MLER Middle Level Education Research Special Interest Group

The Chronicle of Middle Level Education Research



Message from the Chair

Points of Interest:

- Message from the Chair
- Executive Advisor Report
- MLER-SIG Business Meeting Minutes
- Featured Article: Improving Academic Self-Efficacy

Inside this issue:

News from the Executive Advisor	2
Business Meeting Minutes	3
Cont'd: Message from Chair & Business Meeting Minutes (cont.)	4
AERA MLER SIG Conference Sessions	6

Featured Article:

Self-efficacy

Improving Academic

22

Spring greetings from Vermont! It has been an exciting and busy time in the MLER SIG over the past few months. Among other actions, we held elections for eight key positions on our leadership council; moved another award petition forward through the **AERA** sanctioning process; energetically continued our membership drive; expanded our Graduate Student Mentoring Initiative; passed revisions to our by -laws; and managed the upcoming program for the AERA meeting later this month.

First, huge appreciation is due to Steve Mertens, who as Program Chair, put together an impressive program for this month's AERA meeting. If you are attending AERA this year, be sure to follow the SIG sessions, which are listed elsewhere in this issue of the Chronicle, and join us at the Friday evening Business Meeting.

I'd also like to formally acknowledge Chris Cook for his remarkable work in managing this year's election. We had a very full ballot and an extraordinarily competitive process this year, which is a terrific sign of the health of our association. For those of you who did not see the announcement on our listsery or Facebook page, the new leadership council is as follows:

Advisor
Steven Mertens Chairperson
Chris Cook - Program
Chair/Chair Elect
Shawn Faulkner - Vice
Chairperson
Penny Bishop - Past Chair
Kenneth Anderson Treasurer

Penny Howell - Secretary

Frances Spielhagen -

Council Member

David Strahan - Executive

University of Vermont

Penny

Bishop



Kathleen Brinegar Council Member
Karen Bostic - Council
Member
Robert Capraro Council Member
Lisa Harrison - Council
Member
Nicole Thompson Council Member
Bridget MahoneyGraduate Student
Council Member

(continued on page 4)

RMLE Online Call for Manuscripts

The editor of Research in Middle Level Education Online is seeking manuscripts concerning quantitative and qualitative research studies, case studies, action research studies, as well as research syntheses.



RMLE Online is an international, peer-reviewed research journal published by the National Middle School Association.

Guidelines for Contributors, a listing of the Editorial Review Board, and past issues of *RMLE Online* are available at www.nmsa.org

If you have questions, please contact Karen Swanson, Editor, at SWANSON_KW@ mercer.edu.

NEWS FROM THE EXECUTIVE ADVISOR

Vincent A. Anfara, Jr., The University of Tennessee

Looking forward to seeing many of you in Vancouver, BC for the annual AERA meeting. I hope you take some time to see the wonderful city as well as partake in the fantastic program that Steve Mertens, Program Chair, has prepared for us.

I want to thank Penny Bishop for the strong leadership she has provided to the MLER SIG over the past two years. I know that Steve Mertens will continue the tradition of effective leadership for our special interest group. We have been lucky to have very capable leadership who is interested in seeing the MLER SIG grow and flourish as an organization.

I have been a member of the AERA SIG Executive Committee and this affiliation has allowed MLER to be privy to information about SIGs—especially as the rules and policies change. I recently found out that even though my elected term has ended, I will be completing the term of a member of the committee who is ill. Therefore, as a SIG we will continue to have first-hand information about the SIGs as rules and policies change.

Lastly, I want to thank you for the honor of serving as Executive Advisor for the last 5 years. It has been good for me to advise the SIG Chairs as they do their iob and want someone to talk with about the issues at hand. I personally believe that this is an important position for the MLER SIG—we must remember the past and what was done by the ogranization as we embrace the future. See you in Vancouver!

MLER SIG Officers

Penny Bishop, Chair University of Vermont penny.bishop@uvm.edu

Steve Mertens, Chair-Elect & Program Chair

Illinois State University smertens@ilstu.edu

Chris Cook, Vice Chair & Newsletter Editor

Northern Kentucky University cookc2@nku.edu

Shawn Faulkner, Treasurer Northern Kentucky University faulkners1@nku.edu

Cynthia Reyes, Secretary University of Vermont

creves@uvm.edu

Micki Caskey, Immediate Past Chair & Webmaster

Portland State University caskeym@pdx.edu

Vincent A. Anfara, Jr., Executive Advisor

University of Tennessee Knoxville vanfara@utk.edu

SIG Association Council Members

Tariq Akmal (2010-12)Washington State University

Kenneth Anderson (2010-12) Howard University

Lisa Harrison (2011-13)Ohio University

Molly Mee (2010-12)
Towson University

Nicole Thompson (2011-13) Mississippi State University

Nicole Miller (2009-12) Graduate Student Mississippi State University

AMLE 2011 Annual Conference MLER-SIG Business Meeting Notes

November 11, 2011 - Louisville, KY Penny Bishop, University of Vermont

The business meeting was called to order at 5:45 pm in the Louisville Convention Center Room 208. Chair Penny Bishop greeted the members and each person introduced him or herself. She informed the group of a productive meeting that she had facilitated earlier in the week between the project leaders of the Common Planning Time (CPT) Project and representatives from AMLE, NASSP, NaPOMLE, and The National Forum to Accelerate Middle Grades Reform. The meeting focused on identifying areas of research that held common interest across organizations, as well as exploring ways for the organizations to work together to support middle grades research initiatives.

