

# Glenn Simonelli

## Curriculum Vitae

glenn.simonelli@gmail.com

www.feltemp.com

### Education/Certification:

**Doctor of Education**, Indiana University School of Education, Department of Curriculum and Instruction, Science Education. Dissertation: *A Validation Study of the Fifth Grade Science ISTEP+ Test*.

**Master of Science**, Indiana University Department of Geological Sciences. Thesis: *Sedimentology and Geochemistry of the Mansfield Formation, Martin County, Indiana*.

**Master of Science**, Elementary Certification/Graduate Program at Indiana University. Thesis: *Using Expository Writing to Foster Mathematical Problem-Solving Skills*.

**Bachelor of Arts** graduated with honors from Indiana University, in telecommunications with an emphasis on audio/video production and a minor in music composition.

**Indiana Multiple Subject Professional Teaching License** (grades 1-8), science endorsement (grades 1-9), gifted and talented endorsement (grades 1-9).

**New York Professional Teaching License** (grades 1-6), with gifted and talented extension.

### **New York State Certification Tests:**

NYSTCE - Liberal Arts and Sciences Test (LAST) (001);

NYSTCE - Multi-Subject CST (002);

NYSTCE - Elementary ATS-W (090);

NYSTCE - Gifted Education CST (064);

NYSTCE - Earth Science CST (008);

NYSTCE - Biology CST (006).

### Professional Teaching Experiences:

Fall 2016 to Present – **Science and engineering coordinator**, Solomon Schechter (Lower) School, White Plains, NY.

Classes taught: grades 2-5 Science and Engineering.

Fall, 2011 to Spring 2016 – **Science teacher**, The Dalton School, New York City, NY.

Classes taught: 4th grade science; 5th grade science and robotics.

Fall, 2007 to Spring, 2011 – **Assistant professor**, State University of New York (SUNY), Potsdam, NY.

Courses taught:

EDUC 408: Practicum II;

EDUC 409: Elementary Science Methods;

EDUC 415: Student Teaching Internship I;

EDUC 416: Student Teaching Internship II;

GRED 566: Elementary Science Content and Methods;

GRED 595: Astrobiology Content and Methods.

## Glenn Simonelli, page 2

### **Professional Teaching Experiences, continued:**

Fall, 2006 to Spring, 2007 – **Assistant visiting professor**, Franklin College, Franklin, IN.

Courses taught:

SCI 344: Science and Elementary Teaching, pt 1;

SCI 345: Science and Elementary Teaching, pt. 2;

EDE 384: Field Experience in Elementary Education;

EDE 445: Advanced Educational Technology;

EDE 457: Assessment and Evaluation Methods in the Elementary Classroom.

Fall 2003 to Summer 2006 – **Associate instructor**, Indiana University, Bloomington, IN

Courses taught:

E328: Science in the Elementary School;

S105: The Search for Habitable Planets;

G103: Earth Science Materials and Processes, lab;

G105: Earth, Our Habitable Planet, lab.

Fall 1997 to Summer 2002- **Elementary teacher**, grades 4 - 6. Lakeview School, Bloomington, IN.

Developed many innovative curricular and pedagogical materials, including Disaster at Lake Nyos and Like Dawn at Midnight, two role-playing, hands-on science investigations, and the Snarkle Economy, a mathematics-based classroom economy designed to promote mastery of integer, decimal and percent concepts.

Spring 1997 - **Elementary teacher**, grades 3 and 4. Harmony School, Bloomington, IN.

Visiting position in a diverse, multi-age classroom. Developed an individualized mathematics curriculum for the class that allowed students to progress at their own pace. Created written problem-solving exercises to teach beginning algebra. Developed and taught units in beginning physics, 3-dimensional geometric construction, and 2-dimensional geometric art. Initiated Comet Day to coincide with the appearance of comet Halle-Bop.

### **Other Professional Experiences:**

September 2017 to January 2019 – **Education consultant**, NSF Research Project: Developing Preservice Elementary Teachers' Ability to Facilitate Goal-Oriented Discussions in Science and Mathematics via the Use of Simulated Classroom Interactions

January 2005 – **Educational consultant and scriptwriter**, NASA Astrobiology Institute (NAI), Bloomington, IN.

