FORM 2 **COVER SHEET**
NEW DEGREE PROGRAM PROPOSAL

Part I requires the completion of the following forms: Appendices B-4, B-5, and B-6.

Program Information

Program Name: PhD Developmental Science and Prevention

Institution Name: Washington State University

Degree Granting Unit: Interdisciplinary: College of Agricultural, Human, and Natural Resource Sciences; College of Communication; College of Nursing

Degree Level: Doctorate Type: Philosophy Major: Developmental Science and Prevention

CIP Code: 19.0799

Proposed Start Date: August 2011

Projected Enrollment (FTE) in Year One: 7.8 FTE At Full Enrollment by Year: 4: 33.6 FTE

Proposed New Funding: none

Funding Source: ☐ State FTE ☐ Self Support ☒ Other: internal reallocation of state funds from existing M.A. Human Development program

Mode of Delivery / Locations

☒ Campus Delivery Pullman, Spokane, Vancouver
☐ Off-site_____
☒ Distance Learning ___videoconferencing, online

Scheduling

☒ Day Classes ☐ Evening Classes ☐ Weekend Classes
☐ Other *(describe)*

Attendance Options

☒ Full-Time
☒ Part-Time
Total Credits: 72 hours ☐ Quarter ☒ Semester

Contact Person

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Proposal to Offer a New Degree Program

I. Mission Statements

Washington State University

Washington State University is a public research university committed to its land-grant heritage and tradition of service to society. Our mission is threefold:

- To **advance** knowledge through creative research and scholarship across a wide range of academic disciplines.
- To **extend** knowledge through innovative educational programs in which emerging scholars are mentored to realize their highest potential and assume roles of leadership, responsibility, and service to society.
- To **apply** knowledge through local and global engagement that will improve quality of life and enhance the economy of the state, nation, and world.

Mission statement of lead department

Department of Human Development

The Department of Human Development provides leadership in discovering, accessing, and disseminating knowledge through high quality research, instruction, and extension programs that promote the well-being of individuals, families, and communities throughout the state of Washington.

Mission Statement of collaborating Colleges

College of Agricultural, Human, and Natural Resource Sciences

Recognizing its unique land-grant research and education mission to the people of Washington and the state's increasing global involvement, the College provides leadership in discovering, accessing, and disseminating knowledge through high quality research, instruction, and extension programs that contribute to a safe, abundant food and fiber supply; promote the well-

being of individuals, families, and communities; enhance sustainability of agricultural and economic systems; and promote stewardship of natural resources and ecological systems.

Edward R. Murrow College of Communication

Communication is central both to a democratic society and to membership in the global community. The faculty of the Edward R. Murrow College of Communication is dedicated to creating knowledge and facilitating learning about the production and interpretation of messages. Combining programs that integrate fundamental communication domains, we are uniquely positioned to disseminate knowledge in a world where interpersonal and mediated communication converge.

We are dedicated to educating professional, ethical, and socially responsible citizens. Such an education shall provide students with an understanding of the social, political, and ethical implications of communication. We are committed to developing in students a dedication to lifelong learning, communication skills, analytical and critical thinking skills, appreciation of diversity, and professional excellence. Our students learn through traditional teaching methods, innovative approaches to learning and application of professional skills and knowledge. In addition to undergraduate instruction, graduate education is an important component of our mission. Thus, we are also dedicated to guiding exceptional students' development as teachers, researchers, and leading professionals.

Research is necessary to fully serve our constituencies including students, industry, policy makers, and the communication discipline. As active members of a Research I institution, we are dedicated to the pursuit of knowledge regarding the complex and multifaceted nature of communication. We purse quality research that respects and is informed by diverse disciplines, perspectives, and methods and strive to contribute knowledge with both theoretical and practical implications. Because research enhances teaching, we aim to develop and maintain a mutually beneficial relationship between research and instruction.

As citizens, we endeavor to share our expertise and abilities with the broader community. We are committed to the advancement of the University and local, national, and international communities through service activities beyond research and instruction. Such activities are exemplified by faculty outreach to various community and industry groups, and by faculty participation in decision making at all levels of the University.

Seeking understanding of communication and its role in society, teaching that understanding in the classroom and beyond, and applying our knowledge in the broader community thus comprise the mission of the College of Communication.

College of Nursing

The Washington State University College of Nursing is committed to inspiring and transforming health care for generations to come.

Core Values:

The Washington State University College of Nursing embraces the core values of caring, altruism, social justice and maximizing human potential. In addition, the College endorses the values of Washington State University and the consortium institutions, Eastern Washington University and Whitworth University that include inquiry and knowledge, engagement and application, committed partnerships, leadership, character, stewardship, teamwork and diversity.

Vision Statement:

The Washington State University College of Nursing pursues opportunities to expand the frontiers of nursing knowledge, science and practice. Using innovative technological approaches, integrated teaching and research, and leveraged resources to benefit all people the College bridges barriers to health care in the global community with a focus on underserved and rural populations.

Washington State University Extension

Washington State University Extension engages people, organizations and communities to advance knowledge, economic well-being and quality of life by fostering inquiry, learning, and the application of research.

Vision:

Washington State University Extension is the front door to the University. It extends non-credit education and degree opportunities to people and communities throughout the state. Extension builds the capacity of individuals, organizations, businesses and communities, empowering them to find solutions for local issues and to improve their quality of life. Extension is recognized for its accessible, learner-centered, relevant, high quality, unbiased educational programs. Extension collaborates with communities to create a culture of life-long learning.

How this proposed program will complement or reflect these missions.

The Department of Human Development is well-positioned to establish and initially administer an interdisciplinary degree in Developmental Science and Prevention. Over the last ten years, through strategic hires and close mentoring of eleven assistant professors with very strong research credentials at the Pullman and Vancouver campuses, they now have a core of about 15 tenure-track research and extension faculty with strong developmental science and prevention credentials. External funding, scholarly productivity, and research/outreach partnerships (both internal and external) have increased significantly over the last ten years. Moreover, by focusing their M.A. program on developmental science and prevention, they have had great success in recruiting, retaining, and placing M.A. students in prevention-related positions and Ph.D. programs. There has been a dramatic increase in the number of applications to the M.A. program, and in the academic credentials of students entering the program. As described throughout the proposal, we believe that the time is right to internally reallocate the resources supporting the Pullman-based Human Development M.A. to support an interdisciplinary, multi-campus Ph.D. program in Developmental Science and Prevention.

The proposed Ph.D. program will complement and reflect the missions of the participating units and the university in numerous ways. First, the proposed program would contribute to the growing field of prevention science, by providing a source of interdisciplinary-trained, developmental and prevention scientists for a range of academic, prevention, and evaluation positions in the Northwest and across the nation. Given the complex nature of most contemporary problems facing today's youth and families (e.g., alcohol and drug use, high school dropout, adolescent pregnancy, school violence, childhood obesity), and the growing recognition that social scientists can play an important role in the prevention of these problems, professionals with interdisciplinary training are in a strong position to develop, disseminate, and evaluate scientifically-based programs to address these problems. Moreover, given the increasing evidence from economic analyses of prevention programs that "an ounce of prevention" is often really "worth a pound of cure," professionals with strong backgrounds in prevention methodology are needed to help develop and implement such programs. As described below, our graduates would be employed in universities and in a wide range of public and private agencies addressing social problems. Given the growing evidence base on the effectiveness of scientifically-based prevention programs, training and placing Developmental Science and Prevention Ph.D. graduates in such positions would likely have a significant societal impact and help fulfill the outreach mission of our land grant university. Such programs would be particularly beneficial to underserved populations and populations at risk.

Besides these contributions to individuals, families, institutions, and communities, the proposed Ph.D. program would help the participating units and the university meet their strategic goals for scholarship and research. By involving Developmental Science and Prevention Ph.D. students in faculty research, teaching, and outreach, we would expect to see significant increases in faculty scholarly productivity. Although the HD faculty has had considerable success in securing external funding and publications working with M.A. students (who are only at WSU for two years), having access to Ph.D. students would provide greater opportunities for mentoring and collaboration which would significantly increase their faculty scholarship (e.g., longer periods of student mentoring, training, and collaboration; attracting graduate students with stronger academic and research credentials).

Third, the proposed Ph.D. would help meet the Academic Affairs Program Prioritization recommendation of "Strengthening the social, cultural and behavioral aspects of human health," as well as contribute to the growing research capacity in the health sciences at WSU Spokane. The interdisciplinary nature of this proposal should increase significantly internal and external partnerships in the area of developmental science and prevention.

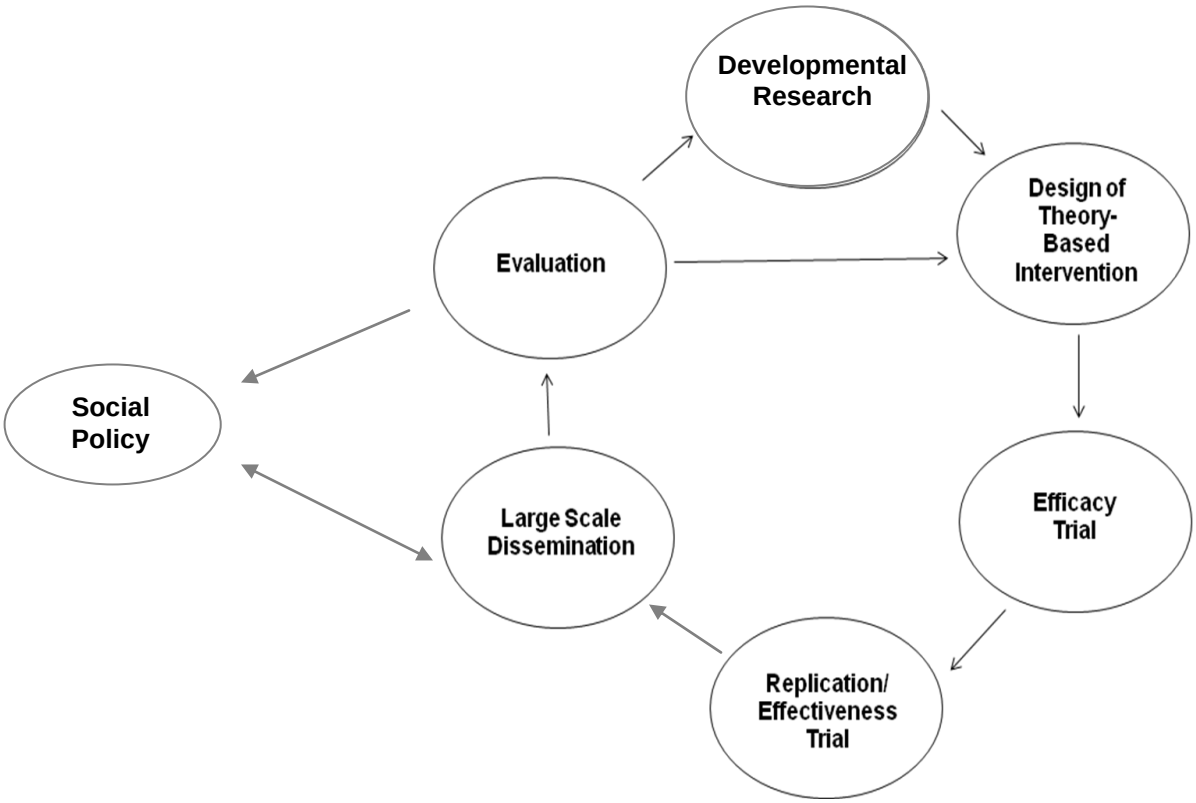
Washington State University is well-positioned to become a national leader in developmental science and prevention. We feel that the proposed interdisciplinary degree would have the potential to increase the national visibility of WSU in the prevention science area. Not only would such visibility help with student and faculty recruitment, it would help in numerous other ways as well (e.g., attracting visiting faculty and post-doctoral researchers, and attracting donations for endowed chairs, graduate student support, and research programs). Moreover, with our growing strengths in the prevention area—particularly our partnerships with external

partners and with WSU Extension—we could become a national leader in the field, particularly in the area of translational research.