Penny also acknowledged the loss of our dear SIG member, Dr. Jennifer L. Wilson, of University of South Carolina, who died tragically this year. Jennifer's university colleague, David Virtue, announced the establishment of an endowed scholarship fund in Jennifer's name and provided details on how to donate.

Tariq Akmal and Nancy Rupert brought greetings from the AMLE Board of Trustees and NaPOMLE, respectively. Editor David Virtue, of AMLE's Middle School Journal, announced new theme issues on the Common Core Standards and encouraged submissions. Next, SIG Executive Advisor Vince Anfara provided his report, highlighting the importance of our SIG remaining a healthy organization given the increasing scrutiny placed on SIGs at the SIG Council level. He compared our SIG to others that have not yet submitted their reformatted by-laws or completed reviews for the annual AERA meeting in April.

Shawn Faulkner then gave his Treasurer Report, noting our expenses since the previous business meeting came to a 1078.29 and identifying a current balance of 5378.83. There were no questions from the membership regarding the status of the SIG finances.

Program Chair Steve Mertens shared the results of the reviews of proposals for the AERA 2012 annual meeting. In sum, there were 32 proposal submissions and two symposia submissions. Each member of the board of reviewers evaluated eight to ten proposals; there was a 47% acceptance rate. Steve led the membership in thanking the following reviewers for their work: Gayle Andrews, Vincent Anfara, Beryl Bray (Graduate Student), Francine Falk-Ross, Donald Hackmann, Heather Rogers Haverback, Jeffrey Kaplan, Salika Lawrence, Paula Martin, Linda Samek, Mary Beth Schaefer, Amy Schechter (Graduate Student), Frances Spielhagen, David Strahan, Nicole Thompson, and Tracy Walker

The 2012 MLER SIG sponsored sessions will consist of one Paper Session, two Roundtable Sessions, two Symposia and a Business Meeting. The content of these is as follows:

Paper Session: The Impact of Middle Level Classroom Instructional Strategies

Chair: David Strahan

1. A Study of the Impact of
Professional Development on
MiddleLevel Advisors [Niska]

2. Engaging Digital Natives
in the Middle Grades
[Downes & Bishop]

- 3. Middle School Mentoring Outcomes and Perceived Obstacles in College Attendance [Bell]
- 4. Missed Opportunities: Common Planning Time in Three Oregon Middle Schools [Carpenter, Musser, Caskey, Samek, Greene, & Kim]
- 5. The Relationship of Middle School Instructional Scheduling Configurations and Social Studies Achievement [Vogler, Allan, & Schramm-Pate] Discussants: Nan Bahr &

Discussants: Nan Bahr & Virginia Jagla

Roundtable 1: Enhancing Learning Opportunities for Young Adolescents

Chair: Don Hackmann
1. Digital Gameplay: Enhancing Science Content
Learning and Problem Solving with Early Adolescent
Students [Spires, Zheng,
& Meluso]

2. Easing the Transition from Middle School to High School: Developmentally Responsive Transition-related Supports [Denmon, Owens, Ellerbrock, Lindstrom, & Boles -Haslup]

3. Middle School Community Book Clubs: Building Literate Spaces [Wilson & Jewett] 4. Middle School Sports Participation, Sense of School Membership, and Student Delinquency [Kurrus & Caldas] 5. Student Voice: Joint Work at the Boundaries of Convention in the Middle Years [Nelson]

Roundtable 2: Engaging and Supporting Student Learning in Middle School

Chair: Regina Rahimi
1. Agency through Art:
Implications for Middle School
Students' School Program
[Radhakrishnan]

- 2. Autonomy-Supportive Teaching and Classroom Environments: The Key to Student Motivation [Alley]
- 3. Middle School Principals' Perceptions of Effective Middle Level Teaching Practices and Preparation [Howell, Faulkner, & Cook]
- 4. Predictors of STEM Career Interest Among Attitudes and Dispositions of Middle School Students [Periathiruvadi, Knezek, Tyler-Wood, Mills, & Christensen]
- 5. The Development and Analysis of the Middle School Student Reading Preferences Instrument (MSSRPI)
 [Firmender]

Symposium 1: Improving Outcomes & Engagement for MG Students: Evidence from Schools and Classrooms

Chair: Adriana Villavicencio

1. Intervening Successfully to
(continued on page 5)

Message from the Chair (continued)

(continued from page 1)
Thanks to the many individuals who ran for office this year. I encourage anyone who was not elected to serve on one of our committees and to strongly consider running again next year; we appreciate any and all forms of support to our SIG.

On another note, the Graduate Student Mentoring Initiative is growing rapidly. Cheryl Ellerbrock and Nicole Miller have been incredible lead organizers of this initiative, resulting in ten mentormentee pairs now matched; this represents a considerable increase from last year's pilot year of two pairs. If you are interested in participating, either as a mentor or mentee. please feel free to contact either Cheryl Ellerbrock (ellerbro@usef.edu) or Nicole Miller (ncm39@colled.msstate. edu).

