

Jayne A. Downey, Ph.D.
Research, Publications, Presentations, and Grant Activity

Over the last five years at MSU, I have developed a coherent and sustained research agenda that is relevant to my work both in preparing prospective teachers and addressing the needs of the education community throughout Montana and beyond. My academic background is in the domain of Educational Psychology and my area of study addresses the nature of learning and learners, the characteristics of effective teaching, and the contextual factors that influence the teaching and learning process. My specific expertise and program of research in this domain revolves around two complementary strands of investigation which explore the factors involved in promoting academic success for at-risk children and adolescents and the preparation of prospective teachers to teach students from diverse backgrounds. My scholarship has also involved the development and publication of a multimedia project and a series of manuals for use by instructors of Educational Psychology designed to enhance the learning of prospective teachers.

Academic Success with At-Risk Students

I conduct research with children, adolescents, and young adults who are considered at-risk for academic failure. My research focuses on the factors and processes that help students facing difficult environmental stressors (such as poverty) to “beat the odds” and achieve academic success. This line of study is grounded in the literature focused on resilience—the interaction of multiple factors that foster a student’s positive adaptation in the face of significant adversity. My research focuses specifically on the area of educational resilience defined as increased likelihood of academic success despite personal vulnerabilities and environmental adversities. My goal is to more clearly identify *which* factors foster academic success for different students and explain *how* those factors make the difference for students facing adversity.

Downey, J. (in press). Recommendations for fostering educational resilience in the classroom. *Preventing School Failure*.

Thorngren, J., Downey, J. and Nelson, M. (2006). Promoting a pro-college culture with at-risk youth: School counselors’ perspectives. *Journal of School Counseling*, 4, 11, 1-22.

Downey, J. (2004). The role of metacognition in the academic success of at-risk children. *Montana State Reading Journal*, 20, 2, 45-50.

Downey, J. (under review). Listening to students: Perspectives on educational resilience from children who face adversity. *Urban Education*.

Downey, J. (2002). Exploring children’s beliefs about educational risk and resilience. *Academic Exchange Quarterly*, 6, 1, 126-131.

Rahm, J. and Downey, J. (2002). “A scientist can be anyone!” Oral histories of scientists can make “real science” accessible to youth. *The Clearing House*, 75, 5, 253-257.

Downey, J. (2001). Understanding children’s resilience: A guide for early childhood teachers. *Colorado Early Childhood Journal*, 3, 1, 4-7.

The consequences of academic failure and leaving school can be very severe; it is estimated that high school dropouts earn an average of one million dollars less over a lifetime than college graduates (Bridgeland, DiJulio, & Morison, 2006) and they are also more likely to be unemployed, poverty stricken, incarcerated, unhealthy, or divorced than are high school graduates (Rumberger, 2001). Given the dire lifelong economic and social disadvantage for students who experience academic failure, I have dedicated considerable effort toward identifying factors and approaches that can be used to support students' academic success and foster educational resilience. My findings show that focused support from adults, specific curricular supplements, and sound pedagogy help to foster students' academic success in the face of risk and adversity. In fact, it appears that informed pedagogy may be a critical mechanism for both learning and protection in the lives of at-risk students. My research offers support for the notion that there is a sense of "ordinary magic" in the daily life of the classroom (Masten, 2001) and in a world full of stresses for students and teachers alike, my research clearly shows that everyday interactions in classrooms really do matter.

My findings also suggest that the academic success of students who face adversity cannot be viewed as the responsibility of any single entity. Rather, the findings point to multiple opportunities and responsibilities that need to be distributed throughout the community. School leaders, teachers, counselors, families, and community organizations must work together to foster the academic achievement of children who face adversity. Given that young people's futures are at stake, it is urgent that all parties work together to offer these students realistic opportunities to achieve success.

Preservice Teacher Preparation

The second thread of my research explores the ways in which our teacher education program can effectively prepare graduates to work with children from diverse cultural backgrounds. The need for this type of work is critical because statistics indicate that while 40% of the students enrolled in U.S. schools are students of color, over 90% of teachers are White/middle-class and report little experience with diverse cultures. This cultural mismatch between teachers and students poses a serious problem for classroom teaching/learning can disadvantage many minority students. Given that student success in a culturally diverse classroom is related to the teacher's knowledge of and sensitivity to the cultural norms of the community, we as teacher educators must constantly look for new methods by which to effectively prepare teachers to serve students from cultures other than their own.

Downey, J. (in press). "It's not as easy as it looks": Preservice teachers' insights about teaching emerging from an innovative Educational Psychology assignment. *Teaching Educational Psychology*.

