



UNIVERSITY OF MINNESOTA

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POSITION ANNOUNCEMENT

**UNIVERSITY OF MINNESOTA EXTENSION &
COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT
Non-formal/Informal Science, Technology, Engineering & Mathematics (STEM)
Education**

- Title:** Extension Educator, Non-Formal/Informal
STEM Education
- Program Area:** Joint Position: 70% Extension Youth Development and 30% College of
Education and Human Development, STEM Education Center
- Appointment:** Professional & Academic, non-tenure track,
with Extension rank to be assigned
- Location:** Flexible with offices at
Extension Center for Youth Development,
Minneapolis Campus and
STEM Education Center, St. Paul Campus
- Deadline:** June 10, 2011; position will remain open until filled

ABOUT EXTENSION Center for Youth Development (ECYD):

The University of Minnesota Extension is a major outreach arm of the University of Minnesota, a land grant institution with a mission to serve the public through applied research and education. The mission of the University of Minnesota Extension is: *Making a difference by connecting community needs and University resources to address critical issues in Minnesota.*

- The Extension Center for Youth Development is a statewide catalyst, resource, and advocate to ensure quality community opportunities for young people to learn, lead, and contribute. The Center is responsible for educational outreach and applied research efforts to connect community needs and University resources that address critical youth development issues statewide. The critical issue and current overarching goal of Extension's Youth Development efforts is to make a measurable difference in the quality, availability, and impact of out-of-school/non-formal community experiences for the learning and development of Minnesota's children and youth. The Center does this by:
 - offering youth programs reaching 130,000 youth through 4-H
 - training 4,000 youth workers annually
 - studying issues using applied research & evaluation approaches
 - leveraging resources through partnerships and multiple funders
 - bridging research and practice using innovative approaches
 - contributing to the field through publications and scholarship

ABOUT THE COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT, STEM Education Center (SEC):

The STEM Education Center is an interdisciplinary, research center involving faculty from across the university, including researchers from the Colleges of Education and Human Development, Biological Sciences, Food, Agricultural and Natural Resource Sciences, the Medical School, and the College of Science and Engineering. Faculty research best practices in STEM teaching, models for STEM integration across the PreK-16 curriculum, and assessment of student learning in STEM. Through extensive partnerships with local and statewide K-12 schools, faculty also provide professional development for STEM teachers. The primary goal of the STEM Education Center is to have a significant impact on STEM education through concerted interdisciplinary research efforts in:

- learning and cognition
- STEM integration
- instructor development
- evaluation and assessment

ABOUT THIS POSITION

This full time, non-tenure track, joint, professional and academic position and is a member of both the ECYD and SEC academic staff. Youth development colleagues specialize in non-formal education, youth development, professional development and training, applied research, and evaluation. STEM education colleagues specialize in learning and cognition, STEM integration, instructor development, and evaluation and assessment. This position is eligible for Extension academic rank and promotion.

The appointment is annually renewable contract. This individual will also be encouraged and assisted in developing ties/joint appointments with other University academic units to support his or her work and scholarship.

PERFORMANCE EXPECTATIONS

Promotion is based on excellence in scholarship, program leadership, and teaching. Extension academic rank (i.e., Assistant Extension Professor, Associate Extension Professor, or full Extension Professor) will be assigned depending upon qualifications and experience and Extension's promotion policy. Academic staff members are expected to make significant contributions to their field through scholarship, program leadership, and Extension teaching in ways that are recognized and valued by peers, communicated effectively, and constitute an intellectual contribution to the field. A person entering at the Assistant Extension Professor level will have six years to demonstrate such contributions. Distinguished contributions are required for promotion to full Extension Professor.

LOCATION OF POSITION

The position has two flexible office locations: The ECYD, McNamara Alumni Center, and the STEM Education Center (SEC) Learning and Environmental Sciences Building. The Minneapolis and St. Paul campuses are conveniently connected by an intercampus shuttle service, with stops within a block of the office locations. Minneapolis and St. Paul (the Twin Cities area, as it is popularly referred to) are located on the east central border of Minnesota. Clerical, technology, and other support will be provided by ECYD and SEC support staff.

DESCRIPTION

The ideal candidate for this position has a unique skill set that blends a degree in science education, mathematics education, engineering education, or closely related field with application in youth development and non-formal or informal learning settings.

We seek an energetic, dynamic individual who understands the research, theory and practice behind non-formal and informal STEM learning models for youth, relevant learning/instructional approaches, and latest advances in training adults to work with youth to advance STEM learning. The ideal individual has demonstrated and studied their application in a variety of innovative ways to attract and engage young people in STEM-related youth programs.

This position provides statewide leadership to a new STEM initiative in ECYD as co-chair to the initiative team, ensuring that the initiative is integrated, intentional and strategic in its efforts to further the mission and sustainability of STEM non-formal learning in ECYD. The position will both manage and help secure resources that lead to training, programs, and research that advances the field of non-formal STEM learning for youth.

This position also has research responsibilities within SEC, securing programmatic and research funding, conducting research, working with graduate students, and successfully engaging with the public by bridging research to practice.

The position will grow and intentionally create opportunities for youth development to advance the latest non-formal STEM learning research and practices by bridging the work of the STEM Education Center and the Center for Youth Development. Likewise, the position will grow and intentionally create opportunities for STEM education to benefit from collaborations with youth development researchers, educators, and practitioners.