Our outreach committee has also been busy. Overall AERA membership numbers have been low this year given the economy and the expensive location of the annual meeting. In response, our SIG committee analyzed the new, current, and lapsed membership lists and then Micki Caskey and Molly Mee worked tirelessly to 1) update and expand the list of institutions with middle grades programs in order to identify potential new members; 2) mail copies of the SIG brochures to

all schools on the list; and 3) invited veteran middle grades scholars to make personal contact with lapsed members.

As a result of these efforts, our membership is currently at a strong 147, which represents an additional 24 members in just the past two months. Outreach efforts also included establishing an MLER Facebook page (Like us on Facebook!), (continued on page 5)

MLER SIG Business Meeting Minutes (Continued)

(continued from page 3)

Keep Middle Grades Students on Track to Graduation: Early Findings of the Diplomas Now Turnaround Model [MacIver, MacIver, & Fradlin] 2. Transforming Historically Low-Performing Schools: Successful Turnaround Strategies for New York City Middle Grade Schools [Villavicencio & Grayman] 3. "Third Space" Pedagogy -Creating Classroom Cultures for Collective Achievement [Herr & Naiditch] 4. Identity Performance and Middle Grade Learners: Keeping the "Who Am I?" In Middle School Curriculum

[Dubowsky Ma'ayan]

Discussant: Deborah Kasak

Symposium 2: The MLER SIG's National Project on Middle Level Common Planning Time Chair: Nancy Flowers

1. The MLER SIG National Common Planning Time Project: Background and Findings [Mertens, Flowers, Anfara, & Caskey] 2. A Portrait of Two Middle Schools: An Examination of Common Planning Time [Angelle]

- 3. Teacher Perceptions of the Use of Common Planning Time in Middle Grades Schools [Cook, Kinne, & Faulkner]
- 4. The Implementation and Use of Middle Level Common Planning Time [Mertens, Hurd, & Tilford]
 Discussants: Micki Caskey & Vince Anfara

Steven discussed the challenges inherent in the review process and proposed a more focused approach to identification of reviewers' research expertise for next year's program selection. Penny acknowledged Steve's tremendous amount of work in managing the program and the membership thanked him for his time and effort.

Next, individual working groups reported out. Vice Chair Chris Cook, of the Nominations committee, shared his work on preparing for the next election, explaining that we have at least two (and in several cases more than two) candidates for each open position, with the exception of the graduate student representative. Penny

acknowledged that a healthy ballot such as this is a good indication of a strong organization. The membership discussed the challenge of engaging graduate students, particularly in a economic climate that may make it difficult for students to travel to conferences.

Immediate Past Chair Micki Caskey and Council Member Molly Mee informed the membership of the Outreach efforts, in particular focusing recruitment of new members. Currently membership is strong at 173, but the SIG would like to reach 200 and Penny urged each member present to recruit at least one person to join.

(continued on page 5)

Send In Your News!

Please send any items, announcements, or information you would like to have considered for publication in the *Chronicle of Middle Level Education Research* to Chris Cook at cookc2@nku.edu

The Newsletter is published three times annually – Spring, Summer, & Fall.





The purpose of the MLER SIG is to improve, promote, and disseminate educational research reflecting early adolescence and middle level education.

Membership in the MLER-SIG connects AERA members who are committed to research issues related to young adolescents. SIG members exchange information and ideas through Annual Meeting presentations, newsletters, and informal gatherings.

Membership cost is \$15/year. The MLER-SIG (#88) is listed on the third page of the AERA Membership Application Form.

MLER SIG Business Meeting Minutes (Continued)

(continued from page 5)

Treasurer Shawn Faulkner, representing the Recognition working group, reminded SIG members of the two existing awards: The Graduate Student Award and The Richard Lipka Lifetime Achievement Award, and encouraged nominations for both. He also shared that a third award, for outstanding research, is in development and will be coming to the membership for a vote between now and the AERA 2012 meeting.

Graduate Student Representative Nicole Miller and SIG member Cheryl Ellerbrock informed attendees of the Graduate Student Mentoring Initiative, as part of their work in the Leadership Development working group. They thanked members for volunteering to serve as mentors, provided information about access to signing up, and encouraged everyone to recruit graduate students to take advantage of the opportunity.

Handbook of Middle Level Education Research Series Editor Vince Anfara reminded the membership of the upcoming issue on the Common Planning Time (CPT) Project and Micki Caskey updated the group on the status of the CPT Project, reminding us that there were still opportunities to become involved with Phase II through online training.

Prior to close, Vince initiated a round of applause for the accomplishments of two SIG members: Gayle Andrews for receiving AMLE's coveted John Lounsbury Award and Micki Caskey for delivering the prestigious William Alexander Lecture at this year's conference.

Penny reminded the group of upcoming award deadlines and several vacant university positions were announced. Penny thanked the membership for their ongoing support of the SIG and the meeting adjourned at 6:49.

Message from the Chair (Continued)

(continued from page 4)

through which we are now reaching between 30-40 members.

