Rising to the Challenge

The Pennsylvania Professors of Middle Level Education and Pennsylvania Association for Middle Level Education have partnered to support a peer reviewed journal focused on research in the field of middle level education. *Betwixt and Between* is the result of this joint venture. We are pleased to welcome you to our learning community and encourage you to submit an article in the future. In the meantime, we hope to elevate your understanding of middle level students, schools, and the issues they face in these challenging times.

—The *Betwixt and Between* Editorial Board.

In This Issue

Analyzing and using student performance data

A pedagogical model for instruction

Bullying through the eyes of multiple stakeholders

Reading in content areas

Inquiry in mathematics

Caring classrooms

Betwixt and Between

Education for Young Adolescents

A Peer Reviewed Journal of Middle Level Research

Subscriptions
Subscriptions are complementary with the purchase of a membership in either organization.

Back Issue Requests
Direct inquiries regarding back issue requests to:
Betwixt and Between: Education for Young Adolescents, c/o Journal Services, 312 State College, PA 16801 or mack@calu.edu.

Advertising
Inquiries should be addressed to
Leighann Forbes, Gannon University, 109 University Square, Erie, PA 16541, phone 814-871-7144 or forbes001@gannon.edu.

Call for Manuscripts
A Call for Manuscripts can be found in each issue and online at http://www.papomle.org/On-Line_Journal.html.

Copyright and Sharing
Authorization to photocopy articles for internal (school building) or personal use of Association members is granted by the Pennsylvania Association for Middle Level Education (PAMLE) and the Pennsylvania Professors of Middle Level Education (PA-POMLE) provided that the copies recognize the organizations, provide a link to the organizations, provide a citation that reference the journal title on the first page of each photocopied article in this format:

> *Betwixt and Between* is a publication of Pennsylvania Association for Middle Level Education (http://www.pamle.org) and the Pennsylvania Professors of Middle Level Education (http://www.pomle.org). Permission has been granted for members of the Pennsylvania Association for Middle Level Education and the Pennsylvania Professors of Middle Level Education to maintain a copy for personal use or for use within a school building. All other uses are prohibited.

Link Requests
If you want to link to a *Betwixt and Between* article, permission will be granted as long as it is not used in a marketing or sales brochure, or to raise funds, and as long as full credit is given in this format:

> *Betwixt and Between* is a publication of Pennsylvania Association for Middle Level Education (http://www.pamle.org) and the Pennsylvania Professors of Middle Level Education (http://www.pomle.org). Permission has been granted for members of the Pennsylvania Association for Middle Level Education and the Pennsylvania Professors of Middle Level Education to maintain a copy for personal use or for use within a school building. All other uses are prohibited.

Other Requests
Special requests, such as for non-members, general distribution, resale, advertising, and promotional purposes or for creating new works, should be directed to *Betwixt and Between: Education for Young Adolescents*, c/o Journal Services, 312 State College, PA 16801, or via email to Deana Mach (mack@calu.edu).

Environmental Impact
The Journal is created electronically to reduce the use of paper. Please consider the environment before printing.

Table of Contents

4

About Our Cover Image

Joe Girard, a successful author, motivational speaker, and salesman, once said, "The elevator to success is out of order. You'll have to use the stairs... one step at a time."

We hope that Mr. Girard is not correct. Just as elevator call buttons allow us to select a variety of locations and move between them with ease, we hope that Betwixt and Between will cover a variety of middle level issues and elevate our collective ability to improve middle level education for all learners.   It is our hope that becoming informed about current issues, engaging in research, and learning from others will help our middle level community move from novice to expert across many areas more quickly than going it alone. So, go ahead, take the elevator with us .

Thank you for joining us in our quest to lift up all middle level learners. We hope our journal will provide something new to enhance the professional development of each of our readers.

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

4

From the Editor's Desk

Deana Mack

Welcome to the first issue of Betwixt and Between: Education for Young Adolescents, The Journal of the Pennsylvania Professors of Middle Level Education. It is both a pleasure and honor to see the efforts of the editorial board come to fruition. Without the editorial board's hard work, those who submitted research, and those who reviewed the research submissions, this edition would not be possible. I would like to personally thank Herb Steffy for his wise counsel to me on random questions and his ability to contact large masses of people with his vast supply of e-mail lists. Additionally, I would also like to thank Kim Arp for being a sounding board on so many topics I cannot even begin to mention them all. Finally, I would like to thank Leighann Forbes for being the glue that turned this journal into something that is wonderfully presented and wonderfully accessible. It is my hope that everyone will find the articles presented here of great value in the field of middle level education.