II. Program Description

The field of developmental science and prevention integrates theories and methodology from disciplines of human development, behavioral sciences (e.g., psychology, sociology), economics, communication, health sciences, evaluation, epidemiology, and public policy and administration. Developmental scientists specialized in prevention conduct basic research on risk and protective factors and use the resulting knowledge to develop, evaluate, and disseminate programs that promote the healthy physical, cognitive, and socio-emotional development of children, youth, adults, and families. Prevention programs may include drug and alcohol prevention programs; broad based youth development programs; and early child care and learning quality improvement programs.

The activities of prevention scientists are summarized in the following figure:



Developmental and prevention scientists conduct *basic developmental research* on risk and protective factors to *inform the design of theory-based intervention programs*. *Efficacy* and *effectiveness* trials examine the impact of social programs under controlled and natural conditions, respectively. Prevention scientists facilitate the large scale *dissemination* of social programs followed by *evaluation* of their impact in real world settings. Evaluation includes assessment of the impact of the programs on the *physical and mental health well-being* of

children and families, as well as *economic impacts* (cost-benefit analyses, etc.). Results of dissemination efforts are used to inform both *social policy* and the improvement of existing programs.

Developmental science and prevention, therefore, involves both the *generation* of research-based knowledge and its *translation* into effective programs and policies that positively impact the well-being of children, youth, adults, families, and their communities. The field is evidence-based and requires that practitioners have a strong background in human development theory and research, as well as skills for the design, evaluation, and dissemination of prevention programs. Given the strength of WSU's faculty in the areas of child development and family science, the major focus of the proposed Ph.D. program will be on youth and families, although Ph.D. students interested in prevention issues with other populations (e.g., adult development and aging) will be supported as well, especially as WSU develops more expertise in the adult development area. All students completing the program will receive the same degree—however, students may choose from sets of electives to specialize in one of three areas: Advanced Developmental Science; Social Policy; and Quantitative Methods.

Four units at WSU will participate in this program: the Colleges of Nursing and Communication, the Department of Human Development, and WSU Extension. The program initially will be administered in the Department of Human Development. Students will take courses in all of the academic units and faculty members from all units will serve on the doctoral committees of Developmental Science and Prevention Ph.D. students. Doctoral committees will be required to be made up of faculty members from at least two (preferably three) disciplines. Moreover, the program is designed so that students can enter the program from any of these disciplines and faculty members from any of these units may serve as doctoral advisors in the program. Initially, the program will be administered by the Department of Human Development. Human Development will be responsible for coordinating student recruitment, admissions, student evaluation, and all paperwork submitted to the graduate school. However, as the program grows and develops, we anticipate that these functions will be taken over by an interdisciplinary group. Specifically, faculty members who have chaired or served on Developmental and Prevention Science dissertation committees from the various units (and faculty who have funded students in the program) will be invited to serve on an interdisciplinary advisory committee that helps shape the future of the program. Faculty from all participating units will serve on this committee. Over time, this committee will make decisions about how and when administrative duties such as student admissions and student evaluations will be made by an interdisciplinary committee rather than the Department of Human Development.

The program initially will be administrated by Human Development for two primary reasons: 1) Human Development is reallocating all of its resources supporting their current M.A. program to the proposed interdisciplinary Ph.D. program, and 2) Human Development is the only participating academic unit without an existing Ph.D. program. We believe that assigning program administration to a single unit is important initially until the program develops sustainability in funding and enrollment over time. However, from the very beginning, students will be required to take courses in ALL participating units. Moreover, during the first few years of the program, various initiatives will be implemented to further engage interdisciplinary faculty in the program such as collaborative grant proposals, invited speaker series, and program

colloquia. These efforts should generate greater faculty awareness and interest in the program, and ultimately lead to greater levels of interdisciplinary involvement. Many of the faculty members in the current proposal are already working together on interdisciplinary, collaborative research; as such, they have demonstrated the ability to work together effectively, and have a shared vision for the future of developmental science and prevention at WSU. We anticipate that the transition to a more interdisciplinary program structure should occur fairly quickly—probably within five years.

Students will be encouraged to examine individual and family development in the larger social context. Specifically, they will examine how multiple levels of social context (e.g., schools, communities, cultures) interact with individual- and family-level factors in influencing the course of development. The interventions they learn to implement can occur at the individual level, at levels that interact directly with individuals (e.g., schools), or at the level of social systems that influence individuals indirectly (e.g., public policy).

Particular strengths of this program result from the units that will be participating in the program. These include our emphases on: 1) child and adolescent development in the family context (Human Development); 2) program dissemination and evaluation in real-world settings (WSU Extension); 3) health communication and public policy (Colleges of Communication and Nursing); and 4) program evaluation and statistics (Educational Psychology courses taught by affiliate faculty members of that program). These emphases are strengthened by our external partnerships, including the Washington Division of Behavioral Health and Recovery, the Washington Department of Health, the Family Policy Council, the Department of Corrections, the Oregon Department of Human Services, and numerous tribal communities and school districts.

Few doctoral programs in prevention currently exist in the U.S. The major programs are at Northwestern (Human Development and Social Policy), Pennsylvania State University (Human Development and Family Studies), and the University of Washington (Ph.D. in Social Welfare). Other programs are found in schools of public health (e.g., University of Texas, University of Alabama at Birmingham), but these programs focus primarily on physical health, with much less emphasis on behavioral or mental health issues.

III. State Need and Student Demand for the Program

As social service agencies and policy makers have come to value the contributions that social scientists can make to policies and practices affecting the well-being of individuals and families, there has become an increasing interest in the field of prevention. Because many problems affecting young people and families have significant long-term costs to society, resources invested in prevention often have far greater societal benefits than investments in treatment. Moreover, numerous research studies show that scientifically-developed and evaluated "best-practices" prevention programs are much more effective in the long term than programs without a strong scientific basis.

Despite the growing societal and government interest in prevention, few opportunities exist nationally for doctoral training in prevention science. The proposed interdisciplinary doctoral

program in Developmental Science and Prevention will help fill this demand by providing students with training in the fields of health communication, community and population-focused nursing, educational psychology, and human development. Washington State University Extension will play a significant role as well, providing strengths in the area of translational research—translating proven scientific discoveries into effective programs and policies that positively impact the well-being of children, youth, adults, families, and their communities.

Graduates of this program would be well-trained for a variety of prevention-related positions such as: 1) program evaluators, research analysts, and administrators in government, private research institutes, social service agencies, and consulting firms; 2) foundation program officers and grant evaluators; 3) tenure-track faculty members in departments of child development, communication, developmental psychology, educational psychology, family studies, human development, public health nursing, rural sociology, and social work; and 4) in other academic positions such as research associates or program coordinators for grant-funded projects or extension faculty.

Washington State University is exceptionally well-positioned to offer such an interdisciplinary program in developmental science and prevention given the significant investments that the participating units at WSU have recently devoted to prevention science, as well as the strategic priority that the university is now placing on the health sciences and the social, cultural and behavioral aspects of human health.

In a recent on-survey of 59 bachelor or M.A. level prevention professionals across the state of Washington, we found that 91% reported that there is significant need or some need for doctoral-level prevention professionals in the state. Sixty-five percent of these respondents reported that they would be interested in receiving information about the proposed program if it were approved, and 74% felt that professionals in their field would be very likely or somewhat likely to apply. In an online survey of 33 current Human Development students and M.A. alumni (a prevention science M.A.), 79% said that they anticipated applying to a doctoral program in the future and 79% of these students said that would be very likely or somewhat likely to apply to the proposed doctoral program. Of those who were already enrolled (or had completed a doctoral program), 90% indicated that they would have applied to WSU if this program had been available when they had applied to their doctoral program.

Finally, in a recent on-line search for doctoral-level prevention positions, many open positions were found at a range of institutions including Pennsylvania State University, the University of Florida, the University of Washington, the University of Pittsburgh, West Virginia University, the University of South Carolina, the Centers for Disease Control and Prevention, the U.S. Department of Education, the New York City Department of Health and Mental Hygiene, the Rand Corporation, the OMNI applied social science research and technical assistance company, RTI International, the Children's Hospital of Los Angeles, the Prenatal Advisory Council, Nemours Health and Preventions Services (Newark, DE), and the Human Services Research Institute (Cambridge, MA).

It is clear that a market for well-trained, developmental science and prevention professionals exists in human service, public non-profit, and higher education organizations. Moreover, this

demand is growing as public and private agencies place great emphasis on the scientific evaluation of prevention efforts. Washington State University is well positioned to offer interdisciplinary training in this rapidly growing field and to become a national leader in basic and translational research in Developmental Science and Prevention.

This program also responds to the Statewide Strategic Master Plan for Higher Education by producing graduates with advanced degrees in areas critical to the health needs of the state.

The only similar degree program in this region of the country is the Ph.D. in Social Welfare at the University of Washington, which includes a small number of students specializing in Prevention Research. The experience of WSU Extension in translating research and forming sustainable community partnerships, the prevention emphasis of the Health Communication track in the Murrow College of Communication, and the ongoing collaborative research with economists are significant differences between the WSU and UW programs, and we see them as complementary to each other.

IV. Goals, Objectives, and Student Learning Outcomes

A. Goals and Objectives

The primary goal of this program is to prepare individuals in the Northwest and the nation for doctoral level prevention and evaluation positions in government, private research institutes, universities, social service agencies, and consulting firms. Graduates would be employed as tenure-track faculty members, program evaluators, research analysts, administrators, research associates, or program coordinators. As described in the curriculum section below, we will prepare students for such positions by providing them a strong background in: 1) human development theory and research; 2) research methods and statistics; and 3) community-based program development and evaluation.

A second goal for establishing this program is to help WSU achieve national prominence in the field of developmental science and prevention. There are few prevention science programs, and among those that exist we are unique in the integration of field-based Extension faculty and university researchers, which enables the translational research necessary for moving basic knowledge to effective application. We would like to increase our visibility in Washington State and the nation as a program that has expertise in the full cycle of developmental science and prevention, from basic research to applied programming and policy, and achieve national prominence in employing university Extension as a model for the integration of research and outreach. A 2009 article in the Journal of the American Medical Association recommended that primary-care transform its practices by taking the land-grant extension service as a model for community outreach. This article and others like it illustrate the potential value of our interdisciplinary model.

Metrics we will use to determine if we are meeting our objectives will include:

- Placement of graduates in academic, evaluation, and prevention positions.

- Increased numbers of state and regional contracts.
- Increased federal grant dollars and grants from private foundations.
- Sustained interdisciplinary collaboration, as evidenced by peer-reviewed papers and presentations in multiple disciplines and with cross-unit authorships.
- Increased numbers of graduate applications and increased academic credentials (e.g., GRE, GPA) of admitted students.

These metrics will be examined annually by the graduate committee and used to guide changes in our curricula, courses, and recruitment strategies, and to inform the development of policies and programs supporting interdisciplinary research.

B. Student Learning Outcomes

Graduates of this program will have the following competencies:

- A mastery of theory and basic research on child and youth development in the contexts of family, peers, school, and community.
- An understanding of: 1) individual, family, and environmental risk and protective factors and how they relate to optimal child development; and 2) the epidemiological approach to assessment of their prevalence.
- The skills to conduct rigorous, basic and/or applied research in the area of developmental and prevention science.
- The ability to apply theory and research findings to the design of programs that promote optimal development and prevent poor physical, social, and emotional outcomes.
- The ability to design and conduct scientific tests of program efficacy and effectiveness.
- The ability to conduct translational research on program implementation, outcomes, dissemination, cost, and sustainability (moving programs from research to practice).
- Effective written and oral communication skills for the dissemination of research findings to a variety of audiences and for effecting evidence-based policy decisions.
- The ability to write successful grant and contract proposals to fund developmental science and prevention research.
- Effective teaching strategies for both face-to-face and distance instruction.