Downey, J. and Cobbs, G. (2007). "I actually learned a lot from this": A field assignment to prepare future preservice math teachers for culturally diverse classrooms. *School Science and Mathematics*, 107, 1, 391-403.

Downey, J. and Herbeck, J. (under review). Developing culturally competent preservice teachers in programs with limited multicultural opportunities. *Multicultural Perspectives*.

Multimedia and Pedagogical Publications

In conjunction with my work in the teacher education program, I have also developed and published a multimedia project and a series of Educational Psychology instructor's manuals designed to enhance the learning of prospective teachers. The first publication is a multimedia product composed of 3 CD-ROMs. The CDs contain over 50 video clips of children discussing relevant issues such as motivation, memory, family, and thinking processes. This product implements cutting edge technology to engage college students the theory and application of educational psychology. In addition, I have authored an instructional guide to accompany the set of CDs. In this guide, I provide professors with innovative strategies for using the CDs with their students. Finally, I have authored a set of instructor's manuals that identify pedagogical strategies and multimedia tools that can be used in Educational Psychology courses for both Elementary and Secondary preservice teachers.

Downey, J. and Ormrod, J. (2006). *Instructor's manual to accompany Essentials of Educational Psychology*. Upper Saddle River, NJ: Merrill Prentice Hall.

Downey, J. and Ormrod, J. (2006). *Multimedia guide to accompany Essentials of Educational Psychology*. Upper Saddle River, NJ: Merrill Prentice Hall.

Downey, J. and Ormrod, J. (2006). *Instructor's manual to accompany Educational Psychology: Developing Learners*. Upper Saddle River, NJ: Merrill Prentice Hall.

Downey, J. and Ormrod, J. (2006). *Multimedia guide to accompany Educational Psychology: Developing Learners*. Upper Saddle River, NJ: Merrill Prentice Hall.

Downey, J., Garry, S., and McDevitt, T. (2004). *Observing children and adolescents: Guided interactive practice in understanding development*. Upper Saddle River, NJ: Merrill Prentice Hall.

McDevitt, T. Ormrod, J., and Downey, J. (2004). *Multimedia guide to accompany Child Development: Educating and Working with Children and Adolescents*. Upper Saddle River, NJ: Merrill Prentice Hall.

Summary

The complementary strands of my research agenda and my published pedagogical manuals, guides, and multimedia technology all help to shed light on the nature of the teaching and learning process. My research with at-risk students reveals the strategies and approaches that can help to close the achievement gap and foster academic success for students in need. I have carefully integrated these results into my class content so that my prospective teachers have increased insight into how to support the academic success of at-risk students. My work in the realm of teacher education has helped to pinpoint some of the ways in which we can strengthen our preparation of prospective teachers to work with students from all backgrounds. Publication of the pedagogical manuals, guides, and multimedia technology has helped to strengthen the pedagogy in my own courses, as well as providing pedagogical insights for the national Educational Psychology community.

Grants & Awards

Authors	Grant Title	Funding Source	Amount
Smith, J., Downey, J., & Klebe, K. (2007).	Identification of initiatives that enhance post-secondary retention for students at-risk for non-persistence: The mediating role of students' achievement, social and interest goals.	Submitted to the U.S. Department of Education, Institute of Education Sciences, Washington, D.C.	\$520,000 requested.
Downey, J. (2005).	Provost's BEST Award	Montana State University	\$4000
Franzak, J. & Downey, J. (2005).	Reading for change project. Research Funding Proposals	Morris & Helen Silver Foundation, Missoula, MT; Harvest Foundation, Seattle, WA; Wendy's of Montana Foundation, Henderson, NV; Starbucks Foundation, foundationgrants@starbucks.com.	Unfunded
Downey, J. (2005).	Developing culturally responsive literacy education for American Indian youth.	College of Education, Health and Human Development Research Mini-Grant,	\$3000
Downey, J. (2004).	Preparing preservice teachers to teach diverse students.	College of Education, Health and Human Development Research Mini-Grant	\$1500
Downey, J (2004).	Utilization of digital video to strengthen the pedagogical skills of prospective secondary teachers.	Department of Education	\$3154
Downey, J. (2003).	Children's perspectives on participation in a community mentoring program.	College of Education, Health and Human Development Research Mini-Grant	\$1640
Downey, J. (2003).	Engaging preservice teachers in issues of diversity: How are we doing?	College of Education, Health and Human Development Research Mini-Grant	\$1330
Downey, J. (2003).	Preparing preservice math teachers to teach diverse students.	Center for Learning and Teaching West	Unfunded

Peer-Reviewed Presentations

Holder, K.C. & Downey, J. (2008). Incidental becomes visible: A comparison of school- and community-based field experience narratives. Accepted for presentation at the annual meeting of the American Educational Research Association, New York, NY.