Sincerely,
Deana Mack Ph.D.

PAMLE Membership

Members of each organization receive notification when new issues of *Betwixt and Between* are released. Don't miss an issue! Join these professional organizations today.

Pennsylvania Association for Middle Level Education

The mission of the Pennsylvania affiliate of the Association for Middle Level Education is to promote best practices in the schools and classrooms of our Commonwealth. Membership provides and opportunity to meet like minded educators, to keep up on the latest middle level practices, and, most importantly, be confident about providing the best education possible for students.

Regional chapters of PAMLE exist throughout the state providing access to local expertise at your fingertips. Membership rates range between $20 and $199. To learn more, please visit our website.

http://www.pamle.org

Pennsylvania Professors of Middle Level Education

The Pennsylvania chapter of the Professors of Middle Level Education is provides a professional network that contributes to the development of an expanded research base, disseminates best-practices, and enhances the preparation of future middle level educators.

Chapter meetings are held three times per year in various locations throughout the state. The annual membership dues of $100 provide access to this network for all faculty members within a middle level teacher preparation program. Please take a moment and investigate about our association online.

http://www.papomle.org

Using Collaborative Inquiry to Analyze Student Performance Data with Middle School Teachers

Terry R. Barry

Abstract

Since the inception of NCLB, educators have had to navigate an ever-increasing amount of student performance data with little or no direction in how to use it. Recently, President Obama's *Race to the Top* legislation compounded this issue. This legislation not only required educators to use student performance data, it directly linked it to their annual performance evaluations. In Pennsylvania 30% of a teacher's annual evaluation is now linked to student performance data. One middle school principal in northeastern Pennsylvania has found an ingenious method to analyze and use student performance data with his teachers. This principal used a process called collaborative inquiry. This informal case study revealed how this building principal used collaborative inquiry with his staff to analyze student performance data, make instructional decisions, and positively impact the academic achievement of students.
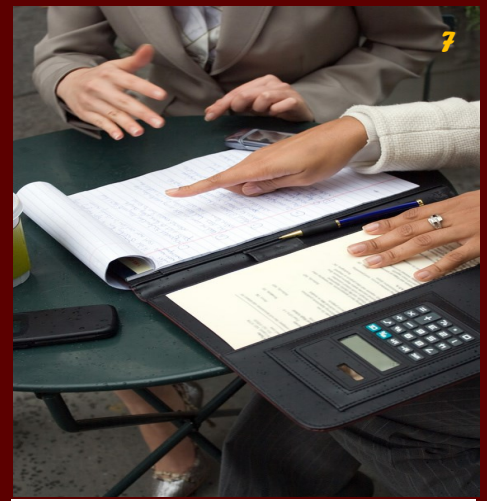
Introduction

Since the inception of No Child Left Behind (NCLB; 2001), educators have had to navigate an ever-increasing amount of student performance data with little or no direction in how to use it (Earl & Katz, 2006). To compound this issue, President Obama recently introduced *Race to the Top* as part of his American Recovery and Reinvestment Act (2009). Race to the Top not only mandated schools to use student performance data but it directly linked student performance data to teacher and administrator evaluations. Consequently, educators who continue to ignore the instructional benefits of using student performance data may very well face its consequences on their annual evaluations.

One middle school principal in northeastern Pennsylvania has found an ingenious way to analyze student performance data with his teachers. According to this principal, "I meet with interdisciplinary teams of teachers once per month to review student performance data, share instructional strategies, and collectively develop plans for improvement. Our system works extremely well because we not only include the grade-level teachers but we also include our related arts teachers. The collective knowledge of our group is focused on the instructional needs of our students."

What the principal was referring to is a process known as collaborative inquiry. As defined by Weinbaum et al. (2004), collaborative inquiry is a systematic process where teachers gather together to explore issues about teaching and learning that they identify as important. While this definition is fairly simplistic, this informal study revealed that the implementation of successful collaborative inquiry at the subject school required a great deal of planning, knowledge, and leadership on the part of the building principal. Accordingly, this informal study reveals how one building principal successfully implemented collaborative inquiry with his teachers to analyze the instructional needs of students, sculpt instructional decisions, and positively impact the academic achievement of the students in his school.

Collaboration: A Middle Level Essential

Did you know *This We Believe: Keys to Educating Young Adolescents* (2010), published by the Association for Middle Level Education, identifies "*Courageous and Collaborative Leaders*" as essential element of successful middle level institutions?

