### Joëlle Genevieve Clark

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### **Education:**

Northern Arizona University Anthropology MA 1990 Northern Arizona University Recreation Resource Management BS 1985

### **Post Degree Professional Development:**

- National Science Education Leadership Association, Science Leadership Institute on Science Curriculum Topic Study (2009)
- Lawrence Hall of Science, University of California Berkeley, GEMS Roots of Reading/Seeds of Science and Space Science Curriculum workshops (2007)
- National Education Summit: Proven Practices for Learning Communities (2005)
- Inquiry Institute, Exploratorium, San Francisco (2005)
- Using Data Getting Results Data Facilitator Professional Development Seminars (2001-2003)
- Using the School Portfolio for School Improvement, Victoria Bernhardt, Ph.D. (2002)
- Adaptive School: Developing Collaborative Groups Four Hats Leadership Institute (2000)
- WestEd Eisenhower Regional Consortium Annual Conference (1997, 2000)
- GLOBE Franchise Training and Facilitation (1999)
- GEMS (Great Explorations in Math and Science) Associate I & II(1996 & 1999)
- Classroom Observation Team for Evaluation of Phoenix Urban Systemic Initiative (1997)
- FOSS (Full Option Science System) Leadership Institute (1997)
- Facilitating Systemic Change in Science and Mathematics Education (1997)
- Professional Development for Alternative Assessment (1997)
- Project Archaeology: Intrigue of the Past Facilitator Training (1996)
- Navajo Cultural Training for Educators (1993)

# **Curriculum Development Experience** 2009

- The Ancestral Puebloans: An Investigation Into Human History. Traveling Trunk Program Grades 3-5. Flagstaff Areas National Monuments, National Park Service. Author & Curriculum Development Specialist
- Stories Then and Now. Traveling Trunk Program Grades K-2. Flagstaff Areas National Monuments, National Park Service. Curriculum Development Specialist & Contributing Author.
- Hot Spots and Squeeze-Ups: An Investigation into Earth's History. Traveling Trunk Program Grades 6-8. Flagstaff Areas National Monuments, National Park Service. Curriculum Development Specialist & Contributing Author.
- Project Archaeology: Investigating Shelter. Letts, C.A. and Moe, J.M. Contributing Authors: C. Alegria, G. Allen, J. Clark, B. Crane, D.M. Paterson, W. Pratt, KC Smith, S.J. Smith, and V. Wulfkuhle. Bozeman, MT: Montana State University. Curriculum Development Specialist & Contributing Author.
- Kuuyit ovi Suvotumala (Working Together for Water): Supplemental Curriculum Lessons designed for Hopi Youth Ages 9-12. Curriculum Development Specialist & Contributing Author.

### **Curriculum Development Experience, continued**

2006

 Hopi Footprints: Curriculum Sampler. Curriculum Development Specialist & Contributing Author.

2003

- Hubbell Trading Post National Historic Site: The Pueblo Colorado Wash Environmental Study Guide. Center for Science Teaching & Learning, NAU and National Park Service. Author & Curriculum Development Specialist
- Interactive Archaeology of the Colorado Plateau and Grand Canyon CD ROM: Archaeological and Indigenous Perspectives. Curriculum Development Specialist & Contributing Author.

2004

• Science In Our Parks: Cultural and Natural History of the Colorado Plateau. Science and Mathematics Learning Center and National Park Service. Curriculum Development Specialist & Author.

2001

 The Leupp Japanese Isolation Camp Inquiry. Curriculum Development Specialist & Author.

1997

 Pinal County Schools Gifted & Talented Archaeology Curriculum. Curriculum Development Specialist & Author.

1995

• Science In Our Parks: Petrified Forest National Park. Science and Mathematics Learning Center and National Park Service. Curriculum Development Specialist & Author.

1990

• Elden Pueblo Archaeological Project Education Program. Curriculum Development Specialist & Contributing Author.

### **Professional Experience:**

## August 2007 – Present

# **Project Director, Education Specialist, & Professional Development Coordinator**

Northern Arizona University Anthropology Department:

<u>Specific Expertise and Experience in:</u> Cultural education programs, curriculum development, and Native American outreach and education, archaeology education

### **Current Projects**

Program Director: Native Voices on the Colorado River

Native Voices on the Colorado River is a cultural interpretive program for Grand Canyon Colorado River outfitters on Native American perspectives of the Grand Canyon. The goal of the program is to increase understanding and communication about the relationships of affiliated tribes with the Grand Canyon from their own perspectives through the development of interpretive materials.