Advised and assisted in the production of an educational DVD for high school biology classrooms based on the work of the Indiana-Princeton-Tennessee Astrobiology Initiative (IPTAI). IPTAI collects deep sub-surface organisms and analyzes their potential as analogues for life on Mars. Aligned the DVD content with state and national science educational guidelines, wrote the final production script and accompanying curricular materials for classroom use.

## Glenn Simonelli, page 3

### Other Professional Experiences, continued:

Spring 1997 - **Technical assistant**, distance learning. Indiana University, Bloomington, IN.

Assistant in a graduate-level science methods class for elementary teachers. Taught a Project Wild class on evolutionary adaptation to groups of elementary teachers at three different sites simultaneously via distance learning technology.

Fall 1996 - **Field researcher**, math education, Research In Teacher Education. Indiana University and Lakeview School, Bloomington, IN.

Worked with teachers at a public elementary school to facilitate change in their mathematics curricula. Collected data researching the process of reforming mathematics curricula. Helped support graduate students having practicum experiences at the school.

August 1994 - June 1995 - **Connected Math Project**. Indiana University, Bloomington, IN.

Part of a team responsible for the assessment of a new, middle-school-level mathematics program funded by the **National Science Foundation**. Collected, condensed and reported data received from elementary and middle school teachers field-testing the program.

January 1991 - August 1994 - **Creative Audio Enterprises (CAE, Inc.)**, Bloomington, IN.

General manager for an audio production facility and recording studio. Responsibilities included the general supervision of operations, including office and financial management, inventory control and purchasing, bookkeeping, payroll and payroll taxes. Other responsibilities included tape re-mastering and duplication, composing and producing musical "jingles" for radio and television, writing and producing radio advertising, and audio engineering.

August 1984 - August 1989 - **Indiana University Archives of Traditional Music (IUATM)**, Bloomington, IN.

Technical specialist for one of the largest recorded sound archives in the United States. Responsibilities included the audio preservation of recorded materials and the maintenance of the audio labs and equipment. Helped design and install an international video and two audio laboratories, and supervised the audio transfer and preservation work of the graduate students employed by the archives.

### Publications, Books:

Simonelli, G., and Ingersoll, G., 2008. *A Validation Study of Standardized Elementary Science Test Scores: Scores of the Indiana Statewide Testing for Educational Progress-Plus*. Köln, Germany: Lambert Academic Publishing.

### Publications, Peer Reviewed:

#### Print:

Simonelli, G., Johnson, C.C., Elswick, E.R., Kauffman, E.G., Eble, C.F., and Hasiotis, S.T., 2013. *Sedimentology, Geochemistry, and Paleobiology of a Pennsylvanian Marginal Marine Depositional Environment, Mansfield Formation, Indiana*. Indiana Geological Survey Occasional Paper 71, Bloomington, IN.

## Glenn Simonelli, page 4

### **Publications, Peer Reviewed, continued:**

Simonelli, G., Johnson, C. C., Elswick, E. R., and Kauffman, E. G., 2006. *Sedimentation and Geochemistry of the Mansfield Formation in Martin County, Indiana*. North-Central Geological Society of America Abstracts with Programs, V. 38, no. 4.

Simonelli, G., 2004. *Helping Your Students Colonize the Solar System*, in *The Hoosier Science Teacher*, Spring, V. 29, no. 3.

### **Electronic:**

*First-Year College Students' Ideas about Astronomy: A Pilot Study*, in *Astronomy Education Review*. Available:

<http://aer.noao.edu/AERArticle.php?issue=4&section=5&article=2>

*Modeling the Motions of the Earth, Sun and Moon*, in *Practical Uses of Math and Science (PUMAS)*. Document #03\_10\_04\_1, accepted June, 2004. Available:

[http://pumas.jpl.nasa.gov/examples/layout.asp?Document\\_Id=03\\_10\\_04\\_1](http://pumas.jpl.nasa.gov/examples/layout.asp?Document_Id=03_10_04_1)

*The Cause of the Phases of the Moon*, in *Practical Uses of Math and Science (PUMAS)*.

Document #03\_10\_04\_2, accepted June, 2004. Available:

[http://pumas.jpl.nasa.gov/examples/layout.asp?Document\\_Id=03\\_10\\_04\\_2](http://pumas.jpl.nasa.gov/examples/layout.asp?Document_Id=03_10_04_2)

*The Cause of the Earth's Seasons*, in *Practical Uses of Math and Science (PUMAS)*.