These skills will be developed through mentored reading, classroom lectures and discussions, experiential learning (such as class projects), and closely mentored research experiences.

As described in the curriculum section below, students will develop a mastery of developmental theory and research through their human development, educational psychology, nursing, and communication courses, as well as through their experiences working closely with members of the faculty on a variety of research projects, including the students' own research.
Students will gain research skills through their research methods and statistics courses, through collaborative involvement with faculty members in their research, and through the design, implementation, and writing of a research-based M.A. thesis and Ph.D. dissertation. Faculty members will work closely with students in writing up their thesis, dissertation, and collaborative research for publication.

Students will learn about program development, evaluation, and dissemination through their human development, educational psychology, communication, and nursing courses, as well as through their work with faculty in WSU Extension. Many current projects in the Department of Human Development involve partnerships with WSU Extension faculty working with a range of community partners across the state and region. Human Development instructors currently take advantage of these partnerships in teaching their program development and evaluation courses. Therefore, as part of their HD coursework, and for some students as part of their research assistantships, students will work closely with extension faculty and community partners in developing, evaluating, and disseminating best-practices programs to promote the well-being of children, youth, and families.

Students will develop written and oral communication skills through course assignments; through multiple opportunities to present their work at regional and national conferences; through presentations to community partners as part of their outreach efforts; and through closely mentored experiences in writing research for publication in scientific journals. Students will develop effective grant-writing skills through working closely with their faculty mentors in preparing grant/contract proposals and through grant-writing assignments in their courses.

Students will develop effective teaching strategies through a series of closely mentored teaching experiences during their four years in the Ph.D. program. First year students will be assigned teaching assistantships to assist faculty members with class preparation, assignment development and grading, and be responsible for teaching a small number of class sessions. Faculty members will closely mentor students in developing the skills for providing high-quality lectures, for employing effective experiential learning methods, and for effectively evaluating student learning. As students' teaching skills develop, they will take on increasing responsibility for classes, essentially co-teaching introductory classes with departmental faculty members. Toward the end of their graduate career, students will be primarily responsible for teaching their own section of a course. Given the Department of Human Development's large and growing distance degree program, most students will complete this final task in an online environment, closely mentored by a tenure-track faculty member.

Graduate student learning outcomes will be assessed through a variety of methods including: independent, quantitative ratings of the quality of student thesis and dissertation projects (both the written products and the oral defenses); faculty ratings of student performance on preliminary exams and as teaching fellows; the number of peer-reviewed student presentations and publications; exit interviews and end of program surveys; teaching evaluations; and job placements of Ph.D. graduates. Faculty ratings will be conducted using specific rubrics developed for these processes. These will include, for example, rubrics designed for faculty ratings of qualifying exams and dissertation defenses, as well as student performance as teaching assistants and teaching fellows. Every year the graduate committee will examine the outcome assessment data and implement changes to increase program quality. The relations between program objectives, student learning outcomes, and assessment techniques are summarized in the following table:

Table 11. Program Objectives, Student Learning Outcomes, and Learning Assessments

Program Objective	Outcome	Assessment
Acquire an understanding of theory and basic research on child and youth development in the contexts of family, peers, school, and community.	Apply developmental research and theory to the design, evaluation, and dissemination of effective prevention programs for individuals and families.	Successful completion of the Human Development in Context core courses; Successful completion of relevant qualifying exam questions.
Understand: 1) individual, family, and environmental risk and protective factors and how they relate to optimal child development; and 2) the epidemiological approach to assessment of their prevalence.	Apply a risk and protective factor framework to conducting community needs assessments and designing effective prevention programs.	Successful completion of the Program Design and Evaluation core courses; Successful completion of relevant qualifying exam questions.
Acquire the skills to conduct rigorous, basic and/or applied research in the area of developmental and prevention science.	Conduct cutting-edge research to make scholarly contributions to the field of developmental science and prevention.	Successful completion of the Research Methods and Statistics core courses; Successful completion of relevant qualifying exam questions; Successful completion of thesis and dissertation research; Conference presentations and publication of research results in peer-reviewed journals.
Apply theory and research findings to the design of programs that promote optimal development and prevent poor physical, social, and emotional outcomes.	Contribute to effect social policy through the implementation of evidence-based, prevention programs.	Successful completion of the Program Design and Evaluation core courses; Successful completion of relevant qualifying exam questions.
Design and conduct scientific tests of program efficacy and effectiveness.	Ensure that best-practice prevention programs implemented in communities are efficacious in experimental trials, and that they retain their effectiveness once leaving "controlled" settings.	Successful completion of the Program Design and Evaluation core courses; Successful completion of relevant qualifying exam questions.

Conduct translational research on program implementation, outcomes, dissemination, cost, and sustainability (moving programs from research to practice).	Ensure that prevention programs implemented in communities are cost-effective and sustainable.	Successful completion of the Program Design and Evaluation core courses; Successful completion of relevant qualifying exam questions.
Effective written and oral communication skills for the dissemination of research findings to a variety of audiences and for effecting evidence-based policy decisions.	Effectively advocate for the implementation of evidence-based prevention programs to address societal problems affecting individuals and families.	Successful completion of required core courses; Faculty ratings of written and oral communication skills demonstrated during the thesis, dissertation, and preliminary examination; Oral presentations at conferences; Publications in peer-reviewed journals.
Write successful grant and contract proposals to fund developmental science and prevention research.	Secure funds for the development, evaluation, and dissemination of evidence-based prevention programs for addressing societal problems affecting individuals and families.	Successful completion of grant writing assignments in methodology courses.
Effective teaching strategies for both face-to-face and distance instruction.	Effective training of the next generation of developmental science and prevention scholars.	Faculty ratings of students' performance as teaching fellows; Student course evaluations.

V. Curriculum

Students in the program will complete required courses in the three areas of developmental science and prevention: 1) human development in context; 2) research methods; and 3) program development and evaluation. Students will take a core of 25-27 hours of graded courses across these areas and will have the opportunity to take additional electives if so desired. Students will be required to take core courses in at least three disciplines. These include courses in the following disciplines: Communication, Educational Psychology, Human Development, and/or Nursing. Letters of support from all fully participating units are included in the Appendix. Administrators in all units have agreed to allow Developmental Science and Prevention doctoral students to take the required and elective courses in the curriculum; faculty members in these units have agreed to serve on the doctoral committees of students enrolled in the proposed program. By choosing the sets of electives below, interested students will have the opportunity to specialize in one or more of the following areas: Advanced Developmental Science; Social Policy; and Quantitative Methods.

All students will complete a M.A. thesis as part of their Ph.D. program. Once they have defended their M.A. thesis and completed their core coursework (typically by the end of their fifth semester), students will be awarded an M.A. degree. All students will initially be accepted into the program as doctoral students, and as a result, the vast majority of students will receive the M.A. degree as a stepping stone to the Ph.D. The program will NOT offer a terminal master's degree. Once students have completed their M.A. requirements, students will take preliminary exams and begin work on their doctoral dissertation. Preliminary exams will involve two 8-hour days of sit-down exams. Students will answer three questions written by the interdisciplinary faculty covering the three core components of the doctoral program: Human Development in Context; Prevention Research Methods; and Program Development and Evaluation. Students will answer a fourth question on their specialty area of interest. Students will develop suggested questions in this area in collaboration with their advisor. Comprehensive exam questions will be written and student exams evaluated by a committee of faculty members made up of the members of the student's dissertation committee, a subset of the faculty members who teach the core courses, as well as any additional members of the faculty necessary to evaluate the specialty question. Once students pass their comprehensive exams, they will then complete their dissertation research in an area of prevention science. Students will be required to have faculty members from at least two (preferably three) disciplines on their dissertation committee.

Students will be required to take a minimum of 6 hours of thesis credit (i.e., Com 700, HD700, or Nurs 700) and 20 hours of dissertation credit (i.e., Com 800, HD800, or Nurs 800). With the required core, this totals to 51-53 hours. To meet the required minimum of 72 hours of credit for the doctoral degree, students will sign up for Special Projects credit (i.e., Com 600, HD600, Nurs 599) for their involvement in collaborative research with the faculty, for electives, and/or for additional thesis or dissertation credits.

The following two tables summarize the required and elective courses making up the curriculum. Table 12 can be read as follows. Each row in the table represents a program requirement or elective. The columns provide courses within the four disciplines that can meet these requirements. For example, a student with an M.A. in nursing could take the following Nursing courses to meet part of the core requirements for the proposed interdisciplinary degree: Nurs536, Nurs588, Nurs587, and Nurs564. If he or she chose these courses, then the rest of the core requirements would be met by taking: HD550, HD560, HD513, HD540, and EdPsy571. If the student wanted to complete the elective specialty area in Social Policy, he or she could choose from a number of courses, for example: Com517, Com572, and HD580. This curriculum design makes it easy for a student entering from any of three disciplines to pursue the Ph.D. and allows students to tailor their interdisciplinary program of study to their area of interest.

Table 12. Course Curriculum for Ph.D. in Developmental Science and Prevention

Core Requirements (25-27 credits)		**Course Options** (all courses 3 credits unless indicated)		

I. Human Development In Context (8-9 credits)				
Theoretical Foundations	Com 501 Theory Building in Communication	HD 511 Theory and Substance in Human Development	Nurs 536 Nursing Theory: Foundation for Knowledge Development (2 credits)	
Family Relationships	HD 550 Seminar in Family Relationships			
Child Development	HD 560 Child Development			
II. Research Methods* & Statistics (9 Credits)				
Research Methods	HD 513 Research Methods I			
Quantitative Methods	Com 509 Quantitative Research	HD 514 Research Methods II	Nurs 588 Research Inquiry: Quantitative Methods	
Qualitative Methods	Com 591 Qualitative Research Methods	Nurs 587 Research Inquiry: Qualitative Methods		
III. Program Development & Evaluation (8-9 credits)				
Program Development	HD 535 Program Development in Child and Family Studies	Nurs 564 Health Promotion in Nursing Practice	Nurs 554 Epidemiological Approaches to Community Health	SPED 594 Research-Based Prevention and Intervention of

		(2 credits)		Emotional & Behavioral Disorders
Program Evaluation	HD 540 Effective Intervention Programs			
Advanced Evaluation	EdPsy 571 Advanced Program Evaluation	Nurs 591 Mixed Methods for Outcomes Evaluation		

Elective Specialty Areas		**Course Options**		
I. Advanced Developmental Science (9-10 credits)				
Adolescent Development	HD 520 Adolescence			
Parent-Child Relationships	HD 558 Parent-Child Relationships			
Advanced Development	HD 586 Special Topics in Human Development	Nurs 551 Risk and Resilience in Child and Adolescent Health (4 credits)		
II. Quantitative Methods* (6 credits)				
	EdPsy 569 Seminar in Quantitative Techniques in Education (2 semesters)	Nurs 527 Association, Group Difference, and Regression Techniques for Health Sciences		
		Nurs 528		

		Multivariate Statistical Techniques for Health Sciences		
III. Social Policy (9 credits)				
Health Campaigns	Com 514 Health Communication Theories and Campaigns	Com 506 Persuasion and Social Influence	Com 517 Health Communication and Social Development	
Media and Society	Com 572 Mass Media, Social Control, and Social Change	Com 571 Theoretical Perspectives on Media and Society	Com 516 Health Communication and Society	Com 507 Communication Ethics
Public Policy	HD 580 Families, Community, and Public Policy			

*Due to the nature of these course sequences, when possible, students must take these courses within a single discipline.