DUTIES AND RESPONSIBILITIES

1. Proactively leading and shaping the new STEM Youth Development Initiative, establishing clear measurable goals, defining clear strategies, supporting implementation and capturing and regularly reporting on the initiative's progress.
2. Designing research and evaluations on non-formal and informal STEM education programs.
3. Contributing to scholarship in non-formal STEM education (e.g., effectiveness of different approaches to non-formal and informal STEM education) through studies, publications, staff development, and educational resources individually and in collaboration with Youth Development and STEM Center project PIs/co-PIs.
4. Developing and nurturing relationships with key partners both nationally and within the state and the University that can contribute to or help inform the initiative,
5. Writing proposals and developing other mechanisms for generating initiative, program and research resources.
6. Coordinating the implementation of research studies across multiple grants and contracts, including the coordination of interviews and other data collection, maintenance of project data base, data entry, training interviewers, and data collection staff, including graduate assistants.
7. Assisting Youth Development and STEM Center project PIs/co-PIs to create and validate study instrumentation and provide supervision and supports to graduate research assistants.
8. Supervising, managing and supporting research, program and support staff, when appropriate.
9. Collaborating with Youth Development and STEM Center project PIs/co-PIs to conduct and interpret statistical analyses using SAS and SPSS, and to conduct qualitative data analyses using N*Vivo software. Learning new statistical software and analytic techniques as needed.
10. Promoting and demonstrating the use of technology to communicate, locate information, design and deliver programs; conduct research and evaluations and write and disseminate appropriate reports.

11. Managing the activities of initiative and project advisory committees.
12. Conducting literature reviews including securing articles and drafting text for manuscripts.
13. Assisting and ensuring preparation of human subjects applications and reports.
14. Proposing and delivering presentations on project results.
15. Representing Extension and CEHD through service on community, regional, state and national boards that are congruent with area of expertise.

QUALIFICATIONS

Education:

A doctorate degree in a science, technology, engineering or mathematics education or a youth development field is required. Research experience in applying STEM education in non-formal settings is required. Significant course work and scholarship in STEM education or other discipline related to working with youth and/or program development is required. Course work in child and adolescent development, curriculum and instruction, educational program design, experiential learning and pedagogy is preferred.

Experience:

Two years of relevant professional experience in related organizations such as research centers, Cooperative Extension, elementary, secondary or post-secondary education, community youth development organizations and/or foundations is required.

Skills/Abilities:

Demonstrated competence in a useful mix of the following areas is preferred:

- sustained excellence in leading and studying STEM education in non-formal or informal settings
- research skills necessary to lead and collaborate on STEM education research projects
- ability to manage and excel in a joint appointment between two departments,
- leadership and team building skills
- ability to communicate effectively with individuals and groups, orally and in writing
- ability to develop and maintain effective working relationships with colleagues, partners and stakeholders
- knowledge of and productive experience working with diverse and multicultural audiences
- ability to apply research to program design, delivery and evaluation
- ability to use technology for gathering information, communication, program delivery and reporting
- ability to conceptualize and write major grant proposals and design major program initiatives
- ability to both seek and leverage resources through grants, fees, or services and then utilize resources effectively
- experience thinking at both the program and statewide system level

BENEFITS/APPOINTMENT

1. This is annual renewable academic professional appointment with the title of Extension Educator and Extension academic rank to be assigned at hire.
2. The appointment will be reviewed annually, with continuation dependent on performance, results, availability of funds, and program needs. Annual renewal is automatic if no action is taken. The position is not tenure track but funding is expected to continue as it is based on recurring state and federal funding.
3. Promotion in Extension academic rank is available and expected as defined in Extension Promotion Policies and Procedures document.
4. University of Minnesota appointment and benefits, including health and life insurance as well as retirement contributions.

5. Reimbursement for travel and subsistence is available in accordance with University policy. (Must provide own means for traveling throughout the state and legally required vehicle insurance).
6. Salary commensurate with academic rank, education and experience.

TO APPLY

Please attach your cover letter; and resume or vita at

<https://employment.umn.edu/applicants/Central?quickFind=94134>

Three names of professional references; transcripts for all college work (unofficial transcripts are acceptable) are also required to complete your application. To submit three names of professional references; you can attach them to the "references" section of the "optional documents." To submit your unofficial transcripts on-line; you can attach them to the "Additional Document" section of the "optional documents".

Three names of professional references and your unofficial transcripts that cannot be submitted online should be sent to or if you have questions about applying online please contact:

Naaz Babvani

University of Minnesota Extension - Human Resources

260 Coffey Hall, 1420 Eckles Ave.

St. Paul, MN 55108

Telephone: (612) 624-3717; Fax: 612-624-7749; E-mail: babva001@umn.edu

FOR POSITION QUESTIONS, CONTACT

Pam Larson Nippolt, Ph.D. (Extension Center for Youth Development)

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612-624-8445

or

Tamara Moore, Ph.D. (STEM Education Center, CEHD)

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612-624-1516

Search Committee co-Chairs

APPLICATION REVIEW

June 10, 2011; position will remain open until filled

*To check the status of your application, log-in to the University of Minnesota employment website at <https://employment.umn.edu/>. To log-in, you will need the user name and password you create when you apply for the position.

**Any offer of employment is contingent on the successful completion of a background check.

The University of Minnesota Extension is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status or sexual orientation.