Program Coordinator and Educator: Footprints of the Ancestors project Footprints of the Ancestors is an intergenerational learning project designed to assist Hopi communities in preserving Hopi traditions, language, and culture. The key aspect of this project brings together Hopi high-school youth and a team of Hopi elders, Hopi cultural specialists, archaeologists, and anthropologists in an interactive, experiential, and collaborative learning experience focusing on

	these types of Hopi traditions, culture, and history. The program involves curriculum development, multimedia development, and community collaboration.
	Curriculum and Evaluation Director & Arizona Program Coordinator: Project Archaeology
	Project Archaeology is a comprehensive archaeology and heritage education program for everyone interested in learning or teaching about our nation's rich cultural legacy and protecting it for future generations to learn from and enjoy. Project Archaeology includes publications, professional development for educators, networking opportunities, and continuing support for participants. Using an innovative hands-on approach to history, Project Archaeology teaches scientific inquiry, citizenship, personal ethics and character, and cultural understanding.
2002 - Present	Professional Development Specialist, University of California Berkeley Lawrence Hall of Science: GEMS (Great Exploration in Mathematics and Science) professional development provider, science and mathematics education.
2004 –	Project Archaeology, Montana State University & Bureau of Land
Present	Management Curriculum consultant, curriculum evaluator, & professional developer
1994 - 2008	Center for Science Teaching and Learning: Northern Arizona University Science Education Coordinator Specific Expertise and Experience in: Informal and Formal Science Education; K-12 Outreach, Culture and Science Education; Standards-Based Curriculum Design And Development; Archaeology Education.
1988 - 2002	Elden Pueblo Archaeological Education Project Manager, Arizona Natural History Association. Supervisory archaeologist for public programs and public archaeology and education program development.
1992 - 1993	Public Education Coordinator, Animas-La Plata Archaeological Project, Department of Anthropology, Northern Arizona University. Archaeological education program development and implementation
1988-1992	Independent Consultant 1992. Instructor. Grinnell College, Archaeological Field School. 1991. Hopi Tribe. Archaeological survey project 1991. CSWTA, Inc., Environmental Consultants. Ethnographic and Archaeological Research. 1991. Anthropology Instructor. Adult Degree Program, Prescott College. 1988 – 1991 Field Archaeology Contracting 1988 - 1992 Museum of Northern Arizona. Archaeology Education Instructor.
1989	Assistant Instructor. Arizona Humanities Council and Northern Arizona University. Archaeology Plus History: Insights on the Impact of Spanish Colonization on the Navajo and Hopi.
1989 - 1990	Graduate Assistant Northern Arizona University, Archaeology Laboratory
1986 - 1988	Instructor. Southwest Expedition Institute.
1987	Teachers Aide, Discovery Montessori School
1985 - 1989	<b>River Guide</b> , San Juan River and <b>Residential Counselor/ Educator</b> for juveniles on probation or parole. Adventure/Discovery, Flagstaff.

### **Additional Current Projects:**

- Arizona Heritage Education Strategic Plan, Bureau of Land Management Heritage Education Program
- Mesa Verde National Park: Wayside Exhibits, Morefield Campground Static Displays, and Wetherill Mesa Trail Guide