Table 13. WSU Catalogue Course Descriptions for Proposed Doctoral Program

Core Requirements
I. Human Development in Context (8-9 credits)
Theoretical Foundations (choose one)
Com 501 Theory Building in Communication Relationship of research to theory development; evaluation of current theory and research; planning and executing research within specified theoretical frameworks.
HD 511 Theory and Substance in Human Development I Human development theories; application to life span development, cultural variations, resources, problem solving, interaction of families and individuals with other systems.
Nurs 536 Nursing Theory: Foundation for Knowledge Development Theory development analysis; theory critique; nursing knowledge examination; impact of theory on nursing science, applied to student's phenomenon of interest.
Family Relationship (choose one)
HD550 Seminar in Family Relationships Survey of family studies topics and issues examined from a research point of view.
Child Development
HD560 Child Development Survey of literature on selected areas in child development; discussion of research and

application related to current issues and trends.
II. Research Methods and Statistics (9-10 credits)
Research Methods
HD 513 Research Methods I Introduction to process of research and methods in human development; techniques of research, data collection, and data analysis procedures.
Quantitative Methods (choose one)
Com 509 Quantitative Research Introduction to quantitative research in communication; hypothesis development, testing; basic statistics, interpretation; field surveys, laboratory and field experiments, content analysis.
HD 514 Research Methods II Integration of formal decision making into the social science research process; procedures appropriate for experimental, quasi-experimental and field research.
Nurs 588 Research Inquiry: Quantitative Methods I Quantitative methodologies, issues and techniques of data collection, analysis and interpretation.
Qualitative Methods (choose one)
Com 591 Qualitative Research Methods Historical, textual, and legal methodologies for theory-based evaluative and discourse studies in communication.
Nurs 587 Research Inquiry: Qualitative Methods I Qualitative methodologies, issues and techniques of data collection, analysis and interpretation; issues of ethics and bias.
III. Program Development and Evaluation (9 credits)
A. Program Development (choose one)
HD 535 Program Development in Child and Family Studies Analysis and development of program delivery systems, curricula and evaluation models.
Nurs 564 Health Promotion in Nursing Practice Theoretical bases including cultural variations for selected health promotion strategies for neonates through elderly clients.
Nurs 554 Epidemiological Approaches to Community Health Epidemiologic application to health; implications for health promotion, disease prevention; focus: knowledge and skills required to obtain and use databases.
SpEd 594 Research-Based Prevention and Intervention of Emotional & Behavioral Disorders Cross-disciplinary perspectives on preventing mental, emotional and behavioral disorders; Analysis of evidence-based practice, research to practice gap, implementation and sustainability.
B. Program Evaluation
HD 540 Effective Intervention Programs Innovative effective prevention and intervention programs from theoretical, applied, and outcome evaluation perspectives.
C. Advanced Evaluation (choose one)
EdPsy 571 Advanced Program Evaluation Advanced methods and techniques of program evaluation.
Nurs 591 Mixed Methods for Outcomes Evaluation

Outcomes and evaluation in nursing and health care from both a qualitative and quantitative methods and application perspective.
Elective Specialty Areas
I. Advanced Developmental Science (9 credits) (choose three)
HD520 Adolescence In-depth examination of theories and research, developmental issues and prevention and intervention programs for school-aged children and adolescents.
HD558 Parent-Child Relationships The reciprocal interactions among family members will be examined; theoretical perspectives and empirical findings will be explored in terms of implications for education and practice.
HD586 Special Topics in Human Development Assessment and evaluation of families and children.
Nurs 551 Risk and Resilience in Child and Adolescent Health Risk and resilience models in the development of strengths-based health interventions for child and adolescent populations.
II. Quantitative Methods (6-10 credits) *(choose one sequence)*
A. Educational Psychology
EdPsy 569 Seminar in Quantitative Techniques in Education (two semesters) Application of parametric and nonparametric statistics, data processing using computer packages in educational research.
B. Nursing
Nurs 527 Association, Group Difference, and Regression Techniques for Health Sciences Application of quantitative techniques to explore relationships and group differences among variables supporting questions in health science research.
Nurs 528 Multivariate Statistical Techniques for Health Sciences Application of quantitative techniques to explore multivariate relationships among variables supporting questions in health science research.
III. Social Policy (9 credits)
A. Health Communication (choose one)
Com 514 Health Communication Theories and Campaigns Health communication theories with a focus on campaign construction and evaluation.
Com 506 Persuasion and Social Influence Theories, concepts, strategies and processes of persuasion and social influence.
Com 517 Health Communication and Social Development Explores and tests role of mediated communication in the causes of and solutions for health problems, particularly among young people.
B. Media and Society (choose one)
Com 572 Mass Media, Social Control, and Social Change Study of the forces that influence the media's role as an agent of social control or social change.
Com 571 Theoretical Perspectives on Media and Society Theories explaining the social and cultural environments of communication processes emphasizing in mass communication.
Com 516 Health Communication and Society

Reviews, critiques and applications of research regarding the impact of social and cultural environments on health communication.
Com 507 Communication Ethics Topics in communication ethics.
C. Public Policy
HD 580 Families, Communities, and Public Policy Analysis of family policy research; role of family policy research in public policy and knowledge building processes.

Table 14 illustrates the optimal sequence that the required courses will be taken. Students will take two graded courses per semester during their first five semesters. In that way, they will have completed all of the required courses by the middle of their third year, putting them in a position to take their preliminary exams during their sixth semester of study. If students choose to pursue one of the specialty elective areas, they will take one or two additional courses after completing their comprehensive exams. In the table, these two electives are included in the sixth semester, although it is likely that many students will take these electives during their fourth or fifth year in the program.

The sequence is designed so that students get a background in normative human development and research methods first, and then take courses where they learn to apply this material to the design, evaluation, implementation, and dissemination of programs to promote child and family well-being. The table shows the courses that will be taken by the first four cohorts of the program.

These programs of study describe the *optimal* sequence in which the courses should be taken. However, it is unlikely that all students will take the courses in the following order. Although the courses currently are offered on a regular basis, some courses are not offered every year. Therefore, adjustments in response to variations in unit teaching rotations undoubtedly will be required. For the vast majority of students, however, the required courses should be completed by the middle or end of the third year.

Table 14. Sample Courses of Study: Years 1-4 of Program (First Four Cohorts)

Year/Cohort	Requirement	Options
Yr 1 Fall Semester		
Cohort 1	Theoretical Foundations	Com501, HD511, Nurs536
	Research Methods	HD513
Yr1 Spring Semester		
Cohort 1	Child Development	HD560
	Quantitative Methods	Com509, HD514, Nurs588
Yr 2 Fall Semester		
Cohort 1	Family Relationships	HD550
	Program Development	HD535, Nurs564, Nurs554, SpEd594
Cohort 2	Theoretical Foundations	Com501, HD511, Nurs536

	Research Methods	HD513
Y2 Spring Semester		
Cohort 1	Program Evaluation	HD540
	Elective	(see specialty electives above)
Cohort 2	Child Development	HD560
	Quantitative Methods	Com509, HD514, Nurs588
Yr3 Fall Semester		
Cohort 1	Qualitative Methods	Com591, Nurs587
	Advanced Evaluation	EdPsy571, Nurs591
Cohort 2	Family Relationships	HD550
	Program Development	HD535, Nurs564, Nurs554, SpEd594
Cohort 3	Theoretical Foundations	Com501, HD511, Nurs536
	Research Methods	HD513
Yr3 Spring Semester		
Cohort 1	Elective	(see specialty electives above)
	Elective	(see specialty electives above)
Cohort 2	Program Evaluation	HD540
	Elective	(see specialty electives above)
Cohort 3	Child Development	HD560
	Quantitative Methods	Com509, HD514, Nurs588
Yr4 Fall Semester		
Cohort 2	Qualitative Methods	Com591, Nurs587
	Advanced Evaluation	EdPsy571, Nurs591
Cohort 3	Family Relationships	HD550
	Program Development	HD535, Nurs564, Nurs554, SpEd594
Cohort 4	Theoretical Foundations	Com501, HD511, Nurs536
	Research Methods	HD513
Yr4 Spring Semester		
Cohort 2	Elective	(see specialty electives above)
	Elective	(see specialty electives above)
Cohort 3	Program Evaluation	HD540
	Elective	(see specialty electives above)
Cohort 4	Child Development	HD560
	Quantitative Methods	Com509, HD514, Nurs588

VI. Uses of Technology

A. Technology used in teaching this curriculum

The College of Nursing and the Department of Human Development are campus leaders in the use of instructional technology: the College of Nursing through its statewide delivery of undergraduate and graduate nursing programs; the Department of Human Development through the distance delivery of its B.A. in Human Development. The College of Nursing delivers graduate courses to five locations around the state (i.e., Pullman, Spokane, Tri-Cities,

Vancouver, and Yakima) through the use of AMS conferencing. About one-third of their courses have a significant online component as well, employing the Blackboard platform. The Department of Human Development has had a successful distance degree program since 1998, employing a range of instructional technologies including video-based courses and the use of a number of on-line platforms. Faculty members in both departments are comfortable delivering courses to students at a distance and are fully aware of the challenges and opportunities offered by distance course delivery.

All of the nursing courses in the proposed doctoral curriculum will be delivered by AMS to the Spokane, Vancouver, and Pullman campuses. All of the human development courses will be delivered by the WECN system to these same locations. Both units will employ considerable online instructional technology as well. The remaining courses in the curriculum will only be available to the Pullman-based students, because they will be only available to students in the face-to-face format. However, sufficient courses are offered at the three locations and by distance so that students in any of the three locations can complete the required core. Over time, we expect that more elective courses will be available at the three locations—either face-to-face or through the use of technology.

Faculty members and students in the program will use a variety of other technologies for collaborative research, thesis and dissertation meetings, etc. These will include IP video conferencing, telephone conferencing, and email.

B. Technologies the students will learn to use in order to be employed in this field

Through their coursework, research, and outreach experiences, students will develop skills in a number of technologies supporting research, instruction, and outreach. These will include acquiring competence in the use of: 1) SPSS, SAS, AMOS, and other statistical packages for data analysis; 2) computer software for the design and analysis of on-line surveys; 3) technologies supporting face-to-face instruction; and 4) various instructional technologies for distance education—technologies supporting both synchronous and asynchronous course delivery.

VII. Delivery methods

Although the degree will be offered through WSU Pullman, students will be able to participate in this program at one of three WSU campuses: Pullman, Spokane, and Vancouver. Upon entering the program, students will be matched based on their interests with a faculty advisor at their local campus. Students will take a combination of face-to-face and distance courses (i.e., AMS, WECN, and/or online) to complete their degree requirements as described in the previous section. Student thesis, comprehensive exam, and doctoral committees will be made up of faculty from multiple disciplines at multiple locations, and a range of technologies including IP videoconferencing, teleconferencing, and email will be used to support student-faculty interactions. Thesis and dissertation work will be supervised mostly by in-person, face-to-face interactions with a local faculty advisor. Students in Spokane with a Pullman advisor will communicate through a combination of face-to-face and technology-assisted meetings. Therefore, students participating at the Pullman campus and Spokane campuses will be

supervised by advisors in the College of Communication, the College of Nursing, or the Department of Human Development. Students at the Vancouver campus will be advised by Human Development faculty or an affiliated Education member, because none of the prevention-focused faculty members in the other participating units are at the Vancouver campus.

VIII. Students

It is expected that five Pullman-based, two Vancouver-based, and one Spokane-based students will join the program during the first two years of the program and that six Pullman-based, two Vancouver-based, and one Spokane-based students will join during the second two years. We expect most of the Pullman-based students to be full-time and most of the Vancouver- and Spokane-based students to be half-time. These will include students entering the program through communication, human development, and nursing. Because we will be recruiting students from all disciplines who might be interested in this program, we cannot predict how many will enter the program from the different units.

Table 15. Student Headcount and FTE for First Four Years of the Program

Number of Students	Year 1	Year 2	Year 3	Year 4*
Headcount	8	16	25	34
FTE**	7.8	15.6	24.6	33.6

* Enter year number in which program anticipates reaching full enrollment
**The FTE is less than the headcount based upon a projected 12 half-time students at Vancouver/Spokane by year 4.