Document #03\_10\_04\_3, accepted June, 2004. Available:

[http://pumas.jpl.nasa.gov/examples/layout.asp?Document\\_Id=03\\_10\\_04\\_2](http://pumas.jpl.nasa.gov/examples/layout.asp?Document_Id=03_10_04_2)

*The Rubber Band Problem*, in *Practical Uses of Math and Science (PUMAS)*. Document #01\_13\_03\_1, accepted May, 2003. Available:

[http://pumas.jpl.nasa.gov/examples/layout.asp?Document\\_Id=01\\_13\\_03\\_1](http://pumas.jpl.nasa.gov/examples/layout.asp?Document_Id=01_13_03_1)

*The Mathematical Implications of Lying*, in *Practical Uses of Math and Science (PUMAS)*.

Document #12\_04\_02\_1, accepted February, 2003. Available:

[http://pumas.jpl.nasa.gov/examples/layout.asp?Document\\_Id=12\\_04\\_02\\_1](http://pumas.jpl.nasa.gov/examples/layout.asp?Document_Id=12_04_02_1)

### **Publications, Other:**

#### **Print:**

*Retrieving the Orson Welles' Radio Broadcasts*, in *Resound: A Quarterly of the Archives of Traditional Music*, Volume 8, Number 2, April, 1989.

#### **Electronic:**

*Life in Space: An Astronomy/Astrobiology Unit for Upper Elementary and Middle School Students*. Available: <http://www.astro.indiana.edu/~gsimonel>

## Glenn Simonelli, page 5

### **Publications, continued:**

#### ***Musical Scores:***

*Bittersuite (for jazz ensemble);*  
*Broken Glass (for SSA chorus);*  
*Catharsis (for solo classical guitar);*  
*Division Street Shuffle (for jazz ensemble);*  
*Guitar Suite (for solo classical guitar);*  
*Icarus (for SSA chorus);*  
*Let It Go (for SSAA chorus);*  
*New Song (for SSAA chorus);*  
*An Olive Glow (for jazz ensemble);*  
*Short Set for String Ensemble;*  
*Swagger (for jazz ensemble);*  
*Symphony No. 2;*  
*Threnody (for SSAA chorus);*  
*Voices (for SS youth chorus);*  
*Wild Mountain Thyme/Mutability (for SATB chorus).*  
All songs published by Really Good Music, Inc.

### **Presentations:**

#### ***Workshops:***

*Exploring the Dark Universe.* Co-developer and co-presenter of a hands-on workshop about dark energy and dark matter for middle and high school science teachers, Bloomington, IN, August 2007.

*Astrobiology and the Search for Life in Space.* Co-developer and co-presenter of a hands-on workshop in astrobiology for middle and high school science teachers, Bloomington, IN, June, 2006.

*The Universe in the Infrared.* Co-developer and co-presenter of a hands-on workshop in infrared astronomy for high school science teachers, Bloomington, IN, August 2005.

*Hands-on Discovery-Based Science.* Developed and presented an inquiry-science workshop for elementary teachers, Bloomington, IN, October 2004.

#### ***Papers:***

*Sedimentology and Geochemistry of the Mansfield Formation in Martin County, Indiana,* presented at the Geological Society of America North-Central Meeting, Akron, OH, April, 2006.

*Assessing Student Ideas of Astronomy,* presented at the Association of Elementary Science Teachers Convention, Nashville, TN, January 2004.

*Helping Your Students Colonize the Solar System,* presented at the Hoosier Association of Science Teachers, Inc. (HASTI) Convention, Indianapolis, IN, February 2003.

## Glenn Simonelli, page 6

### **Presentations, continued:**

*Two Web Tools for College Astronomy Instruction*, (co-author) presented at the Indiana Partnership for Statewide Education (IPSE) All Partners Conference, Indianapolis, April 2005.

### **Posters:**

*Imaging the Deep Sub-Surface*, (co-author) presented at the NASA Astrobiology Conference, Boulder, Colorado, April 2005.

*Life in Space: An Astronomy/Astrobiology Unit for Middle Grade Students*, presented at the Bioastronomy, 2004: Habitable Worlds Conference, Reykjavik, Iceland, July 2004.