As my term as Chair of the Middle Level Education Research SIG winds down, I am profoundly grateful for the opportunity to have served our organization in this way. I've appreciated the chance to get to know our membership and to work alongside some extraordinarily committed officers, council members and member volunteers. The combined leadership of our Past Chair Micki Caskey and Executive Advisor Vince Anfara made it smooth and effective transition for me and I hope to provide a similar service as Steve Mertens steps into the Chair role later this month. Thanks for all of your support while I have served our association.

I look forward to seeing as many of you as possible this month in beautiful Vancouver!





American Educational Research Association Annual Meeting Vancouver, British Columbia April 13-17, 2012 Middle Level Education Research SIG Sessions

1. Engaging and Supporting Student Learning in Middle School

Unit: SIG-Middle-Level Education Research

Session type: Roundtable Session Time: Fri, Apr 13 - 2:15pm - 3:45pm

Place: Vancouver Convention Center, Floor Second Level - East Room 2&3

2. Enhancing Learning Opportunities for Young Adolescents

Unit: SIG-Middle-Level Education Research

Session type: Roundtable Session Time: Sat, Apr 14 - 2:15pm - 3:45pm

Place: Vancouver Convention Center, Floor Second Level - East Room 2&3

3. Improving Outcomes & Engagement for Middle Grade Students: Evidence From Schools and Classrooms

Unit: SIG-Middle-Level Education Research

Session type: Symposium

Time: Sun, Apr 15 - 2:15pm - 3:45pm

Place: Marriott Pinnacle, Floor Third Level - Dundarave

4. Middle-Level Education Research SIG Business Meeting

Unit: SIG-Middle-Level Education Research

Session type: Business Meeting Time: Fri, Apr 13 - 6:15pm - 7:45pm

Place: Marriott Pinnacle, Floor Third Level - Shaughnessy I

5. Middle-Level Education Research SIG National Project on Middle-Level Common Planning Time

Unit: SIG-Middle-Level Education Research

Session type: Symposium

Time: Sun, Apr 15 - 12:25pm - 1:55pm

Place: Marriott Pinnacle, Floor Third Level - Shaughnessy I

6 The Impact of Middle-Level Classroom Instructional Strategies

Unit: SIG-Middle-Level Education Research

Session type: Paper Session

Time: Sat, Apr 14 - 8:15am - 10:15am

Place: Marriott Pinnacle, Floor Third Level - Shaughnessy I

The Chronicle of Middle Level Education Research, the online publication of the Middle Level Education Research SIG, is seeking submissions. The MLER SIG publishes the *Chronicle* three times a year in spring, summer, and fall. We invite you to submit book reviews, brief articles of scholarly work, (including original research and reviews of literature), descriptions of research, or other events/information of interest to MLER SIG members

Manuscripts should (a) be approximately 2,500 words in length; (b) be double-spaced with 1-inch margins in 12-point font; (c) follow the 6th Edition of *Publication Manual of the American Psychological Association* (2001) style guide; and (d) include a separate title page with author name, affiliation, and contact information. Aside from the title page, manuscripts should have no reference to the author(s) to ensure a blind review. Note: Manuscripts need to be prepared and submitted electronically as Word documents.

Submit the manuscript and title page to Chris Cook at cookc2@nku.edu



Save the Date!

39th Annual Conference for Middle Level Education

November 8-10, 2012 Portland, Oregon

http://www.amle.org/annual/



Middle Level Education Research SIG Officers and Council Members for 2012-2013

MLER SIG Officers Steven Mertens- Chairperson Shawn Faulkner - Vice Chairperson Penny Bishop- Past Chair Penny Howell- Secretary

MLER SIG Council Members
Frances Spielhagen- Council Member
Karen Bostic- Council Member
Lisa Harrison- Council Member
Bridget Mahoney- Graduate Student Council Member

Chris Cook—Program Chair/Chair Elect David Strahan- Executive Advisor Kenneth Anderson- Treasurer

Kathleen Brinegar- Council Member Robert Capraro- Council Member Nicole Thompson- Council Member

IMPROVING STRUGGLING MIDDLE SCHOOL GIRLS' LEVELS OF ACADEMIC SELF-EFFICACY, SCHOOL CONNECTEDNESS, AND IDENTITY: A PILOT STUDY OF THE *REAL GIRLS* PROGRAM

> Michael J. Mann, Ph.D. California State University – Chico

ABSTRACT

Middle school girls struggling to be successful in school are often dealing with serious problems that affect their ability to achieve academically. Frequently, these girls exhibit academic failures and problem behaviors that reflect their best attempts to deal with trauma and indicate their being overwhelmed by the demands of life circumstances. In the absence of intervention, these patterns can contribute to girls chronically underperforming in school, dropping out of school, and becoming involved in delinquent and high-risk behavior.

This article describes a mixed methods pilot study of the *REAL Girls* program. *REAL Girls* was designed to help struggling middle school girls develop resilience – particularly academic self-efficacy, school connectedness, and identity – and achieve increasingly successful outcomes in school and life. Ninety-five girls identified as experiencing academic failure, school behavior problems, or truancy participated in one of three pilot implementations of this three day intervention. Both quantitative and qualitative results suggest that *REAL Girls* contributed to mean increases in academic self-efficacy, school connectedness, and identity. Dependent samples t-tests suggest significant increases in each variable, both immediately after program delivery and 30 days later. Focus groups conducted 90 days after pilot implementation confirm the quantitative findings and support the efficacy of the *REAL Girls* curriculum and approach.

