

Educational
Advancement
Foundation



*Sixteenth Annual
Legacy of R.L. Moore Conference*

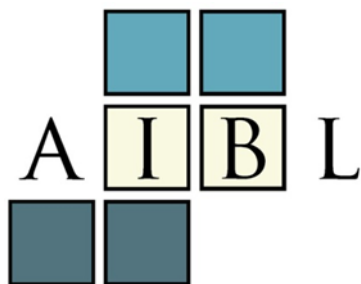
June 13-15, 2013, Austin, Texas

“We Are IBL”

Program Committee

Jacqueline Jensen–Vallin (Co-Chair) Angie Hodge (Co-Chair)

Hanna Bennett Nathaniel Dean Dana Ernst Kyeong Hah Tom Ingram
Brian Katz Vilma Mesa Carol Schumacher Ron Taylor Stan Yoshinobu



Academy of Inquiry-Based
Learning

Journal of Inquiry-Based
Learning in Mathematics

Thursday, June 13

Salon C

10:00–1pm **Registration Begins** (Ballroom Prefunction)

1:00 –1:15 **Welcome & Overview** (Salon C)
MC: Jacqueline Jensen-Vallin, Slippery Rock University
 Angie Hodge, University of Nebraska Omaha

1:15–2:00 G. Edgar Parker, Visiting Professor, Guilford College and Professor Emeritus,
 James Madison University
Some Reflections on Issues in Implementing Inquiry-Based Pedagogy in Mathematics

2:30–3:35 **Parallel Sessions: Implementing IBL**

Time	(Salons A&B) Moderator: Judith Covington	(Salon C) Moderator: Susan Crook	(Salons D&E) Moderator: Tom Judson	(Classroom 201) Moderator: Dana Ernst
2:30–2:45	TJ Hitchman <i>Success through Failure: Assessment in a Moore Method Geometry Course</i>	Ruthmae Sears <i>Increasing High School Stu- dents Opportunities to En- gage in Proofs: Addressing Shortcoming of Textbooks</i>	Joseph Malkevitch <i>A Sampler of Fairness and Equity Mathematical Model- ing Situations</i>	Michael Butros <i>An Inquiry Based Learning Approach to University Physics</i>
2:55–3:10	Javier Garza <i>Implementing IBL in an Introductory Real Analysis Course</i>	David Cusick <i>“I do and I understand” Confucius</i>	Ryan Gantner <i>Playing Games with IBL</i>	
3:20–3:35	Melvyn Jeter <i>Engaging, Assessing and Grading in My IBL Courses</i>	Robert Vallin <i>Presentation Fridays in Advanced Calculus</i>	Jason Callahan <i>Inquiry-Based Learning Pro- jects in an Applied Statistics Course</i>	

3:45–4:15 **Break for Refreshments** (Ballroom Prefunction)

4:15–5:15 *The Future of the IBL Projects at EAF* (Salon C)
Panel Discussion and Q&A:
 Ron Douglas, Texas A&M
 Tina Straley, MAA and Kennesaw State University, Retired
 IBL Strategic Planning Committee Members

5:30–6:30 **Cocktail Hour and Reception – Cash Bar** (Ballroom Prefunction)

6:30–8:00 **Dinner and Banquet Speaker** (Salon C)
Coke Reed, Data Vortex Technologies, introduced by John W. Neuberger
*Mathematical Heroes: The Journey of Independent Thinkers
and the Computer as a Mathematical Object*

Friday, June 14

7:30–9:00 **Continental Breakfast** (Ballroom Prefunction)

MC: Angie Hodge, University of Nebraska Omaha

9:00–10:30 Brian Katz, Augustana College (Salon C)
RoundTable Discussions. See Abstracts for Topics

10:30–11:00 **Break for Refreshments** (Ballroom Prefunction)

11:00–11:30 **Five Minute Talks, Session I** (Salon C) Introductions by Judith Covington, LSU-Shreveport

11:45–1:00 **Lunch and Speaker** (Salon C) Introduction by Jacqueline Jensen-Vallin, Slippery Rock University

Panel Discussion: *Designing a Mathematics Major for Pre-Service Teachers*

Moderator: Martha Siegel (Chair of the Committee on the Undergraduate Program in Mathematics)

Panelists: Angie Hodge, University of Nebraska Omaha

Michael Pearson, Executive Director, MAA

Diana White, University of Colorado Denver

1:00–1:30 **Five Minute Talks, Session II** (Salon C) Introductions by Dana Ernst, Northern Arizona University