#### **Grant and Contract Awards**

- 2009 Wayside Exhibits, Morefield Campground Static Displays, and Wetherill Mesa Trail Guide, Mesa Verde National Park
- 2009 Arizona Heritage Education Strategic Plan, Bureau of Land Management Heritage Education Program
- 2009 National Park Foundation. Following in the Footprints of the Ancestors A Hopi Youth Guide to Mesa Verde National Park
- 2008 Arizona Bureau of Land Management. Arizona Project Archaeology
- 2007 Grand Canyon River Outfitters Association, Native Voices on the Colorado River program
- 2007 Conceptual Understanding in Physical Science II and Conceptual Understanding in Biological Science. Math-Science Partnership. Arizona Department of Education through the Coconino County Educational Services.
- 2006 Conceptual Understanding in Physical Science. Math-Science Partnership. Arizona Department of Education through the Coconino County Educational Services.
- 2005 Mashuntucket Pequot Museum. Pathways to Wisdom Zuni program.
- 2004 Traveling Trunks Materials Development, National Park Service.
- 2004 PRISM Preservice Reform Informal Science Model. Arizona Board of Regents.
- 2003 Science Curriculum Implementation in Tombstone School District. Arizona Board of Regents.
- 2002 Tombstone Standards-Based Science Professional Development. Arizona Board of Regents.
- 2001 GLOBE-NAN III, Eisenhower Higher Education Program. Arizona Board of Regents. [Global Learning & Observations to Benefit the Environment: Native American Network]
- 2001 Science In Our Parks Dissemination Grant, National Park Service. Informal Science Education.
- 2001 Hubbell Trading Post Education Project, National Park Service. Educational Program and Curriculum Development.
- 2000 GLOBE-NAN II, Eisenhower Higher Education Program. Arizona Board of Regents. GLOBE/CP-LUHNA, Tides Foundation. Teacher Enhancement Project.
- 1999 GLOBE-NAN, Eisenhower Higher Education Program. Arizona Board of Regents.
- 1998 Connecting Our Land and Cultures Conference, National Park Service. Informal Education.
- 1997 Central Arizona Math and Science Project III (CAMS III), Eisenhower Higher Education Program. Arizona Board of Regents.
- 1996 Flagstaff Areas National Park Service. Parks As Classrooms. *Science In Our Parks*, Parks As Classrooms. Educational Program and Curriculum Development.
- 1994-1996 Petrified Forest National Park. *Science in Our Parks*, Petrified Forest Museum Association. Educational Program and Curriculum Development.
- 1992-2000 City of Flagstaff. Elden Pueblo Project, Archaeology education program development.
- 1989 Arizona Humanities Council and Northern Arizona University. Archaeology Plus History: Insights on the Impact of European Colonization on Navajo and Hopi Cultures.

### **Current Professional Memberships:**

National Science Teachers Association National Science Leadership Academy National Council for Social Studies Society for American Archaeology Society for Applied Anthropology

#### **Professional Activities:**

1991 - Present	Public Education Committee, Society for American Archaeology - chair (2007-
	2010), Listserv manager (1996-2007), and vice-chair (2003-2006),
1994 - Present	State Coordinator Arizona Project Archaeology
2006	Design Team member, Science Curriculum Topic Study Leaders Guide
1998 – 2008	Founding member and listserv manager (1998-2008) - Resource Education
	Network of Northern Arizona – Informal Science Network Group.
1987 - 2006	Arizona Archaeological Council - Executive Committee (1997-1999),
	Archaeology for Educators Committee, Chair (1995-1997).
1991-1995	Environmental Education Advisory Committee, Arizona State Parks Board.
	Chair 1991-1993.

### **Publications, Papers, and Presentations**

- Clark, J. and Heath, M. (2010). Native American Heritage Values: Building Curriculum, Building Bridges. Chapter in Heritage Values: The Past In Contemporary Society. Left Coast Press: Walnut Creek, CA.
- Clark, J. (2009). The Ancestral Puebloans: An Investigation Into Human History. Traveling Trunk Program Grades 3-5. Flagstaff Areas National Monuments, National Park Service.
- Bertko, C. (2009). Stories Then and Now. Contributing Authors: J. Clark & C. Kruse. Traveling Trunk Program Grades K-2. Flagstaff Areas National Monuments, National Park Service.
- Bertko, C. (2009). Hot Spots and Squeeze-Ups: An Investigation into Earth's History. Contributing Authors: J. Clark & C. Kruse. Traveling Trunk Program Grades 6-8. Flagstaff Areas National Monuments, National Park Service.
- Clark, J. (2009). Final Evaluation Report, Archaeology as Culturally Relevant Science Curricula. Bozeman: Project Archaeology, Montana State University.
- Letts, C.A. and Moe, J.M. (2009). *Project Archaeology: Investigating Shelter*. Contributing Authors: C. Alegria, G. Allen, J. Clark, B. Crane, D.M. Paterson, W. Pratt, KC Smith, S.J. Smith, and V. Wulfkuhle. Bozeman, MT: Montana State University.
- Clark, J. (2009). Native American Communities working with Archaeology Educators. Forum presentation at the 74<sup>th</sup> annual meeting. Society for American Archaeology. Atlanta, GA..
- Clark, J. and Moe, J. (2009) Designing and Delivering Archaeology Education for Multicultural Students. Workshop at the 74<sup>th</sup> annual meeting. Society for American Archaeology. Atlanta, GA.
- Clark, J. (2009) Following the Footprints of Our Ancestors: Hopi Youth Return to Homolovi. Film presented at the Society For Applied Anthropology Conference. Santa Fe, New Mexico.
- Gumerman, G., Clark, J., and Hongeva G. (2009) Footprints of The Ancestors: Intergenerational Learning of Hopi History and Culture. Forum presented at the Society For Applied Anthropology Conference. Santa Fe, New Mexico.
- Gess-Newsome, J.; Menasco, J.; Clark, J. (2009). Reform, One Teacher at a Time. Foundations Reform for Secondary Science Teachers. Washington, DC: National Science Foundation.
- Gumerman, G., Clark, J., and Naseyowma, G. (2008). Footprints of the Ancestors: The Learning of Hopi History and Culture through Oral History and Archaeology. Presented at the Sixth World Archaeological Congress, Dublin.