Admission Requirements

- A baccalaureate or masters degree in a relevant discipline (e.g., anthropology, communication, criminal justice, educational psychology, human development, nursing, psychology, social work, or sociology).
- A GPA of 3.0 or higher (graduate school minimum requirement—we will be recruiting for students with GPAs of 3.5 or above)
- Graduate Record Exam (GRE).
- Admission to the WSU Graduate School.
- Statement of career goals and research interests. For students with a recent baccalaureate degree or masters we will be looking for students with a clear interests in the area of prevention, relevant work or volunteer experience, and research interests that match those of the faculty. For professionals in human service organizations, we will be looking for relevant career experiences and clear prevention career goals.
- Resume.
- Three letters of reference.

- Official transcripts from all colleges attended.
- The TOEFL exam for international applicants, if required. TOEFL cut-offs will be 550 for the paper exam, 213 for the computer exam, and 80 for the Internet exam.
- Although not required, previous research experience and previous coursework in statistics will be highly desired.

C. Expected time for Program Completion

Pullman-based students will be full-time. Place-bound Spokane and Vancouver students are likely to be part time. According to our enrollment projections (see Section VIII.A. above), we expect by the fourth year of the program that about one-third of the students will be part-time and two-thirds full time. Expected time to completion of the Ph.D. will be four to five years for full-time students. For full-time students, course work should be completed in 2 ½ years. The preliminary exam would typically be taken during the 6th semester and the doctoral defense completed in the beginning of the fourth year. The dissertation work will take between one and two years. Part-time students should take between six and eight years for program completion.

D. Advising

Upon applying to the program, students will be requested to indicate the faculty advisors that they would be interested in working with. Then based upon student interests and advisor availability, an initial faculty advisor will be assigned. Pullman and Spokane students will be assigned to a Pullman- or Spokane-based advisor; Vancouver students will be assigned to a Vancouver-based advisor.

From the beginning of their doctoral studies, all students will join their faculty advisor's research team and work with him or her on research. Students will have weekly meetings with their advisors to help define a thesis area. These meetings will function largely as an independent study opportunity for the student, where the student and advisor will read and discuss papers in the student's possible thesis area. Besides providing the student with his or her initial research training, the faculty advisor will assist the student in selecting courses, creating a thesis committee, and completing the thesis.

If the student is assigned a teaching assistantship, the faculty member he or she is assigned to (this may or may not be the student's faculty advisor) will provide instructional mentoring. First-year TAs will assist faculty members with class preparation, assignment development and grading, and be responsible for teaching a small number of class sessions. Faculty members will closely mentor students in developing the skills for providing high-quality lectures, for employing effective experiential learning methods, and for effectively evaluating student learning. As students' teaching skills develop, they will take on increasing responsibility for classes, essentially co-teaching introductory classes with departmental faculty members. Toward the end of their graduate career, students will be primarily responsible for teaching their own section of a course. Given the Department of Human Development's large and growing distance degree program, most students will complete this final task in an online environment, closely mentored by a tenure-track faculty member (typically the faculty member who developed the online course).

Students who are funded as research assistants will work on faculty research projects and assist in study design, data collection, data analysis, and manuscript preparation. Over the four or five years in the program, most full-time students will serve as both teaching and research assistants.

After students complete their thesis and required coursework, faculty advisors will help them prepare for the preliminary exams by suggesting readings and study strategies, as well as help students write possible questions for their specialty area. After students pass the preliminary exams, advisors will mentor them through the dissertation process.

Although students will be initially assigned to advisors based upon student interests and advisor availability, students will be encouraged to change advisors if there is not a good initial fit or if the student's research interests change. Students will be encouraged to work with several faculty members on research during their doctoral training and encouraged to work with faculty members from different disciplines.

E. Diversity

Multiple strategies will be employed to recruit and retain a diverse student body. These will include: emphasizing our commitment to diversity on the program website; sending recruiting emails to students of color identified through such programs as the McNair Scholars program; placing advertisements in professional journals and other publications that target diverse audiences; advertising the program through appropriate listservs; campus visits to universities and regional campuses with high minority enrollments; and recruiting visits to Native American reservations in the state of Washington and Idaho. We will work closely with the WSU Graduate School in their minority recruiting programs as well. Additionally, the Society for Prevention Research has an active diversity outreach program which may be helpful in recruiting diverse students from across the nation. As the proposed Ph.D. program grows, we anticipate applying for training grants that would increase our capacity to fund a large, diverse student body.

All students in the program will be closely mentored by faculty advisors who will closely monitor student progress in the program and provide the support necessary for high levels of retention. More senior students in the program will mentor first year students as well. The participating units have had significant success in graduate student retention. For example, as mentioned earlier, since revising their M.A. program in 2001, the Department of Human Development has retained 94% of its M.A. students. All students leaving the program will participate in an exit interview with the program director. Students will be asked a series of questions about retention issues to inform program improvement. Statistics on the diversity of the applicant pool and the student body will be tracked annually and used to evaluate the effectiveness of our diversity recruitment efforts.

Because many prevention science programs are directed toward high risk populations, it is important that professionals in the field of Developmental Science and Prevention develop skills for working with a diverse clientele. Many of the research and outreach experiences that students in the program will receive will involve working closely with diverse populations.

Additionally, issues regarding diversity are fully integrated into the courses in the proposed curriculum. WSU Extension is a national leader in professional development around diversity issues—two of the participating extension faculty members, Drs. Mary Katherine Deen and Louise Parker, have developed and are implementing regionally a highly successful cultural competency training program for Extension professionals entitled "Navigating Difference…Cultural Competency Training for Extension Professionals." Students in the proposed doctoral program will have the opportunity to complete these non-credit workshops as part of their training in Developmental Science and Prevention. Additionally, members of the statewide WSU Extension Parenting Team have had considerable success in adapting the Strengthening Families curriculum to a wide range of audiences (Latino families, Native American families, etc.). In their program development and evaluation courses, students in the Developmental Science and Prevention program will learn to develop culturally sensitive programming and develop the skills required in program development and adaptation.

Because this program uses existing WSU resources, the proposal does not require that any new faculty be hired to initiate the program. However, if relevant faculty positions open up in the participating units (i.e., College of Agricultural, Human, and Natural Resource Sciences; College of Communication; College of Nursing; and WSU Extension), multiple strategies will be used to ensure a large and diverse applicant pool. These strategies (already employed in the participating units) will include: reviewing best-practices for minority hires at the beginning of each faculty search; writing position descriptions emphasizing our commitment to diversity; advertising the position through professional organizations, listservs, and publications that target diverse audiences; and phone and email contact with developmental and prevention science professionals nationwide to identify a diverse pool of candidates. Once recruited, new faculty members will be provided with extensive mentoring and support from their mentoring committees, senior faculty, and departmental administrators. Each of the participating units has had considerable success in hiring and retaining a diverse faculty. Given the fact that prevention programs often are targeted toward diverse audiences, it is likely that the approval of the proposed program will increase the diversity of program faculty as positions open up and are filled.

Together these efforts should lead to a diverse student body, as well as provide our students with the skills they need to work with diverse populations. These efforts will support WSU's strategic goal of embracing an environment of diversity, integrity, and transparency.

IX. Faculty and Administration

Table 16. Program Faculty

Name	Rank	Status & Location	Assignment	% Effort in Pgm.
Administration:				
T. Power-Chair HD	Professor/Chair	Full-time Pullman	HD514; Administration; Thesis & Dissertation Committees	33%
Faculty:				
Communication				
E. Austin	Professor	Full-time Pullman	Com501 or Com517; Thesis & Dissertation Committees	25%
D. Hindman	Associate Professor	Full-time Pullman	Com571 or Com572; Thesis & Dissertation Committees	25%
E. Hindman	Associate Professor	Full-time Pullman	Com507 or Com591; Thesis & Dissertation Committees	25%
S. Hust	Assistant Professor	Full-time Pullman	Com514 or Com516; Thesis & Dissertation Committees	25%
B. Pinkleton	Professor	Full-time Pullman	Com509; Thesis & Dissertation Committees	25%
C. Yang	Assistant Professor	Full-time Pullman	Com 506; Thesis & Dissertation Committees	25%
Human Development				
C. Bolkan	Assistant Professor	Full-time Vancouver	HD586; Thesis & Dissertation Committees	25%
B. Boyd	Associate Professor	Full-Time Pullman	Thesis & Dissertation Committees	10%
M. Bumpus	Associate Professor	Full-Time Pullman	HD513; Thesis & Dissertation Committees	25%
M. Diversi	Assistant Professor	Full-time Vancouver	HD586; Thesis & Dissertation Committees	25%
L. Hill	Associate Professor	Full-Time Pullman	HD540; Thesis & Dissertation Committees	25%
J. Lanigan	Assistant Professor	Full-time Vancouver	HD580; Thesis & Dissertation Committees	25%
J. Lisonbee	Assistant Professor	Full-Time Pullman	Thesis & Dissertation Committees	10%
J. McGuire	Assistant Professor	Full-Time Pullman	HD520; Thesis & Dissertation Committees	25%
P. Pendry	Assistant Professor	Full-Time Pullman	HD560; Thesis & Dissertation Committees	25%
K. Peterson	Professor	Full-Time Vancouver	Thesis & Dissertation Committees	10%

K. Rodgers	Associate Professor	Full-Time Pullman	HD558; Thesis & Dissertations Committees	25%
Y. Sano	Assistant Professor	Full-time Vancouver	HD550; Thesis & Dissertation Committees	25%
S. Smith	Associate Professor	Full-time Vancouver	HD511; Thesis & Dissertation Committees	25%
N. Werner	Associate Professor	Full-Time Pullman	HD535; Thesis & Dissertation Committees	25%
Nursing				
R. Bindler	Professor	Full-Time Spokane	Nurs588; Thesis & Dissertation Committees	25%
J. Lohan	Clinical Associate Professor	Full-Time Spokane	Nurs551; Thesis & Dissertation Committees	25%
K. Miller	Associate Professor	Full-Time Spokane	Nurs564; Thesis & Dissertation Committees	25%
WSU Extension				
Mary Katherine Deen	Associate Professor	Full-Time Wenatchee	Thesis & Dissertation Committees	10%
Louise Parker	Professor	Full-Time Puyallup	Thesis & Dissertation Committees	10%
Affiliate Faculty				
Education				
S. Findley	Associate Professor	Full-time Vancouver	Thesis & Dissertation Committees	10%
B. French	Associate Professor	Full-time Pullman	EdPsy569; Thesis & Dissertation Committees	25%
H. Jackson	Assistant Professor	Full-Time Pullman	SpEd 594; Thesis & Dissertation Committees	25%
L. McCubbin	Associate Professor	Full-Time Pullman	Thesis & Dissertation	10%
M. Trevisan	Professor	Full-time Pullman	EdPsy 571; Thesis & Dissertation Committees	25%
S. Ullrich-French	Clinical Assistant Professor	Full-Time Pullman	Thesis & Dissertation Committees	10%
Total Faculty FTE				**6.88**

Table 17. Administrative and Support Staff

Title	Responsibilities	% Effort in Pgm.	Annual Salary
Info Techno Spec 3	IT Maintenance/Management	10%	51,864
Office Asst. 3	Program Assistance	10%	27,890
Fin Budget Coord.	Program Funds Management	10%	45,283
Total Staff FTE		.30	

X. Library and Facilities

No new library collections are required. The existing holdings are satisfactory. The disciplines at WSU participating in this proposal (Community Based/Population Focused Nursing, Health Communication, Human Development, and Washington State University Extension) already have access to sufficient library holdings to support their faculties and students. Moreover, since the participating units have offered coursework and conducted research with a focus on prevention for the last eight-ten years, sufficient library holdings in this area are already available. We have responsive library personnel support, and the existing library technology is appropriate. The library system has the appropriate resources and technology to support students at the regional campuses.