### **Musical Compositions:**

*Division Street Shuffle* (jazz ensemble). Premiered by the Potsdam High School jazz ensemble, Norwood, NY, May, 2009.

*Threnody* (SSAA youth chorus). Premiered by the Crane Children's Chorus, Potsdam, NY, December, 2009.

*New Song* (SSAA youth chorus). Premiered by Corobna Frula, Zagreb, Croatia, June, 2010.

### **Other:**

*What Are Fossils Trying to Tell Us?* Presented at AAK Middle School, Potsdam, NY, January 2010.

*(Lessons from) Build Your Own Planet*. Presented at Colton-Pierrepoint High School, Colton, NY, November, 2009.

*Astrobiology and the Darwinian Threshold*. Presented at Potsdam High School, Potsdam, NY, June, 2009.

*Astrobiology: Is there anybody out there?* Presented at Higley Flow State Park, South Colton, NY, July, 2008.

*When Did Astrobiology Become Respectable?* Presented at Family Star Night, Eastern Greene County Elementary School, Greene County, IN, January 2006.

*Get Your Hands-On Science with Saturday Science QUEST for Kids Program*, presented at the National Science Teachers Association (NSTA) regional convention, Chicago, IL, November 2005.

*Life in Space: An Astronomy/Astrobiology Unit for Middle Grade Students*, presented at the NSTA national convention, Dallas, TX, April 2005.

## **Glenn Simonelli, page 7**

### **Presentations, continued:**

*Build Your Own Planet: An Astrobiology Unit for Upper Elementary and Middle School Students*, presented at the HASTI convention, Indianapolis, IN, February 2005.

### **Grants/Awards Received:**

Indiana SpaceGrant Consortium April 2006;

Geological Society of America travel grant, April 2006;

Indiana Professional Geologists research grant, January 2006;

LAPLACE Winter School participant, January 2006;

NASA Earth Science Education Roadmap Community travel grant, May 2005;

NASA Astrobiology Institute (NAI)

*Scholarship and travel grant:*

Josep Comas i Sola International Summer School in Astrobiology, Santander, Spain, July, 2006;

*Travel grants:*

NASA Astrobiology Conference, Boulder, Colorado, April 2005;

Bioastronomy, 2004: Habitable Worlds Conference, Reykjavik, Iceland, July 2004

Chancellor's Fellowship, Indiana University, August 2002 to May, 2006;

NASA EPO supplement to NAG5-11964 Durisen research grant, August 2002 to June 2005;

NFS Research Experiences for Teachers (RET), June 2002 to August 2002.

### **Other Accomplishments:**

Big Brothers Big Sisters of New York City

Presented a series of hands-on, discovery-based lessons about earthquakes to middle school students;

Event coordinator and judge for the National Science Olympiad, Potsdam, NY, multiple times;

Judge for the First Robotics Competition, Potsdam, NY;

Member of the Potsdam Local Waterfront Redevelopment Project Advisory Committee, Potsdam, NY;

Big Brothers Big Sisters of the North Country, Watertown, NY;

Member of the NASA Earth Science Education Roadmap Community responsible for drafting NASA's 10-year plan for Earth Science educational outreach;

Designed and presented a hands-on activity about logic circuits for local school Science, Technology, Engineering and Mathematics Day celebration;

Volunteer assistant in local multi-age elementary classroom, presenting weekly geobiology lessons based on the fossils available in the local area and lessons in 3-D geometry;

Helped students prepare presentations for local elementary school "Astronomy Night;"

Developed and presented a series of discovery-based geology lessons culminating in a geology merit badge during a weekend jamboree of regional Boy Scout troops;

Developed and presented a series of hands-on physics lessons to local Cub Scout troop;

## **Glenn Simonelli, page 8**

### **Other Accomplishments, continued:**

Presented a paleontology presentation and led a fossil-hunting field trip for local Boy Scout troop;

Event coordinator and judge for the National Science Olympiad, national finals, held at Indiana University, Bloomington, IN, multiple times;

Baseball Coach for the Smithville Youth Baseball Association, Smithville, IN;

Court Appointed Special Advocate (CASA) for Monroe County, IN;

Rural Community Advisory Committee for Monroe County, IN.

### **Hobbies:**

Music composition;

Hiking, backpacking and geocaching;

Ancient numismatics.