The publication states, "Leaders understand that successful schools committed to the long-term implementation of the middle school concept must be collaborative enterprises. The principal, working collaboratively with a leadership team, focuses on building a learning community that involves all teachers and places top priority on the education and healthy development of every student, teacher, and staff member."

Learn more about the 16 Characteristics of Effective Schools by visiting the AMLE website at http://www.amle.org/AboutAMLE/ThisWeBelieve/tabid/121/Default.aspx#122516-the-16-characteristics

PAMLE is a proud affiliate of AMLE.

Nature of the Study

This informal study employed a case study research design. Using this design, a researcher selects one bounded case in an effort to search for meaning (Merriam & Associates, 2002). Accordingly, a middle school in northeastern Pennsylvania was selected for this study due to the fact that the principal and his teachers had been successfully using collaborative inquiry to analyze student performance data and make instructional decisions since the 2008 – 2009 school year.

In order to elicit primary source data, the principal and the members of the collaborative inquiry teams were interviewed regarding their use of the collaborative inquiry process as it related to data acquisition, data analysis, professional discourse, and instructional planning. In addition to these data, observations of the collaborative inquiry meetings were conducted and unobtrusive documents were collected. Finally, the interview data, observational data, and data related to the unobtrusive documents were analyzed and triangulated to validate findings.

Background and Limitations

This investigation was framed within the context of a rural public middle school in northeastern Pennsylvania. The subject school serviced 630 students. The subject school was comprised of six teams of teachers. Seven teachers were on each team. The ethnicity of the school's students was relatively homogeneous. The student population was 95% white, 1% black, 3% Hispanic, and 1% Asian. Thirty percent of this school's students were considered low socio-economic as defined by their qualification for free or reduced lunch. Twenty-seven percent of the school's population was identified special education. Accordingly, when reviewing the results of this informal study one should consider them within the limitations outlined above.

Collaborative Inquiry

David (2009) defined collaborative inquiry as teachers working together to identify and solve common challenges through the analysis of student performance data and the implementation of instructional strategies. Kasl and Yorks (2010) echoed this notion, sharing that collaborative inquiry is a systematic means of research where individuals use their past experiences and expertise to solve problems in a collective manner.

This informal study revealed that the process of collaborative inquiry at the subject school was cyclical and involved (a) the development of collaborative inquiry teams; (b) the analysis of student performance data; (c) time, support, leadership, and discourse related to instructional methodology; (d) follow-up analysis of student performance data to determine the effectiveness of instructional decisions; and (e) the modification of instructional direction if needed. This process is outlined in figure 1 below.

As its name implies, the successful use of collaborative inquiry at the subject school required a great deal of professional discourse and collective decision making. As noted by David (2009), the process of collective decision making may seem somewhat counterintuitive to American educators who have historically planned and taught in isolation. As such, for collaborative inquiry to succeed, the culture of one's school must support it.

School Culture:

This study revealed that a careful evaluation of the culture of one's school must be the starting point for the implementation of collaborative inquiry.

Figure 1. Collaborative Inquiry Cycle at Subject School

Want to recognize an outstanding
STUDENT TEACHER
working with middle level students (ages 10-14)?

Know a middle level ADMINISTRATOR or TEACHER
who deserves a great pat on the back
for their work with kids?

Check out the award opportunities through PAMLE

the Pennsylvania Association for Middle Level Education
Go to www.pamle.org for more information.

Learning to Teach & Teaching to Learn: Student Teacher Recognition -- This recognition is presented to outstanding student teachers or interns. PAMLE wants to recognize teaching candidates who have student taught in a middle school and have demonstrated both a commitment to middle level teaching as well as an awareness of young adolescent development. Any student teacher or intern who has completed his/her student teaching in the Fall (deadline Dec. 15) or Spring (deadline Apr. 15) is eligible for this award. These novice teachers will be recognized at the PAMLE Conference each Spring. They will receive a certificate, free one-day attendance to the conference and a one-year PAMLE Individual membership.

Outstanding Administrator Award -- By establishing this award in 2004-05, PAMLE sought to honor administrators who value, understand and support middle level education that promotes powerful learning for young adolescents.

Ann Moniot Outstanding Middle Level Teacher -- Ann Moniot was a very dynamic educator from the city of Pittsburgh. She was one of the original Board Members of PAMLE. She was also the second president of the Association for Middle Level Education. This award is presented to a middle level educator that has made professional contributions that have positively influenced middle level education as well as middle level students.