Initially, no new facilities will be required for the proposed interdisciplinary doctoral program. The participating units all have sufficient space for housing interdisciplinary doctoral students. Moreover, because students will conduct their research primarily in the field, no additional research facilities are required. However, as the size of the program grows and the faculty secures more external grants, additional office space for Ph.D. students will be required.

The participating units all currently have sufficient office space for program faculty and graduate students. The Colleges of Communication and Nursing have recently expanded their research and office space supporting their units involved in prevention research. In the College of Communication, the Communication Addition (CADD), which was completed in 2004, has a number of state-of-the-art classrooms, as well as a focus group study lab, a 24-station survey lab, an interview lab, a children's research lab, and an observation room to support developmental science and prevention research. The new College of Nursing Building on the WSU Spokane Riverpoint campus was completed in 2008. It provides state-of-the art classrooms, distance learning technology, computer and multimedia labs, and research spaces. Finally, upon their move to Johnson Tower on the Pullman campus in 2005, the Department of Human Development secured additional space for M.A. students, as well as a state-of-the-art lab for the observation of children and families. Although this space will be sufficient for the first two years of the proposed program, additional office space for graduate students will be required beginning in year three—especially at the Pullman campus.

The Department of Human Development has two child care facilities that support research and instruction on early childhood development and care. These are the Child Development Lab on the Pullman campus and the Child Development Program on the Vancouver campus. These campus programs support undergraduate and graduate research initiatives, participate in collaborative (including grant funded) community projects, and serve as models of best practice work for both beginning and experienced professionals.

The participating units also have sufficient computer and technology support for the proposed doctoral program, although with increasing size of the program, more computers and software will be needed. As discussed above, it is anticipated that these costs will be covered by increased indirect cost and distance degree funds.

Sufficient classroom space, as well as educational technology (see Section VI. A. above) are available at all three campuses to offer the program. Because all of the courses in the curriculum are currently offered on a regular basis, no additional classrooms will be required.

XI. Finances

Presented in Table 18 is a summary of the estimated program costs of offering the proposed Ph.D. program. This summary provides an estimated cost per FTE for the first four years of the program. Note that all of these costs will be covered through the reallocation of existing internal resources from the existing M.A. program in Human Development. These costs per FTE will be covered by existing resources—there will be no new costs to WSU. Presented in Table 19 are the detailed administrative, faculty, and clerical costs.

Table 18. Summary of Program Costs

Proposal for Ph.D. in Developmental Science and Prevention Interdisciplinary Degree	1-Nov-09	Internal Reallocation	New State Funds	Other Sources	Year 1-2011 Total	Year 4-2014 Total
Administrative Salaries, including benefits		111,659	-	-	55,829	55,829
Faculty Salaries, including benefits		276,384	-	-	60,594	215,790
TA/RA Salaries including benefits		-	-	-	-	-
Clerical Salaries, including benefits		33,644	-	-	16,822	16,822
Other Salaries including benefits		-	-	-	-	-
Contract Services		-	-	-	-	-
Goods and Services		100,000	-	-	45,000	55,000
Travel		10,500	-	-	3,000	7,500
Equipment		-	-	-	-	-
Other costs computers		6,500	-	-	3,000	3,500
Library		-	-	-	-	-
Direct Cost		**538,687**	**-**	**-**	**184,245**	**354,441**
Indirect Cost		**316,372**	**-**	**-**	**108,208**	**208,164**
Total Cost		**855,058**	**-**	**-**	**292,453**	**562,605**
FTE Students					7.8	33.6
Cost Per FTE					**37,494**	**16,744**

Table 19. Salary Cost Detail—Years 1 and 4

Name	Monthly salary	# of months	Annual Salary	%	Annual Pgm salary	Benefits	Annual Pgm Totals
Administration:							
Chair	10,980	12	131,760	33%	43,481	12,349	55,829
Subtotal Administration	10,980		131,760	0.33	43,481	12,349	55,829
Faculty:							
Faculty I	7,751	9	69,761	25%	17,440	4,883	22,324
Faculty II	6,333	9	57,000	25%	14,250	3,990	18,240
Chair, above			0		0	0	0
Faculty III	6,955	9	62,596	25%	15,649	4,382	20,031
Subtotal Faculty	21,040		189,357	0.75	47,339	13,255	60,594
RA/TA's:							
	0	0	0	0%	0	0	0
Subtotal TA/RA	0		0	0	0	0	0
Support staff:							
Info Techno Spec 3	4,322	12	51,864	10%	5,186	1,588	6,774
Office Asst. 3	2,324	12	27,890	10%	2,789	1,125	3,914
Fin Budget Coord.	3,774	12	45,283	10%	4,528	1,606	6,134
Subtotal Support	10,420		125,037	0.3	12,504	4,318	16,822
Total	42,439		446,154	1.38	103,324	29,922	133,245

Name	Monthly salary	# of months	Annual Salary	%	Annual Pgm salary	Benefits	Annual Pgm Totals
Administration:							
Chair	10,980	12	131,760	33%	43,481	12,349	55,829
Subtotal Administration	10,980		131,760	0.33	43,481	12,349	55,829
Faculty:							
Faculty I	5,944	9	53,500	25%	13,375	3,745	17,120
Faculty II	7,751	9	69,761	25%	17,440	4,883	22,324
Faculty III	5,998	9	53,979	25%	13,495	3,779	17,273
Faculty IV	7,048	12	84,572	25%	21,143	5,920	27,063
Faculty V	5,785	9	52,068	25%	13,017	3,645	16,662
Faculty VI	6,301	9	56,705	25%	14,176	3,969	18,146
FacultyVI I	6,333	9	57,000	25%	14,250	3,990	18,240
Chair, above			0		0	0	0
Faculty VIII	7,247	9	65,225	25%	16,306	4,566	20,872
Faculty IX	5,784	9	52,055	25%	13,014	3,644	16,658
Faculty X	6,955	9	62,596	25%	15,649	4,382	20,031
Faculty XI	7,432	9	66,885	25%	16,721	4,682	21,403
Subtotal Faculty	72,578		674,345	2.75	168,586	47,204	215,790
RA/TA's:							
	0	0	0	0%	0	0	0
Subtotal TA/RA	0		0	0	0	0	0
Support staff:							
Info Techno Spec 3	4,322	12	51,864	10%	5,186	1,588	6,774
Office Asst. 3	2,324	12	27,890	10%	2,789	1,125	3,914
Fin Budget Coord.	3,774	12	45,283	10%	4,528	1,606	6,134
Subtotal Support	10,420		125,037	0.3	12,504	4,318	16,822
Total	93,978		931,142	3.38	224,571	63,871	288,441

XII. External Reviews

Richard Catalano, Jr.,Ph.D.
UW School of Social Work
4101 15th Avenue NE
Seattle WA 98105-6299
catalano@u.washington.edu
Phone: 206-221-7737

Dr. Catalano is the Bartley Dobb Endowed Professor for the Study and Prevention of Violence, and Director of the Social Development Research Group at the University of Washington School of Social Work. He is current chair of the Prevention Research Committee for the Division of Behavioral Health and Recovery at the Washington State Department of Social and Health Services. He is an internationally known leader in the field of prevention science and is actively involved in the training of prevention Ph.D. students at the University of Washington. His most well-known project is the Seattle Social Development Project—a 25 year longitudinal study of substance use prevention. He has chaired several prevention science review panels for NIH, is currently associate editor for the Journal of Adolescent Health, and has served on numerous national advisory panels in prevention including panels convened by the Robert Wood Johnson Foundation, the Annenberg Foundation, the National Institute of Drug Abuse, the National Research Council, the Office of Juvenile Justice, among many others. He is recipient of the Vollmer Ward from the American Society of Criminology and the Prevention Science Award from the Society for Prevention Research. He has been Principal or Co-Principal Investigator on numerous grants from the National Institute on Alcohol Abuse and Alcoholism, the National Institute on Drug Abuse, the Department of Health and Human Services, the Office of Juvenile Justice and Delinquency Prevention, and other funding sources. He is author of four books, over 150 peer-reviewed journal articles, and about 40 book chapters.

Mark Greenberg, Ph.D.
Department of Human Development and Family Studies
S112B Henderson Building
Pennsylvania State University
University Park, PA 16802
mxg47@psu.edu
Phone: 814-863-0112

Dr. Greenberg is the Edna Peterson Bennett Endowed Chair in Prevention Research and Director of the Prevention Research Center at the Department of Human Development and Family Studies at the Pennsylvania State University. He is an internationally known leader in the field of prevention science, and actively involved in the training of prevention Ph.D. students at the Pennsylvania State University. His most well-known projects are the PATHS to Success and Fast Track projects—violence prevention programs that have been implemented and evaluated at multiple locations—both in the U.S. and internationally. He has chaired prevention science review panels for NIH and is a member of the National Advisory Council on Drug Abuse. He has been Principal or Co-Principal Investigator on grants from the National Institute of Drug Abuse, the National Institute of Mental Health, the National Institute of Child Health and Human Development, the Office of Children, Youth, and Families, and the William T. Grant Foundation. He is author of four books, over 100 peer-reviewed journal articles, and about 25 book chapters.

Proposal to Establish an Interdisciplinary Ph.D. in Developmental Science and Prevention
at Washington State University
Review by Richard F. Catalano, Ph.D.
Bartley Dobb Professor for the Study and Prevention of Violence
Director, Social Development Research Group
School of Social Work
University of Washington

I read with great interest the proposal to establish the interdisciplinary Ph.D. in Developmental Science and Prevention at Washington State University. The field would benefit from the type of program described in the proposal. The plan has unique strengths including the link to health communication and policy and the focus on translational research and practice. These aspects differentiate it from the comparison departments described in the proposal. The proposal accurately describes the growing field of prevention science, the need for Ph.D.'s with the mix of skills described in the program itself, and the growth of opportunities for employment through traditional academic departments, but also in foundations, government, and practice. I strongly believe that the proposed doctoral program is coherent in its design and curriculum, is consistent with trends in the field and if implemented will result in well trained developmental science and prevention professionals.

Prevention Science has been created by the growth of longitudinal research, the increase in funding for controlled trials of prevention programs, policies and practices, and the growing demand by federal and state agencies that prevention funds be spent on tested, effective programs. Calls for translational science that uses basic research on risk and protection to develop and test prevention programs, and uses these efficacy trials as the basis for creating population level change through widespread implementation of tested, effective policies and programs have increased over the last 10 years. The latter demand in particular has created a gap between prevention science and practice which is complicated and multifaceted, often involving obstacles to effective communication as well as to acceptance and utilization of new information (e.g., political or institutional barriers). The task of translational research is precisely to bridge this gap and the multiple inherent obstacles between epidemiology, methods and types of preventive intervention, developmental stage, and policy and practice. For example, efficacy trials emphasize finding effects on individuals who participate in an intervention. Taking prevention science to scale requires efficacious prevention programs reach all those for whom the program is appropriate in order to have epidemiological or community-wide impact. This may require adaptation of efficacious programs to have epidemiological reach, motivate diverse populations to participate, and motivate practitioners to substitute tested, effective practice for usual, "best" or new practice. With over 100 tested, effective programs and policies for a wide range of prevention targets: obesity, teen pregnancy, high risk sex, alcohol and other drug use, violence, mental health, and delinquency, the timing is ripe for the type of expansion in Ph.D. programs in developmental prevention science.

I strongly support this proposal to establish a Ph.D. program in Developmental Science and Prevention. Although I provide critical comments about a number of aspects of the program, I believe that these comments will strengthen an already good proposal.