Downey, J., Cobbs, G. & Molesky, Z. (2007). Making connections: An early multicultural field experience for preservice teachers. Presented at the annual meeting of the Northern Rocky Mountain Educational Research Association, Jackson, WY.

- Downey, J. (2007). Challenges in teaching Educational Psychology: Juggling preservice teachers' misconceptions and self-efficacy beliefs. Presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Smith, J., Paulsen, A., & Downey, J. (2007). Documenting the complexity of multiple achievement goal patterns. Presented at the annual meeting of the American Psychological Association Annual Meeting, San Francisco, CA.
- Downey, J. & Koycba, S. (2006). Alternative schooling options for high school students: What makes the difference? Presented at the annual meeting of the Northern Rocky Mountain Educational Research Association, Sun Valley, ID.
- Downey, J. (2006) Students' perspectives on mathematics as revealed through their drawings. Presented at the annual meeting of the School Science and Math Association, Missoula, MT.
- Downey, J. (2006). Closing the achievement gap in mathematics: Insights from elementary students. Presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Downey, J. (2006). Classroom strategies for closing the achievement gap. Presented at the National Youth At-Risk Conference, Savannah, GA.
- Franzak, J. & Downey, J. (2005). Motivation and engagement with adolescent readers. Presented at the annual meeting of the Montana State Reading Council, Billings, MT.
- Downey, J. (2005). "It's not as easy as it looks": Learning to teach in an Educational Psychology course. Presented at the annual meeting of the American Educational Research Association, Montreal, PQ.
- Cobbs, G. & Downey, J. (2005). "I actually learned a lot from this": A field assignment to prepare future math teachers for culturally diverse classrooms. Presented at the annual meeting of the American Mathematics Teacher Educators, Houston, TX.
- Downey, J. (2004). "I've been getting more better": Children's perspectives on participating in a school-based mentoring program. Presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Cobbs, G. & Downey, J. (2004). Preparing preservice teachers to teach math to underrepresented students: A field assignment. Presented at the annual meeting of the School Science and Math Association, Atlanta, GA.
- Thorngren, J. & Downey, J. (2003). K-16 relationships: Promoting post-secondary academic success for at-risk youth. Presented at the annual meeting of the American Council on Education, Atlanta, GA.
- Downey, J. (2003). Listening to students: Perspectives on educational resilience from children who face adversity. Presented at the annual meeting of the American Educational Research Association, Chicago, IL.

Thorngren, J. & Downey, J. (2003). Cultivating tomorrow's leaders: Promoting post-secondary educational opportunities for at-risk youth. Presented at the annual meeting of the Northern Rocky Mountain American Educational Research Association, Jackson, WY.

Invited Presentations

Downey, J. (2007). Challenges in teacher education: Prospective teachers' beliefs about teaching. Presented at the Department of Education Research Symposium, Montana State University, Bozeman, MT.

Downey, J. (2006). Facilitating active learning in the college classroom. Presented at the Thailand Education Scholars Symposium, Montana State University, Bozeman, MT.

Downey, J. (2006). Current trends in teacher education research. Presented at the Department of Education Research Symposium, Montana State University, Bozeman, MT.

Downey, J. & Franzak, J. (2005). Merging streams: Strengthening educational research through collaboration. Presented at the Department of Education Research Symposium, Montana State University, Bozeman, MT.

Downey, J. (2005). Preparing future math teachers for culturally diverse classrooms. Presented at the Department of Education Research Symposium, Montana State University, Bozeman, MT.

Downey, J. (2004). Practical strategies for building educational resilience in secondary classrooms. Presented at the Montana School Counselor's Conference, Bozeman, MT.

Cobbs, G. & Downey, J. (2004). Listening to students: A field assignment to introduce preservice teachers to diverse students' ideas about math. Presented at the Research Symposium, Phi Delta Kappa/School of Education, University of Montana, Missoula, MT.

Cobbs, G. & Downey, J. (2004). "I actually learned a lot from this!": A field assignment introducing preservice teachers to diverse students' ideas about math. Presented at the Center for Learning and Teaching West Research Symposium, Missoula, MT

Downey, J. (2003). Educational resilience. Presented at the Montana Teaching Excellence Awards, Office of International Programs, Montana State University.

Downey, J. (2003). Listening to students: Perspectives on educational resilience from children facing adversity. Presented at the Center for Learning and Teaching West Research Forum, Portland, OR.

Downey, J. (2003). Methods for interviewing children. Presented at the School of Education, University of Montana, Missoula, MT.

Downey, J. (2002). Critical ethnography. Presented at the Center for Learning and Teaching West, Montana State University, Bozeman, MT.