- Moe, J.M., Clark, J., and Alegria, C. B. (2008). Archaeology as Culturally Relevant Science. Poster presentation at the 10<sup>th</sup> annual Project Archaeology conference, Oleno State Park, High Springs, FL.
- Moe, J.M., Clark, J., and Alegria, C. B. (2008). Teaching Archaeology as Culturally Relevant Science Curricula: The Poplar Forest Slave Cabin. Paper presented at WAC-6, Dublin, Ireland.
- Clark, J. Moe, J.M., and Alegria, C. B. (2008). Teaching Archaeology as Culturally Relevant Science Curricula: Building Scientific and Archaeological Literacy. Paper presentation at the 73<sup>rd</sup> annual meeting. Society for American Archaeology. Vancouver, BC Canada.
- Moe, J. Clark, J. and Alegria, C. 2008. Archaeology as Culturally Relevant Science Curricula: The Poplar Forest Slave Cabin. Paper presented at the Society For Historical Archaeology Conference on Historical and Underwater Archaeology. Albuquerque, New Mexico.
- Clark, J. (2007). Archaeology as Culturally Relevant Science Curricula. Project Archaeology Network News. Volume 3, Issue 3, July 2007: 3.
- Clark, J. and Heath, M. (2007). Native American Heritage Values: Building Curriculum, Building Bridges. Paper prepared for Heritage Values: The Past In Contemporary Society Workshop, Cumberland Island National Seashore, Georgia. November 15-17, 2007.
- Clark, J., Bertko, C., Jauron, L., Kirkley, J. and Gess-Newsome, J. (2007). Using *Science Curriculum Topic Study* to deepen understanding of science content and pedagogy. Presentation at the Arizona Science Teacher Association annual conference, Mesa, AZ.
- Meyer, J., Gess-Newsome, J., Clark, J. and Keeley, P. 2007. Using *Curriculum Topic Study* To Deepen In-Service Teacher Understanding Of Science Content And Pedagogy. Presentation at the Association for Science Teacher Education International Conference, Clearwater, FL January 3-6, 2007
- Meyer, J. and J Clark. (2006) Using Teachers To Expand Science Into The Community. Paper presentation at 35<sup>th</sup> annual conference of the North American Association for Environmental Education. Minneapolis, MN.
- Gumerman, G., Clark, J., and Naseyowma, G. (2005). *Hopi Footprints: Using Elder Knowledge and Archaeology to Construct a Culture Curriculum for Hopi Schools*. Paper presented at the World Archaeological Congress, Indigenous Inter-Congress, New Zealand.
- Clark, J. (2005) Education As A Vehicle For Including Multiple Voices in Archaeology. Paper presentation at the 70<sup>th</sup> annual meeting. Society for American Archaeology. Salt Lake City, UT.
- Gumerman, G., J. Clark, and D. Honanie. (2005) Hopi Footprints: A Cultural Curriculum for Hopi Schools. Paper presentation at the 70<sup>th</sup> annual meeting. Society for American Archaeology. Salt Lake City, UT.
- Meyer, J. and J. Clark. (2005) PRISM: Preservice Reform Informal Science Model. Paper presentation at the Association for Science Teacher Education annual conference. Colorado Springs, CO.
- Clark, J. and J. Meyer. (2004) PRISM: Preservice Reform Informal Science Model. Poster Presentation at 33<sup>rd</sup> annual conference of the North American Association for Environmental Education: Casting a Wider Net for Environmental Education. Biloxi, MI.
- Gess-Newsome, J.; Menasco, J.; Moorhead, K.; Clark, J.; Haden, C. & Meyer, J. (2004) Following the Journey: Systemic Reform in Middle Level Science. Presentation at National Science Teachers Association regional conference. Seattle, WA.
- Gess-Newsome, J., M. Blocher, J. Clark, J. Menasco, and E.M. Willis. (2004) Technology infused professional development: A framework for development and analysis: An article in response to Alfred Bork's, *The Dilemma of Teacher Training*. CITE Journal (Contemporary Issues in Technology and Teacher Education).
- Gess-Newsome, J., J. Clark and J. Menasco. January 2003. Ubiquitous Computing: Seeds of a Technological or Pedagogical Revolution? Presentation at Association for the Education of Teachers of Science (AETS) annual conference. St. Louis MI