Market. The proposal identifies three appropriate comparison departments. The proposal recognizes that these are strong competitors and have produced excellent Ph.D.'s. The field is expanding at a rapid rate, and differentiating the Developmental Science and Prevention program from these competitors is a strength in the proposal. For example, the University of Washington School of Social Work has a strong program in prevention science. In addition to prevention traineeships, the School has $10 million dollars a year in external funding in prevention science, and has graduated sought after Ph.D.'s who have focused on various aspects of prevention science. Students in other departments have also taken advantage of the research conducted in the School and have completed dissertations using this data. However, this proposal brings a unique mix of departments and substantive areas that provide it with a unique interdisciplinary signature that allows for comprehensive and flexible course work in areas not claimed by these other departments.

Interdisciplinary nature of the program. The program described has several strengths that make it unique. The focus on health communication is unique across programs that support prevention science specialties. The focus on translational research, particularly on the study of implementation of efficacious programs and effectiveness trials, is a growing focus in prevention science. The ability to collaborate with economic researchers to provide cost and cost-benefit studies is also a unique advantage over other programs. However, while these are the strengths of an interdisciplinary program, it is unclear whether the program as constructed is taking full advantage of the positive aspects of interdisciplinarity that are described in the proposal. The separate departments have already achieved multiple collaborations without an interdisciplinary degree program. The proposal suggests that these collaborations will be strengthened by the creation of this new Ph.D.; however, they may need to do more to achieve the advantages described in the proposal. The program will be administered in a single department, Human Development, and faculty from other departments will mentor students. However, enhanced opportunities for ongoing interactions may be needed to achieve many of the advantages described, including training grant opportunities and large multi-investigators' studies. Program planners may want to think through more carefully how they will enhance collaborations through the interdisciplinary Ph.D. Involving partners in planning, monitoring and evaluating the program and creating joint advisory structures for students could contribute to garnering the type of advantages described in the proposal. Without these ongoing interactions, the program may not achieve its interdisciplinary objectives, but become a Human Development Ph.D. Further integrating communication, educational psychology and economic sciences into the proposal might also strengthen its uniqueness and make graduates more valued in the post degree marketplace. One way to achieve this might be to make choosing one of the specialties in the program design mandatory rather than elective, and adding a cost-benefit specialty to the program design. Finally, it was

curious that Educational Psychology had a prominent role in the course work, but the department was not named as one of the three collaborating departments.

Those entering the program come from two sources: those directly recruited into the Developmental Science and Prevention Ph.D. program; and those recruited initially to other disciplines, e.g., communications, who elect to enter the program at a later time. The incentive for students or faculty from other departments to make or encourage this entry is not clear. Different departmental requirements for the Ph.D. may make it arduous to change to the new interdisciplinary Ph.D. For example, if a student has just completed his comprehensive exams for nursing, will he or she then need to complete the Human Development course work and comprehensive exam for the interdisciplinary degree? The incentive, point of entry and tradeoffs for these transfer students need to be better thought through.

Curriculum. The curriculum again is appropriate for a Developmental Science and Prevention interdisciplinary Ph.D. Creative course substitution with similar content can make graduates look both interdisciplinary, and yet have a primary discipline which will help make graduates attractive on the job market. A comment from above bears repeating here: having the specialties become part of the requirements would help cement the strengths of the interdisciplinary degree. Further, it is not clear from the curriculum when the Master's thesis is expected to be completed. Also, if the design on page 56 is to be complete and fit with the translational and implementation research strengths of the existing programs, there might be a place in the curriculum model for understanding program refinement, adaptation, and testing of alternate forms of program delivery. The program design aspects of the program might be strengthened by adding this content to the course work.

Student support. The opportunities for graduate student support through teaching assistantships takes advantage of what is already in place; however, Ph.D. students benefit more from research assistantships. Shifting the balance might enhance students' marketability, as research assistantships also often create publications valued by departments in evaluating applicants.

This is a creative proposal to establish a new Ph.D. in Developmental Science and Prevention. The current collaborating departments and faculty have established a strong track record of working together as well as a convincing and cost efficient proposal for the new interdisciplinary Ph.D. I strongly recommend that this program be established. My comments are provided with the view of strengthening what is already a strong application by a strong set of collaborators.

PENNSTATE

Department of Human Development
and Family Studies
College of Health and Human Development

(814) 863-0112
Fax:814-863-7963
The Pennsylvania State University
110 Henderson Building South
University Park, PA 16802-6504

March 29, 2010

Dr. Bayly Warwick, Provost
Washington State University

Dear Dr. Warwick,

At your request I have reviewed the extensive proposal for a new Interdisciplinary Program in Developmental Science and Prevention that has been proposed. For such an in-depth proposal I hope you will accept my brief statement that attempts to answers the questions you asked.

First, I believe this proposed program is innovative and likely to attract substantial numbers of well-qualified graduate students over the next decade. This is because the program meets a strongly developing need – Ph.D. program focusing on Prevention Science – that is substantially funded by the NIH as well as other federal agencies and foundations. There is clear need for new Ph.D. programs in this domain and the interdisciplinary model that has been designed looks both innovative and well-conceived. Thus, the program is clearly consistent with trends in the field.

Second, the design of the program model is strong. The main "engine" of this model is the Department of Human Development and they have done an excellent job of reshaping their faculty and research over the last decade. Dr. Power and his faculty are well-positioned to lead this initiative and it appears that they have made strong and well-coordinated connections with their partnering departments/programs. Further, their commitment to reshape the current masters program into this broader Ph.D. program is clear and they are well-positioned to become a nationally-recognized model. I there is enormous potential here. Given the high quality of the current and developing research at WSU in prevention, I think the training will be quite strong.

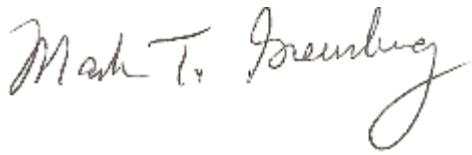
I have only two potential concerns with the present program. First, I am not sure how effective a part-time eight year experience will be for part-time students that are not in Pullman---my own experience is that part-time status tends to diminish the quality of Ph.D. work – however, I know that WSU has conducted multiple campus programs for many years and you may have found unique ways to do so. My experience is that the mentorship for a Ph.D. often requires much face-to-face learning and I don't think is usually done both from a distance and part-time. Second, while I understand the need to create this program in a time of great financial constraints and the need for financial austerity, the development of such an important program should be accompanied by future positions that will enhance current faculty and build the research capabilities of faculty and graduate students to obtain further outside funding (which then helps to further build the program). In this regard, I would suggest that new faculty in the

areas of both advanced quantitative methodology (latent class, growth mixture, missing data, etc) and school-based prevention be considered as new positions become available (these may possibly be found in a single hire).

Given my very positive review and the belief that this Ph.D. program has enormous potential to attract both federal training and research grant funds and enhance the reputation of WSU, I would also suggest one more component of the program. In order to both enhance the learning for both faculty and the new graduate students, as well as to enhance future recruitment to the program, I would suggest investment in a monthly colloquium series that bring to WSU well-known prevention scientists. Through such a process, your new program would be a part of a larger national and international network of Research 1 Universities and organizations as well as create a "focus" for regularly bringing together the participating departments and faculty --and this will create new research collaborations and training opportunities that will greatly enhance this new program initiative.

If you have any questions or would like to discuss this further, I can be reached at mxg47@psu.edu. I am in Washington State till August 6th and can be reached by phone at 814 777-0897.

Sincerely,



Mark T. Greenberg Ph.D.
Bennett Chair of Prevention Research
Director, Prevention Research Center
Associate Director, Children Youth and Family Consortium

Responses to External Reviews

Catalano Review

Dr. Catalano provides a very positive review of the proposed program. He writes that this is a "convincing and cost efficient proposal" for an interdisciplinary degree. He mentions the rapid expansion of the field of prevention science and the need for well-trained professionals in both academic and non-academic settings. He states that the program is "coherent in its design and curriculum" and unique in its focus on health communication, policy, and translational research and practice. As such, it would result in "well-trained" professionals who have skills that complement those graduating from the University of Washington. He brings up a number of suggestions. Each is considered below:

Create structures that further enhance interdisciplinary collaboration with program partners.

Dr. Catalano brings up the important point that the ultimate long-term success of this program will depend largely upon how invested the participating units are in training interdisciplinary Ph.D.s. Although the program is truly interdisciplinary in its curriculum, and has buy-in from the participating units, it initially will be administered through the Department of Human Development. Our justification for this decision is further elaborated on in the proposal, along with our plans to eventually move to a more interdisciplinary program structure. Many of Dr. Catalano's suggestions are incorporated into this expanded section.

Further integrate Economic Sciences and Educational Psychology into the proposal.

Several faculty members from the School of Economic Sciences and Educational Psychology at WSU are currently involved in collaborative prevention research/outreach with faculty members from Communication, Human Development, Nursing, and WSU Extension. In fact, the current proposal is an outgrowth of these collaborations—a way to further encourage collaborative scholarship across these units. The administrations of all units were involved in the development of the proposed curriculum, and all units were invited to participate as full partners. Because of the unique nature of the curriculum in economics, and because only a small portion of their faculty is involved in health economics, the administration of the School of Economic Sciences did not see a way that Ph.D. students in economics easily could pursue this Ph.D. in a way integrated with their current Ph.D. program. So rather than be involved as full partners in the proposed program, the School of Economic Sciences has chosen at this time to continue collaborative research with the participating units, including providing their Ph.D. students with opportunities for involvement in collaborative developmental science and prevention projects. Similarly, although educational psychologists in the Department of Educational Leadership and Counseling Psychology chose to participate in the program as affiliate faculty members (i.e., advising students and teaching classes), the College of Education chose not to participate as a full partner at this point in time. It is our goal to fully involve faculty from both of these units in the program and we anticipate significant increases in faculty involvement as the program grows and evolves.

Make one of the specialties mandatory and add a cost-benefit specialty.

In developing our curriculum, we had to balance our goal of providing students with broad training across disciplines with the WSU Graduate School's policy of keeping course requirements for Ph.D. degrees to a minimum (a university policy to maximize flexibility in Ph.D training). We did this by creating a curriculum with core requirements in three areas and providing specialty options for interested students. We therefore cannot require that students pursue one of the specialty areas. WSU currently does not offer courses on cost-benefit analyses and since our proposal was developed to only use existing courses, we cannot offer a specialty in cost-benefit analysis at this point in time. Cost-benefit analyses, however, are covered in the program development and evaluation classes. In addition, graduate research assistants working on collaborative grant-funded projects with economics faculty currently conduct research and gain experience in economic analysis of prevention, and this type of training will expand with the growth of the PhD program. Given the emphasis of the program faculty on translational research, we hope that as the program evolves we will be in a position to add additional coursework on this issue.

Create incentives for students to transfer into the proposed degree from the various units.

As currently designed, it would be necessary for students to enter the program early in their doctoral training—preferably during their first two years. As Dr. Catalano argues, it would be difficult for students to transfer later in their doctoral careers without taking considerable additional coursework. As now described in the proposal, we anticipate that the vast majority of participating students will be recruited specifically into this program. All of the enrollment projections are based upon this assumption. However, as the program grows, we expect that a greater number of students will enter the program after starting in another Ph.D. program. Incentives for the students to transfer will include opportunities for research and teaching assistantships and the opportunity to engage in interdisciplinary research and training with faculty members across units and the WSU system.

"It is not clear when the Master's thesis is expected to be completed."

This topic is now addressed.

Strengthen the program's emphasis on translational research and practice issues.

Because of cost considerations, the proposed Ph.D. program was designed using existing courses. Although it may not be evident in the catalog descriptions, the current required courses on program development and evaluation place considerable emphasis on translational issues including program refinement, adaptation, and testing of alternate forms of program delivery; the unique problems of conducting longitudinal community-based and school-based research; and program evaluation in non-experimental settings. If, as the program develops, we are in a position to add new courses to the curriculum, we will continue to focus the program on our strengths—providing additional coursework in translational research and cost-benefit analysis.

"Ph.D. students benefit more from research assistantships than teaching assistantships."