INTRODUCTION

Most middle school girls are doing well. Girls typically achieve academically, make positive behavior decisions, and demonstrate leadership within their school communities (Hawkins, et al., 2009; John-

son, Roberts, & Worrell, 1999; Acoca, 1999). Some middle school girls, however, struggle more than others. Often, the girls who struggle the most are dealing with challenging or traumatic life experiences that legitimately affect their ability to be successful in school (Hawkins, et al., 2009; Mullis, 2004). For these girls, problem behaviors typically reflect their best attempts to cope with emotional pain and academic failures frequently indicate how much energy is being usurped by difficult circumstances.

In the absence of intervention, these girls are more likely to develop patterns of chronically underperforming in school, dropping out, and becoming involved in delinquency (Chesney-Lind, 2001). Additionally, they are more vulnerable to experiencing disproportionate, lifelong rates of victimization and abuse, high risk sexual behavior associated with unintended pregnancy and sexually transmitted infections, alcohol and substance abuse, and emotional health problems including depression and anxiety (Thompson, 2004; Crosby, et al., 2004; Aalsma & Lapsey, 2001).

Resiliency theory describes the personal qualities and social supports that help some vulnerable young people have better outcomes than would normally be expected in a challenging situation. This body of work acknowledges the inherent strength of young people and describes the conditions that contribute to their achieving the best possible outcomes. In terms of personal qualities, three themes consistently emerge in the resiliency literature. Resilient young people 1) retain a sense of self-confidence, 2) know how to build effective networks of social support, and 3) develop an authentic sense of self that is both hopeful and pragmatic. (Bernard, 1991; Hawkin, et al., 2009; Tomsen, 2002)

REAL Girls began as an effort to help struggling middle school girls develop resilience and achieve increasingly successful outcomes in school and life. This pilot study examines the influence of the REAL Girls Three Day Intervention Program. The findings presented represent the culmination of the first stage of formative program evaluation and will be used to further refine and inform future program delivery and experimental study.

METHODS

This pilot study utilized a mixed methods QUAN + qual design (Morse, 2003). The quantitative portion used a pre-/post-test design that measured differences in participant levels of school connectedness, academic self-efficacy, and identity before and after exposure to the treatment. Qualitative methods were utilized in a supportive role. Focus groups were used to elaborate on participant perceptions of the intervention and the outcomes associated with the program participation (Hatch, 2002; Glesne, 2006).

PARTICIPANTS

This pilot study included 95 girls aged 12 to 14 years. All participants were referred by public middle schools in Northern California. Each school selected and referred 36 girls with the highest rates of problem behavior, poor academic performance, and truancy. Participants were nominated by teachers and program fit was confirmed by the schools' assistant principals and counselors. One hundred percent of participants had a confirmed history of developmental challenge including one of the following: family fragmentation or extended parent absence, abuse or neglect, significant medical or mental health diagnoses, or a history of academic failure originating in early elementary school. Informed consent was obtained in writing from each participant's parent or guardian.

INSTRUMENTS/MEASURES

Three types of instruments were used in this study. These included a:

Psychosocial Instrument Battery. School connectedness was measured using The School Connectedness Scale and The Mattering Index. The School Connectedness Scale measures the extent to which students feel they are a cared for part of the school community (McNeely, Nonnemaker, & Blum, 2002). The Mattering Index measures student beliefs regarding how much others recognize them as a significant and important part of their community (Elliot, et al., 2004).

Academic self-efficacy was measured using The Academic Self-efficacy Scale and The Pearlin Mastery Scale. The Academic Self-efficacy Scale (Hejazi, et al., 2009) measures student confidence in their ability to meet academic challenges and to be successful in school. While the Pearlin Mastery Scale (Pearlin et al., 1981) measures "the extent to which people see themselves in control of the forces that importantly affect their lives (Pearlin et al., 1981)."

Identity was measured using a combination of The Identity Sub-scale of the Adolescent Personality Style Inventory and The Hope Scale. The Identity Sub-scale of the Adolescent Personality Style Inventory (Lounesbury, et al., 2005) measures an individual's sense of their level of identity formation. The Hope Scale (Synder, et al., 1991) measures the perception that goals can be met, and an individual's self-identification as the type of person who can positively influence their future.

Program Satisfaction Survey. A brief program satisfaction survey was developed for this study. This survey provided participants with an opportunity to express their opinions about the overall quality of the program.

Focus Group Question Guide. A brief focus group question guide was also developed for this study.

The guide was designed to encourage participants to talk candidly about their experience with the intervention, especially regarding which program elements were most influential.

TREATMENT

The *REAL Girls* program was conducted over two full school days with a 2 hour booster treatment 45 days later. During that time, the program was implemented using the *11 Essential Elements of REAL Girls Programs* as a framework and included:

1. Intentionally Choosing Intensity and Energy. Early adolescent brains are predisposed to directing attention toward novelty, emotional intensity, and social connection (Sowell, et al., 2002; Dahl, 2001; Keating, 2004). REAL Girls intentionally capitalizes on this tendency by using intensity and energy to

heighten girls' attention. The program was conducted off-campus during a relatively brief, but concentrated time period. Decorations, music, teams, cheers, dancing, and games were all used to create a high energy atmosphere that felt very different from an ordinary school day.