- Gumerman IV, G. L. Neff, and J. Clark. 2003. Interactive Archaeology of the Colorado Plateau and Grand Canyon: Archaeological and Indigenous Perspectives. Presentation at 68<sup>th</sup> Annual Meeting, Society for American Archaeology. Milwaukee, WI.
- Clark, J. (2003) Hubbell Trading Post National Historic Site: The Pueblo Colorado Wash Environmental Study Guide. Center for Science Teaching & Learning, NAU and National Park Service.
- Clark, J. 2002. Implementing the GLOBE Program In Indigenous Classrooms In Northern Arizona. Poster Session Presentation at Association for the Education of Teachers in Science Annual International Meeting. Charlotte, NC.
- Clark, J. and T. Shirakawa. 2001. Not At Home In The West: The Japanese Isolation Center at Leupp, Arizona. *Plateau Journal*. Spring/Summer 2001. Volume 5, Number 1:48-56.
- Clark, J. and J. Koons. 2001. Integrating Inquiry Through Informal Science Education. Special Flinn Foundation Sponsored Presentation at Arizona Science Teachers Association Annual Conference. Phoenix, AZ.
- Clark, J. 2001. Development of Archaeology Education Programs in Collaboration with Native Americans: Accomplishments and Visions of the PEC. Society for American Archaeology. The SAA Archaeology Record Volume 1, Number 4: 9.
- Menasco, J. & Clark, J. (2000). GEMS Units Face the Challenges of the Information Age. *GEMS Network News*. Berkeley, CA. Great Explorations in Math and Science Lawrence Hall of Science. Fall/Winter.
- Clark, J. 2000. *Teaching Archaeology with Educational Technology*. The Archaeology Education Handbook: Sharing the Past with Kids. K. Smardz & S. Smith Eds. Walnut Creek, CA: AltaMira Press.
- Clark, J and B. Duwahoyeoma. 1999. A Tale of Two Strategies: Teaching Hopi Culture and Archaeology. Paper presented at 64<sup>th</sup> Annual Society for American Archaeology Conference, Chicago, IL.
- Clark, J. and M. Brown. 1999. Science In Our Parks: Science Education within the National Park Service. Presentation at Arizona Science Teachers Association Annual Conference. Phoenix, AZ.
- Clark, J. 1998. Should Kids Dig? Society for American Archaeology Bulletin Vol 16, Number 5:9-12.
- Clark, J. 1998. *Science In Our Parks: Cultural and Natural History of the Colorado Plateau*. Science and Mathematics Learning Center and National Park Service.
- Pilles, P.J., Jr., J. Clark, W. Gosart, and T. Woodall. 1998. Avocational Involvement in Public Archaeology Programs at Elden Pueblo. Presentation at 63rd Annual Society for American Archaeology Conference, Seattle, WA.
- Clark, J. 1998. Teaching Science With Archaeology. Presentation at Arizona Science Teachers Association Annual Conference. Phoenix, AZ.
- Bogert, R., J. Clark, G. Lindner, J. Menasco, H. Clark, and T. Harrison. 1997. *Northern Arizona University Symposium on Systemic Reform in Science and Mathematics Education*. Report to the Arizona Board of Regents: Eisenhower Mathematics and Science Program.
- Clark, J and C. Garza. 1997. Arizona Archaeological Council, Archaeology for Educators Committee: Heritage Education Programs in Arizona. Poster Session at 62<sup>nd</sup> Annual Society for American Archaeology Conference, Nashville, TN.
- Clark, J. 1995-1996. Editor. Arizona Archaeological Council, Archaeology for Educators newsletter.
- Clark, J. 1996. Teaching Archaeology using Scientific Inquiry Methods. Paper presented at 61st Annual Society for American Archaeology Conference, New Orleans, LA.
- Clark, J., L. Chang, and P. Hosking. 1995. *Science In Our Parks: Petrified Forest National Park*. Science and Mathematics Learning Center and National Park Service.
- Ortiz, D., S. Powell, K. Stemmler, J. Clark, K. Fortsas, and E. Masayesva. 1993. *Traditional Cultural Properties of Ridges Basin*. Northern Arizona University Report. Contract Number

- 1425-2-CS-40-11730 United States Department of the Interior, Bureau of Reclamation, Upper Colorado Region.
- Geib, P. R. and J. Clark. 1991. *A Late Pueblo III Double Burial Near Shonto, Arizona*. Navajo Nation Archaeology Department Report No. 90-280.