We agree with Dr. Catalano that opportunities for research are an important part of Ph.D. student training. We have provided considerably more information on our plans for teaching assistantships in the proposal to demonstrate how we now are in a position to create a financially sustainable program, even if there are declines in research funding. However, as stated throughout the proposal, one of the main purposes of developing this interdisciplinary Ph.D. is to increase opportunities for multi-investigator grants addressing important developmental science and prevention issues which would provide numerous funding opportunities for our students.

B. Greenberg Review

Dr. Greenberg also provides a very positive review of the program. Like Dr. Catalano, he stresses that there is a growing need for Ph.D. graduates in the prevention science area and that the prevention training provided by the proposed program "will be quite strong." He writes that the curriculum is "innovative and well-conceived" and that the Department of Human Development is "well-positioned to lead this initiative." He also states that "this Ph.D. program has enormous potential to attract both federal training and research grant funds and enhance the reputation of WSU." He brings up the following issues:

Concerns about the effectiveness of the part-time experience outside of Pullman.

As described in the proposal, although students will earn their Ph.D. through WSU Pullman, some place-bound students will be taking classes at the regional campuses of WSU Spokane and WSU Vancouver. Therefore, most courses will be available through distance technology. We understand his concern, but feel that we are well-positioned to lead a statewide program. WSU has been a leader in statewide education. The College of Nursing and the College of Agricultural, Human, and Natural Resource Sciences (home of Human Development and WSU Extension) have been particularly successful in this regard. The advisors of students participating at regional campus will be faculty members at those campuses. Moreover, the participating units have considerable experience in completing graduate training with faculty members at multiple locations. Given the success of the nursing program in statewide graduate education, we feel that the part-time professionals who are likely to enroll in this program will receive sufficient support to excel in the proposed program and will enrich the experiences of all students in the program. Finally, as described in the various enrollment sections throughout the proposal, the vast majority of students will be full-time students, so addressing the unique needs of part-time students will not put an excessive burden on the other students or faculty.

The program could benefit from hiring of faculty in quantitative methods and school-based prevention.

Dr. Greenberg has done an excellent job in identifying two areas where the proposed program could benefit from new faculty hires. Because the proposed program requires no new faculty resources, there are no requests for faculty hires. We currently have two faculty members with expertise in school based programming (Hugh Jackson in Education and Nicole Werner in

Human Development) and two faculty members with significant quantitative expertise (Brian French and Mike Trevisan). Moreover, many of the other program faculty members have strong backgrounds in quantitative methods. However, we agree that if opportunities arise for the hiring of new faculty members, these would definitely be important areas we would consider.

Add a colloquium series.

Finally, Dr. Greenberg suggests that we invest in a colloquium series to bring well-known prevention scientists to WSU to create new research and training opportunities, and to help make the proposed program part of the national and international network of universities involved in prevention activities. As described in the proposal, this is a high priority, especially during the first few years of the program to increase faculty involvement across the various units. Although funds for such activities are currently limited, we anticipate that we will have sufficient operating funds to create such opportunities for our students and faculty.

Letters of Support

from Administrators of

Fully Participating Units

WASHINGTON STATE UNIVERSITY
College of Agricultural, Human, and Natural Resource Sciences
Office of the Dean

March 1, 2010

To whom it may concern:

I am pleased to write this letter in support of the proposal to develop a Developmental Science and Prevention Interdisciplinary Ph.D. at Washington State University. I have read the proposal in detail and find it to be thoughtful and well-conceived concept that should greatly enhance graduate education and research opportunities in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) and at WSU.

There are several intriguing characteristics about this proposal. Among the most important are: (1) it focuses on an area of critical importance to society, (2) it is interdisciplinary in scope, and (3) it provides doctoral training opportunities in areas of emerging strength at WSU.

The proposal provides thoughtful and coherent argument of the importance of developmental and prevention science to our society. Associated with the increased merit of prevention and developmental science as meaningful approaches to address medical, social, and educational problems, is an accompanied growth in funding opportunities in this area. Clearly, the competitive landscape is such that if we move quickly in developing this degree program, we can cease first-mover advantage in the region and quickly develop national reputation. The proposal also dovetails well with WSU's past and planned investment in the health sciences.

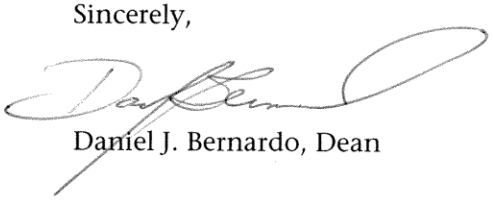
Development of an interdisciplinary doctoral program is consistent with WSU's graduate initiatives of increasing doctoral enrollment and reducing the number of small-enrollment programs. I would view the proposed Ph.D. in Developmental Science and Prevention to follow a similar course of development as the model interdisciplinary doctoral program at WSU – Molecular Plant Science (MPS). Like MPS, faculty from a variety of colleges and academic units will access this program. For units like Human Development, this will be the principal doctoral degree employed by their faculty. For other units (e.g., the College of Nursing), the program will be accessed by a subset of faculty who work in the area of developmental science and prevention. In aggregate, the large number of faculty across a variety of units who access the program will yield a robust student enrollment.

421 Hulbert Hall, P.O. Box 646242, Pullman, WA 99164-6242
509-335-4561 • Fax: 509-335-1065

The faculty in CAHNRS most likely to be actively engaged in a doctoral program in Developmental Science and Prevention reside in the Department of Human Development. This unit has developed an excellent cadre of early- and mid-career faculty with growing research programs, principally focused on various dimensions of developmental science and prevention. The inability of these faculty to access a doctoral program places a significant limitation on the growth of their research programs. The proposed doctoral program would rectify this critical issue.

The CAHNRS Administration is prepared to support this proposal in whatever means necessary to assure its success. We look forward to working with the units involved and the Graduate School to make this endeavor a success.

Sincerely,



Daniel J. Bernardo, Dean

WASHINGTON STATE UNIVERSITY
The Edward R. Murrow College of Communication

Nov. 2, 2009

Howard Grimes
Dean of the Graduate School
Washington State University

Dear Howard:

I would like to express my support for the degree program in Developmental Science and Prevention, being submitted by the Department of Human Development at the College of Agricultural, Human, and Natural Resource Sciences.

The program has clear synergy with Murrow College's own health communications work. We will be pleased to open relevant courses to students in the program and look forward to collaborative research that will undoubtedly emerge.

Let me know if you have any questions.

Sincerely,

Lawrence Pintak
Founding Dean
The Edward R. Murrow College of Communication

Cc: Daniel J. Bernardo, CAHNRS Dean

PO Box 642520, Pullman, WA 99164-2520
509-335-1556 • Fax: 509-335-1555 • www.communication.wsu.edu

WASHINGTON STATE UNIVERSITY
College of Agricultural, Human, and Natural Resource Sciences
WSU Extension

March 15, 2010

To whom it may concern:

I am pleased to write this letter in support of the proposal to develop a Developmental Science and Prevention Interdisciplinary Ph.D. at Washington State University. I have read the proposal in detail and find it to be a thoughtful and well-conceived concept that should greatly enhance graduate education and research opportunities in the College of Agricultural, Human, and Natural Resource Sciences (CAHNRS) and most definitely for WSU Extension.

WSU and CAHNRS have re-energized its commitment to more closely integrating its research and extension activities. I lead a team of multi-departmental leadership (chairs in CAHNRS, Pharmacy, Nursing, Liberal Arts, and the Extension Districts statewide) in such an effort. The human sciences, and specifically in the area of health and prevention sciences, has proved particularly fruitful for Extension in meeting the needs of the state and for generating external funding and scholarly products. Development of an interdisciplinary doctoral program is consistent with the health sciences initiatives of the university and the recent internal report on the capacity of the university in the area of cultural, social and behavioral aspects of health. WSU Extension is named throughout that document as an asset for the success in our health agenda as a university. Furthermore, in the past decade we can document the growth of large-scale, research and extension projects from one in 2000 to ten in 2009. These have included USDA-funded projects, two NIH grants, and recently a Raikes Foundation grant. These projects have involved partnerships with a wide range of external stakeholders and practitioners, many of which are listed in the proposal. It is clear we can be a strong player in the competitive landscape.

WSU Extension is excited about the proposal because of these three important issues: (1) it focuses on an area of critical importance to society, (2) it is interdisciplinary in scope, and (3) it provides doctoral training opportunities in areas of emerging strength at WSU. The proposal provides a thoughtful and coherent argument of the importance of developmental and prevention science to our society.

WSU Extension has an investment of faculty positions in CAHNRS including the Department of Human Development. These faculty will contribute to doctoral training. We are prepared to support this proposal and collaborate with the leadership of CAHNRS and other colleges. We look forward to working with the units involved and the Graduate School to make this endeavor a success.

Sincerely,

Linda Kirk Fox
Associate Dean, CAHNRS, and
Associate Director, WSU Extension

cc: D Bernardo

\\Cru22\ce_admin\Extension\Health Sciences\Prevention Science Proposal Ltr of Support.doc

P.O. Box 646248, Pullman, WA 99164-6248
509-335-2837 • Fax: 509-335-2926 • TDD: 1-800-833-6388 • extension@wsu.edu • http://ext.wsu.edu/

WASHINGTON STATE UNIVERSITY

COLLEGE OF NURSING

October 30, 2009

Dear Dr. Bernardo:

The College of Nursing is very pleased to see your proposal go forward to offer an interdisciplinary doctoral degree in prevention science. We have appreciated the efforts of your faculty to reach out to our nursing faculty early in the development of the proposal. Reaching out early sets the stage for true collaboration. And as we both know, interdisciplinary initiatives and programs can be most successful when all the partners work together from the beginning to create a new inter-professional vision for inquiry.

As nurse scientists and clinicians we understand that in health care you can "pay now or pay later." If we "pay now" we make the investments and see that yield later on. It is fashionable to characterize the yield from prevention in economic terms only; however the real yield comes from preventing pathology, minimizing pain and suffering, and taking those steps that allow persons to achieve their full potential. If we postpone investments in prevention we "pay later" in the form of high cost tertiary health services, additional correctional facilities, and rescue services for persons who have fallen through the cracks of health care. As a public health nurse I very much prefer the former to the latter.

Educating students to understand, quantify, investigate, and break new ground in prevention science is a tall task. It requires a robust and knowledgable faculty, deep and thoughtful lines of research, and a commitment to excellence. The proposal I have read begins to create that base. The College of Nursing looks forward to continued conversations with the Department of Human Development and other departments to ensure smooth access to classes for nursing students and faculty collaboration. Let us know what we can do.

Sincerely,

Patricia G. Butterfield

Patricia G. Butterfield, Ph.D., RN, FAAN
Dean and Professor
Washington State University College of Nursing

FORM 4

REQUIRED COURSE WORK
Part I

Include this form with new degree program proposals. Staff will post this information and the program proposal on the HECB Web site during the public comment period.

See Section V: Curriculum pg. 15-22, Tables 12, 13 and 14

Prerequisite Courses		
Course Number	**Course Title**	**Credits**
	Total Credits	
Program Requirements		
Course Number	**Course Title**	**Credits**
	Total Credits	

HECB
P.O. Box 43430
Olympia, WA 98504-3430
www.hecb.wa.gov/autheva

FORM 5

ENROLLMENT AND GRADUATION TARGETS
Part I

Include this form with a new degree program proposal or a Notification of Intent to extend an existing program. Staff will post this information to the HECB Web site during the comment period.

Year	1	2	3	4*
Headcount	8	16	25	34
FTE	7.8	15.6	24.6	33.6
Program Graduates	--	--	--	8

***year of full enrollment*

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Please contact Mark Bergeson at 360-753-7881 or markb@hecb.wa.gov for Form 6 (Program Personnel) and Form 7 (Summary of Program Costs and Revenue) information