- 2. Assigning participants to supportive teams. After a brief introduction to the program, all participants were randomly assigned to teams of approximately 10-12 girls. Each team developed a team name, banner, and cheers. Teams rotated through each of the learning activities together and, in these teams, participants were able to establish supportive, positive, and empathetic peer and adult connections that were used as the context for processing and applying the program curriculum (Belenky, 1986).
- 3. Assigning participants to adult women role models. A "Big Sister" was assigned to each participant (Josselson, 1987). In the REAL Girls pilots, Big Sisters were university health education juniors and seniors who agreed to administer the program. Being a Big Sister required intentionally and purposefully investing an extraordinary amount of time and attention in their Little Sister throughout the program. Big Sisters tried to sit with, participate in activities with, and make themselves as available as possible to their Little Sisters. The primary goals for Big Sisters included making sure every girl received enough attention to feel important, to provide support and encouragement, and to identify students who seemed to need extra help while in the program.
- 4. Using Fun and Games to Create a Climate of Trust and Rapport. The issues that heighten risk in struggling girls are all sensitive at some level. As a result, trying to discuss these issues before a reasonable amount of positive rapport and trust is established can be counterproductive. In order to account for this, the first half of the first day of the program was devoted to team competition focused on playing novel and fun games. Having fun together gave program leaders opportunities to connect with participants in a non-threatening environment and helped build a foundation of trust prior to engaging with sensitive topics.

5. Using a Relevance Establishing Activity and a Relevance Orientation in General. After a safe environment and positive rapport was established, a large group session was conducted to help girls make a successful transition to more serious topics. During this session, Big Sisters led a discussion about the challenges girls face and the skills required to successfully overcome those challenges. Session leaders emphasized the purpose of REAL Girls. A willingness to address relevant issues directly and frankly, while remaining compassionate and encouraging, was a hallmark of the overall program philosophy.

- 6. Using Personal Stories. Throughout the program, Big Sisters shared their own stories of struggle and trauma and purposefully emphasized how they overcame the difficulties they faced as middle school students (Belenky, 1986; Josselson, 1987). This emphasis helped to keep the tone of the program positive and constructive.
- 7. Emphasizing Curriculum that Requires Girls to Actively Make Decisions. The REAL Girls curriculum is focused on encouraging girls to make decisions, discussing those decisions, and providing constructive feedback from peers and adults that positively reinforces healthy decision-making. Many techniques were used to elicit these types of decision-making opportunities. Techniques ranged from debriefing skits and responding to scenarios to participating in games where participants categorized items based on risk and required identifying choices that promote school and life success (Belenky, 1986).
- 8. Using Pre-Assessment to Tailor a Portion of the Program. Although most of the program was delivered using an exacting curriculum and protocol focused on the specific program goals listed above, approximately 20% of each pilot was devoted to frank conversation addressing specific concerns identified by the participants themselves. This was done in two primary ways. First, one month prior to the program, participants were administered the Adolescent Concerns Inventory (Weiler, 2004) and a brief open-response question asking what topics they wanted to know more about. Information from these surveys was used to guide the tailored portion of the program. Second, each team had an anonymous

question box. Throughout each day, participants were encouraged to put questions in the box that they may have been unwilling to ask in public. Questions from these boxes were answered at the end of each day.

- 9. Providing Take-home Gifts that Communicate Care & Reinforce Community. Each REAL Girls participant left the program with a REAL Girls t-shirt, a framed picture of the whole REAL Girls group, a framed picture of them and their Big Sister together, and a handwritten note from their Big Sister describing what they most admired about them.
- 10. Using Culminating Activities and Closing Ceremonies to Debrief and Consolidate Learning. At the end of the program, each participant was encouraged to reflect on the lessons they wanted to remember after program completion and to set goals related to school success. They reviewed and discussed these lessons and goals with their Big Sisters, created artistic reminders to be displayed somewhere prominently in their lives, and presented at least one of these lessons or goals to the entire REAL Girls group.
- 11.Reconnecting at Follow-up Events/Booster Treatments. A REAL Girls reunion lunch was held approximately 45 days after the program. This reunion lunch provided participants the opportunity to reconnect with their Big Sisters and the REAL Girls community. No formal program was presented. Informal activities were focused on providing participants with encouragement and support regarding the lessons they learned in REAL Girls and reviewing the goals they set during the program.

ANALYSIS AND RESULTS

QUANTITATIVE RESULTS

Dependent Samples t-tests were used to compare pre-intervention, immediately post-intervention (Post-test 1), and 30 days post-intervention (Post-test 2) means for the scales in the study's psychosocial instrument battery. The Type I error rate was set at .05. Changes in means were examined for each of the three waves

individually and with all waves combined in aggregate. The aggregate results are provided in Tables 1 and 2.