Promising Practitioners Award: New Teacher Award -- This award is presented to teachers who are just beginning their middle school careers. These beginning teachers have made a positive impact on both their school and community. They incorporate effective middle level practices in their everyday teaching. Each PAMLE member school has the opportunity to nominate up to three teachers yearly to receive this distinction. Each participant will receive a certificate at the PAMLE Conference.

Joan Jarrett Student Award -- The Joan Jarrett student award is designed to honor outstanding young adolescents who are in the "middle" and who generally don't receive recognitions. To be eligible, the student should demonstrate leadership abilities, good citizenship, and should have made positive contributions to their school and community.
.

The culture of a school is defined by the beliefs and behaviors of the individuals within the school and how they are inclined to act in given situations (Lindsey, Roberts & Campbell-Jones, 2005). The principal, at the school under investigation, went to great lengths to ensure that the culture of his school was conducive to collaborative inquiry.

According to the principal, "There are several things that must be valued in one's school for the process of collaborative inquiry to work correctly. First of all, the school's culture must support a situation where teachers are trusted to make instructional decisions and are not afraid to share their ideas with one another. Second, the school's culture must embrace the use of student performance data and understand the benefit of using student performance data to one's advantage. Third, there must exist a simplistic way to retrieve and organize student performance data. Fourth, the principal must ensure common time, adequate time, and a place for the collaborative inquiry meetings to take place."

School cultures that support collaborative inquiry are framed by trust, collaboration, discourse, shared leadership, accountability, and high expectations for student achievement among staff members (Cooper, Ponder, Meritt, & Mathews, 2005; Seng et al., 2000; Weinbaum et al, 2004). Schools whose cultures supported collaborative inquiry operated in an environment where people worked together, felt safe to share ideas with one another, and felt responsible for student learning. As one teacher in this school noted, "Our principal trusts us to do what is best for our students. Our principal knows that we understand our students best and that we are going to work together to do whatever it takes to make sure they succeed."

Team Development:

Once an honest evaluation of the culture of one's school has been conducted and one is satisfied that the culture will support collaborative inquiry, careful consideration must be given to the development of the collaborative inquiry teams. According to the principal "The structures of middle schools align really well with the needs of collaborative inquiry. Common planning times, common meeting times, expectations for collaboration, and multi-disciplinary instructional teams are all elements that contribute to successful collaborative inquiry. These elements alone, however, are insufficient. To be successful the *personality* of the team is also critical."

Collaborative inquiry teams should, naturally, consist of teachers who have students in common; however, consideration must also be given to (a) who would work well together in a democratic manner, (b) the rules that govern the group's operations, and (c) the expertise and values (Blair, 2004) each member brings to the table. As noted by one teacher at this school, "I think the most unique element of our collaborative inquiry team is that every teacher teaches the students that we are talking about – the core teachers and the arts teachers. I think what's also beneficial is that we all get along and work well as a unit."

Performance Data:

As mentioned above, NCLB (2001) mandated that all states administer high quality assessments to students for the purpose of evaluating performance. Additionally NCLB required all states to provide the results of these assessments to schools so that this information could be used by them to inform instruction in the classroom. As such, state assessment data is available to schools by mandate. State assessment data alone, however, is not enough. Along with state assessment data, successful collaborative inquiry requires the use of ongoing benchmark assessment data, curriculum-based assessment data, and data such as attendance records and discipline records. (Anfara, 2010). It is also imperative that this data is easily accessed. This usually occurs via a computing warehousing system.

State Assessment Data

State assessment data are supplied to schools as both a means to assess the school's compliance with the performance mandates of NCLB and also as a means to determine the instructional needs of students (Anfara, 2010). These results are generally reported by overall performance in each subject as well as by the skill sets within each subject.

According to the building principal, "we review state assessment data, but this data is only supplied to us one time per year. Successful collaborative inquiry requires ongoing performance data so that discussions and decisions can be modified as the year progresses. As a result, we also use benchmark assessments. The benchmark assessments are administered during the first week of the school year and then again quarterly thereafter. Using benchmark assessment information, we can see the progress of our students and the effectiveness of our decisions."

Benchmark Assessment Data

Benchmark assessments are state-correlated examinations that are administered to students at multiple intervals throughout the year (Donhost, 2010). According to Li, Marion, Perie, and Gong

(2010), the main uses of benchmark assessments are to identify the instructional needs of students so that teachers can make informed instructional decisions in the classroom. Benchmark assessments provide teachers ongoing information throughout the school year regarding their students' progress.