2:00–3:30 **Parallel Sessions: Courses and Math Education Research**

Time	Calculus (Salons A&B) Moderator: Judith Covington	Mathematics for Education Majors (Classroom 201) Moderator: Stan Yoshinobu	Advanced Courses (Salons D&E) Moderator: TJ Hitchman	Mathematics Education Research (Salon C) Moderator: Vilma Mesa
2:00–2:15	Janice Rech and Angie Hodge <i>Getting Everyone Involved in Calculus: IBL-Style</i>	Stan Yoshinobu <i>Using IBL in Courses for Future Elementary Teachers</i>	Anna Spice <i>Success and Failure in Intro-to- Proof</i>	Anne Cawley <i>Resource Use of Pre-service Element- ary Teachers in an IBL Mathematics Content Course</i>
2:25–2:40	Larissa Schroeder <i>Flipping Calculus to En- hance Student Engagement</i>	Brian Katz <i>Teaching Mathematical Maturity through IBL Axiomatic Geometry</i>	Steven Schlicker <i>Abstract Algebra: An Inquiry- Based Approach</i>	Nina White <i>How Pre-service Teachers in an IBL Content Course Revise their Mathematical Communication</i>
2:50–3:05	Ed Parker <i>Finding a Proper Platform for Appropriate Rigor</i>	Ali Shaqlaih <i>IBL in Math for Elementary Teachers Course</i>	Andy Schultz <i>Cross-Institutional Refereeing in Two IBL Number Theory Classes</i>	Kelly Bulp <i>An Evaluation of Selected Notes From the Journal of Inquiry-Based Learning in Mathematics</i>
3:15–3:30	John Neuberger <i>Calculus and IBL</i>	Michael Matthews <i>Engaging Teachers in a History of Mathematics Class Using IBL</i>	Dana Ernst <i>Implementing IBL in an Introduc- tion to Proof Course</i>	Sandra Laursen and Chuck Hayward <i>Building Momentum in a Movement</i>

3:30–4:00 **Break for Refreshments** (Ballroom Prefunction)

4:00–5:30 **Parallel Sessions: Other Faces of IBL**

Time	Math Teachers Circle (Salons A&B) Moderator: Tatiana Shubin and Diana White	Presentation Days and other MMM Techniques (Salons D&E) Moderator: William “Ted” Mahavier	Discovering the Art of Mathematics (Salon C) Moderator: Julian Fleron and Philip Hotchkiss	Emerging Scholars Programs (Classroom 201) Moderator: Randy Cone
4:00–4:15	Panel Discussion <i>Math Teachers Circle</i>	Patrick Rault <i>Daily E-feedback on Informal E-homework</i>	Workshop: <i>Mathematical Inquiry in the Liberal Arts</i>	Emily Cili-Turner <i>Collaborative Revision and its Effects on Undergraduate Proof Skills</i>
4:25–4:40	Continued	PJ Couch <i>A Foray into College Algebra via IBL</i>	Continued	Julie Sutton and James Epperson <i>A Comparison of How Emerging Scholars Program and Non-emerging Scholars Students Critique and Rate</i>
4:50–5:05	Henry Fowler and Tatiana Shubin <i>Navajo Nation Math Circles</i>	Elizabeth Thoren <i>WikiLogs: Students Reporting on Pre-Work</i>	Continued	
5:15–5:30	Continued	Amy Ksir <i>Inquiry-Based Calculus III at the U.S. Navy Academy</i>	Continued	

Free Evening

Saturday, June 15

MC: Jacqueline Jensen-Vallin, Slippery Rock University

7:30–9:00 **Buffet Breakfast** (Ballroom Prefunction)

9:00–10:15 **Parallel Sessions**

Time	Five Centers Report (Salons A&B) Moderator: Ron Douglas	General Contributed Papers (Salon C) Moderator: Brian Katz	General Contributed Papers (Salons D&E) Moderator: Tom Judson
9:00–9:15	Ron Douglas <i>Lessons from the IBL Centers Projects</i>	Cornelius Stallmann <i>A Tribute to William “Bill” Mahavier</i>	Suzanne Doree <i>Teaching Conjecturing</i>
9:20–9:35	Cont.	Bernd Rossa <i>A Tribute to William “Bill” Mahavier</i>	Tim Whittemore <i>Teachers’ Perspectives on Getting Students to Work Together</i>
9:40–9:55	Cont.	Thomas Judson <i>The Role of Inquiry-Based Learning in Developing Teacher-Leader</i>	Bin Lu <i>Directing Independent Study Classes Using IBL</i>
10:00–10:15	Cont.	Brandy Comer <i>Presentation Days in Calculus I and II, The First Time Around</i>	David J. Hunter <i>Presentations and Portfolios in Introductory Statistics</i>

10:15–10:45 **Break** (Ballroom Prefunction)

10:45–11:45 David Pengelley, New Mexico State University (Salon C)
How to Beat the Lecture/Textbook Trap, and Then Throw Them Both Away!
Melding Inquiry-Based Alternatives for Both

11:45–12:15 **Five-Minute Talks, Session III**

12:15–12:30 **Concluding Remarks and Thanks**
Jacqueline Jensen-Vallin, Slippery Rock University



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