Aggregate results suggest significant pre-/post-test differences in the means for academic self-efficacy, school connectedness, and identity. Results indicate a significant mean increase in all six scales used to measure these constructs, both immediately and 30 days after program completion.

When examined as individual waves, Waves 1 and 3 reflected the aggregate results exactly with significant differences in all six scales at both Post-test 1 and Post-test 2. Wave 2 results indicated significant mean differences in all six scales immediately after program completion. However, 30 days after program completion, the post-test means for the hope (p=.512) and mattering (p=.498) scales were no longer significant. Scores from the remaining four scales – academic self-efficacy, self-confidence, school connectedness, and identity – continued to indicate significant mean increases at Post-test 2.

Frequencies were used to describe participant levels of satisfaction with the *REAL Girls* program. The aggregate results are provided in Table 3. Results indicate that participants found the program helpful, engaging, and an experience they would recommend for other girls.

QUALITATIVE RESULTS

Two focus groups were conducted approximately 90 days after program completion. A total of 17 girls participated. Focus groups were conducted by university students trained in focus group facilitation. An informal and adapted version of the Interpretative Analysis model (Hatch, 2002) was used to analyze the study's qualitative data. The focus groups clearly confirmed the quantitative findings. Girls reported that participating in *REAL Girls* helped them feel more connected to school, more confident academically, more goal-oriented, and more self-assured when facing challenges in general. Further, participants described *REAL Girls* as having helped them reflect on their experiences, refine their sense of identity, develop new goals, and deepen their commitment to previously established goals. Three themes stood out as particularly influential.

First, the role modeling component was described as particularly powerful. One participant stated,

"My Big Sister was the most important part of *REAL Girls*. She listened to me and that meant a lot." While another said, "The [staff] had problems just like me and they are doing okay now. They are in college and helping people... that made me feel like I could do it too."

Additionally, frank discussion was described as a crucial program component. One participant described the importance of this component by saying, "[REAL Girls staff] talked about what I wanted to talk about. They didn't hold back and I didn't have to pretend." Additional participants described appreciating the opportunity to get real answers about issues they cared about.

Finally, *REAL Girls* seemed to provide a community within the school that provided a point of entry from which girls were able to enter the broader school community. One participant stated, "Before [*REAL Girls*], I didn't fit anywhere. I didn't get along with other girls and I didn't want to go to school because no one liked me. [*REAL Girls*] helped me find people that fit with me. Now I like to go to school and want to be a *REAL Girls* leader..."

DISCUSSION

In *This We Believe: Keys to Educating Young Adolescents* (2010), the Association for Middle Level Educators suggests that an effective education for young adolescents must be developmentally responsive, challenging, empowering, and equitable (AMLE, 2010). This framework advocates creating equitable environments that help vulnerable students be fully empowered to embrace and meet the academic challenges at the heart of the movement's philosophy. Additionally, it suggests that in order for middle grades educators to be truly developmentally responsive, they must both understand the factors related to developmental success and failure and be prepared to intervene on behalf of struggling students. In this context, being ready to create and deliver programs that 1) help increase student confidence in their ability to engage academic challenge, 2) help participants identify themselves as someone for whom academic success is important, and 3) connect vulnerable young people to adult advocates and a supportive school community seem especially important and in

keeping with the middle school movement's approach.

This pilot study provides preliminary evidence suggesting the *REAL Girls* program may be successfully achieving these outcomes with struggling middle school girls. Comparisons between program pre-scores and scores collected 30 days after program completion suggest that these differences may continue. Program satisfaction surveys indicate that girls appreciate the *REAL Girls* experience, believe it helped them, and that it can help other girls. Focus groups confirm these findings.

These formative evaluation results suggest that the program should be tested using a more rigorous experimental design that includes long-term academic outcomes. Additionally, it would be helpful if other researchers replicated this study in different geographical regions using the *REAL Girls* program in full or having developed similar programs using the *11 Essential Elements of REAL Girls Programs* as a framework.

REFERENCES

- Aalsma, M. C., & Lapsley, D. K. (2001). A typology of adolescent delinquency: Sex differences and implications for treatment. *Criminal Behaviour and Mental Health*, 11, 173-191.
- Acoca, L. (1999). Investing in girls: A 21st century strategy. *Juvenile Justice*, 6, 3-13.
- Belenky, M. F., Clinchy, B. M., Goldberger, N. R., & Tarule, J. M. (1986). Women's ways of knowing: The development of self, voice, and mind. New York: Basic Books.
- Bernard, B. (1991). Fostering resiliency in kids: Protective factors in the family, school, and community.

 Portland: Western Center for Drug-free Schools and Communities.
- Chesney-Lind, M. (2001, February). What about the girls? Delinquency programming as if gender mattered. *Corrections Today*, 38-45.
- Crosby, R., Salazar, L. F., DiClemente, R. J., Yarber, W. L., Caliendo, A. M., & Staples-Horne, M. (2004).