The Success for All Foundation (2009) reported that the 4Sight Benchmark Assessments are one of the most popular benchmark assessments used by school districts. These assessments supply student performance data for overall performance in reading and mathematics as well as the anchor assessment standards that make up each subject. As with state assessments, the 4Sight Benchmark Assessment can be disaggregated by race, sex, socio-economic standing, and a myriad of other demographic categories. Multiple studies indicated that the use of benchmark assessments for instructional decision-making is promising (Berry, Johnson, & Montgomery, 2005; Datnow, Park, & Wohlstetter, 2007; Hollins, McIntyre, DeBose, Hollins, & Toowner, 2004; Strahan 2003; Symonds, 2004).

According to one member of this school's collaborative inquiry team, "we review the students' performance on their 4sight Assessments as the year progresses. These assessments breakdown performance by the anchor standards within each subject. For example, we may know a student is struggling in math, but the benchmarks reveal what skill within math the student is struggling with. Is the student doing well with *Numbers and Operations* but struggling with *Measurement*? These assessments drill down to the very skills we need to address in our classrooms."

Professional Discourse

Successful collaborative inquiry is underscored by teachers sharing ideas and strategies with one another to address the identified learning needs of students. This investigation revealed extremely rich discourse among the teachers as they shared instructional strategies with one another that were designed to meet the identified learning needs of their students. Of particular note was the fact that each member of the team represented different instructional disciplines. As such, the team shared ideas and strategies from the perspective of their content area. Sergiovanni wrote that "too often competence is divided among different people. The consequence of this division is to dilute what each individual knows and to ignore the collective intelligence that schools might otherwise have" (p. 117). Middle school teams are naturally interdisciplinary. Taking advantage of this through collaborative inquiry makes perfect sense.

One teacher at this school shared "I remember one meeting when we were discussing the fact that the students were struggling with measurement. The Family Consumer Science teacher said that she could teach measurement in her class through recipes, the science teacher was working on timelines and said that he could have the students measure each section of the timeline; the history then added that he would have his students measure scales on a map. The interesting part was that the math teacher did not change his instruction at all. He kept to his pacing guide. When the students took their next benchmark assessment, their scores in measurement increased dramatically." Using collaborative inquiry, the collective intelligence of the group is recognized and celebrated.

Instructional Decision-making

Once the collaborative inquiry teams analyzed the instructional needs of

their students (through the use of student performance data) and shared strategies to address them (through discourse), their instructional decisions took on many forms. Some decisions used flexible grouping of students within classrooms to provide direct explicit instruction by anchor standard. Other decisions used technology-based instruction or a particular instructional strategy that a member of the group used successfully. Still other decisions involved the related arts teachers, history teachers, or science teachers incorporating specific skills into their lessons. Whatever the decisions, a common thread clearly emerged through this investigation. The team's analysis of student performance data drove their discourse, the team's discourse molded their instructional decisions, and the team's instructional decisions were specific to the anchor standards the student(s) were struggling with.

Conclusion:

The designs of most middle schools are tailor-made for collaborative inquiry. The school under investigation in this informal study was a perfect example. The school's culture was defined by collaboration, shared decision-making, trust, and teamwork. This culture set a foundation for collaborative inquiry to succeed. The principal carefully developed collaborative inquiry teams consisting of educators who worked well together and had students in common. Once the collaborative inquiry teams were developed, sufficient time was set aside for the teams to meet, analyze student performance data, and share instructional ideas.

Through rich discourse, the collaborative inquiry teams based all

instructional decisions on their analysis of state and benchmark assessment data. Since the group represented teachers from varying instructional disciplines, they all took ownership of their decisions. The collective intelligence of the group was celebrated and instructional decisions were sound. Once the instructional decisions were enacted in the classroom(s), follow-up benchmark assessment data were analyzed to determine their effectiveness. Instructional decisions that worked well were continued; instructional decisions that did not work well were altered.

References

Anfara, V. (2010). Data-driven decision making. *Middle School Journal,* 42(2), 56-63.

Berry, B., Johnson, D., & Montgomery, D. (2005). The power of teacher leadership. *Educational Leadership, 62*(5), 56-60.

Blair, N. (2004*). Leading coherently: universal lessons from leaders around the world.* Thousand Oaks, CA: SAGE Publications.