 Health risk factors among detained adolescent females. *American Journal of Preventive Medicine*, 27 (5), 404-410.
- Dahl, R.E. (2001). Affect regulation, brain development, and behavioral/emotional health in adolescence. *CNS Spectrum*, 6, 1–12.
- Elliott, G. C., Kao, S., & Grant, A. (2004). Mattering: Empirical validation of a social-psychological concept. Self and Identity, 3, 339-354.
- Glesne, C. (2006). Becoming qualitative researchers: An introduction (3rd ed.). Boston: Pearson Education.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. New York: State University of New York Press.
- Hawkins, S.R., Graham, P.W., Williams, J., & Zahn, M.A. (2009). Resilient girls Factors that protect against delinquency. Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile and Delinquency Prevention.

Hejazi, E., Shahraray, M., Farsinejad, M., & Asgary, A. (2009). Identity styles and academic achievement: mediating role of academic self-efficacy. *Social Psychology of Education*, 12(1), 123-135.

- Johnson, N. G., Roberts, M. C., & Worell, J. (1999). *Beyond appearance: A new look at Adolescent Girls*.

 Washington, DC: American Psychological Association.
- Josselson, R. (1987). Finding herself: Pathways to identity development in women. San Francisco, CA: Jossey-Bass.
- Keating, D.P. (2004). Cognitive and brain development. In Lerner, R.J. & Steinberg, L.D. (Eds.) Handbook of Adolescent Psychology (pp. 45–84). Chicago: Wiley.
- Lounsbury, J. W., Huffstetler, B. C., Leong, F. T., & Gibson, L. W. (2005). Sense of identity and collegiate academic achievement. *Journal of College Student Development*, 46(5), 501-514.
- McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting School Connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72(4), 138.
- Morse, J. M. (2003). Principles of mixed methods and multimethod research design. In A. Tashakkori & C. Teddle (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 189-208). Thousand Oaks, CA: Sage.
- Mullis, R. L., Cornille, T. A., Mullis, A. K., & Huber, J. (2004). Female juvenile offending: A review of characteristics and contexts. *Journal of Child and Family Studies*, 13(2), 205-218.
- National Middle School Association (2010). *This We Believe: Keys to Educating Young Adolescents*. Columbus, Ohio: National Middle School Association.
- Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior*, 22, 337-356.
- Snyder. C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., et al. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of*

Table 1. Comparison between aggregate pre-program and initial post-program means (Post 1).

	Pre	Post	Diff	St. Dev.	St. Err	95% CI Lower	95% CI Up- per	Т	df	sig.
School Connectedness										
The School Connectedness Scale	26.18	30.33	4.15	6.61	.726	2.70	5.59	5.71	82	.00
The Mattering Index	16.07	18.68	2.61	3.36	.366	1.88	3.34	7.12	83	.00
Academic Self- Efficacy										
The Academic Self-Efficacy Scale	21.41	25.52	4.10	6.07	.651	2.81	5.40	6.30	86	.00
The Pearlin Mastery Scale	18.48	21.26	2.78	4.03	.435	1.91	3.64	6.40	85	.00
Identity										
The Identity Sub-scale of the Adolescent Personality Style Inventory	17.93	21.22	3.29	4.80	.521	2.26	4.33	6.32	84	.00
The Hope Scale	17.29	19.64	2.36	3.16	.339	1.68	3.03	6.94	86	.00

Table 2. Comparison between aggregate pre-program and 30 days post-program means (Post 2).

	Pre	Post 2	Diff	St. Dev.	St. Err	95% CI Lower	95% CI Up- per	Т	df	sig.
School Connectedness										
The School Connectedness Scale	26.18	28.78	2.60	5.57	.612	1.39	3.82	4.26	82	.00
The Mattering Index	16.07	18.48	2.41	11.08	1.21	0.01	4.80	1.99	83	.05
Academic Self- Efficacy										
The Academic Self-Efficacy Scale	21.41	23.69	2.28	4.37	.469	1.34	3.21	4.86	86	.00
The Pearlin Mastery Scale	18.48	20.30	1.83	2.84	.306	1.22	2.43	5.97	85	.00
Identity										
The Identity Sub-scale of the Adolescent Per- sonality Style Inventory	17.93	19.74	1.81	3.00	.326	1.16	2.46	5.56	84	.00
The Hope Scale	17.29	18.82	1.53	2.10	.225	1.08	1.98	6.80	86	.00

Table 3. Aggregate program satisfaction frequencies in percentages

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The REAL Girls program helped me					
Feel confident and strong	62.8	27.7	5.3	0.0	0.0
Get along better with other girls.	50.0	42.6	3.2	0.0	0.0
Feel closer to people who care about me.	52.1	38.3	4.3	0.0	0.0
Think about being successful in school.	57.4	33.0	4.3	1.1	0.0
Set positive goals for my life.	61.7	33.0	1.1	0.0	0.0
Learn how to deal with prob- lems.	54.3	37.2	4.3	0.0	0.0
Learn how to deal with stress.	59.6	31.9	4.3	0.0	0.0
Help me feel closer to the adults at my school.	55.3	35.1	4.3	1.1	0.0
Answer some important questions about life.	62.8	27.7	5.3	0.0	0.0
Overall, I believe REAL Girls					
was					
Helpful	75.4	20.2	0.0	0.0	0.0
Good for me	87.2	8.5	0.0	0.0	0.0
Good for girls in general	87.2	8.5	0.0	0.0	0.0
Fun	87.2	8.5	0.0	0.0	0.0