Cooper, J., Ponder, G., Merritt, S., & Mathews, C. (2005). High-performing schools: Patterns of success. *Nassp Bulletin, 89*(2), 645.

Datnow, A., Park, V., & Wohlstetter, P. (2007). *Achieving With Data: How high-performing school systems use data to improve instruction for elementary students* (Center on Educational Governance, pp. 1-79). Los Angeles: Rossier School of Education, university of Southern California.

David, J. (2009). What the research says about collaborative inquiry. *Educational Leadership, 66*(4), 87-88.

Donhost, M. (2010). Data-driven decision making. *Middle School Journal, 41*(3).

Earl, L., & Katz, S. (2006). Leading Schools in a Data Rich World: Harnessing Data for School Improvement. Thousand Oaks, CA: Corwin Press.

Hollins, E., McIntyre, L., DeBose, C., Hollins, K., & Tower, A. (2004). Promoting a self-sustaining learning community: Investigating an internal model for teacher development. *International Journal of Qualitative Studies in Education, 17*(2), 247-264.

Kasl, E., & York, L. (2010). "Whose inquiry is this anyway?" Money, power, reports, and collaborative inquiry. *Adult Education Quarterly, 60*(4), 315-358.

Li, Y., Marion, S., Perie, M., & Gong, B. (2010) An approach for evaluating the technical quality of interim assessments. *Peabody Journal of Education, 85*(2), 163-185.

Lindsey, R., Roberts, L., & Campbell Jones, F. (2005). The culturally proficient school: An implementation guide for school leaders. Thousand Oaks, CA: Corwin Press.

Merriam, S., & Associates (2002). *Qualitative research in practice: Examples for discussion and analysis.* San Francisco, CA: Jossey-Bass.

Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2000). *Schools that learn: A Fifth Discipline field book for educators, parents, and everyone who cares about education.* New York: Doubleday/Currency.

Sergiovanni, T. J. (2005). *Strengthening the heartbeat: Leading and learning together in schools.* San Francisco: Jossey-Bass.

Strahan, D. (2003). Promoting a collaborative culture in three elementary schools that have beaten the odds. *The Elementary School Journal, 104*(2), 127-146.

Success for All Foundation. (2009). *4Sight Reading and Math Benchmarks*. Baltimore, MD: Author

Symonds, K. (2004). *After the test: Closing the achievement gaps with data* (Learning Point Associates, pp. 1-61). Naperville, IL: Bay Area School Reform Collaborative.

U.S. Department of Education. (2001). *No Child Left Behind Act*. Retrieved March 14, 2009, from http://www.ed.gov/policy/elsec/leg/esea02/index.html

U.S. Department of Education. (2009). Race to the Top. Retrieved April 9, 2013, from http://www2.ed.gov/programs/racetothetop/executive-summary.pdf

Weinbaum, A., Allen, D., Blythe, T., Simon, K., Seidel, S., & Rubin, C. (2004). *Teaching as inquiry: Asking hard questions to improve practice and student achievement*. Teacher's College Press.

About the Author

Dr. Terry Barry, Associate Dean
College of Education
East Stroudsburg University

Dr. Barry has 24 years of experience in public education where he served 12 years as a middle school principal.

Contact Information:

Dr. Terry R. Barry
East Stroudsburg University
200 Prospect Street
East Stroudsburg, PA 18301
Tbarry1@po-box.esu.edu

Developing Deliberative Democracy Skills in Middle Level Classrooms: A Pedagogical Model

Jason T. Hilton

Abstract

This article describes a model for the implementation of a classroom process based on a deliberative democratic political ideal. This analysis includes delineation of the deliberation process and specific gains to be made by including deliberative practices within middle level educational settings. Following this theoretical background, the article moves on to describe a pedagogical model for employing deliberation within classrooms serving young adolescents.

Active Learning: A Middle Level Essential

Successful middle level teachers know that active learning doesn't happen by accident. Teachers must be committed to effectively using instructional practices that place students at the center of the learning process. This article provides a model to assist teachers as they plan for active learning. In addition, the author makes the case for active learning as a mechanism for developing the ability to hypothesize, to organize information into useful and meaningful constructs, and to grasp long-term cause and effect relationships. These skills allow students to play a role in their own learning and develop skills that will transfer into their adult lives.

Learn more about the 16 Characteristics of Effective Schools by visiting the AMLE website at http://www.amle.org/AboutAMLE/ThisWeBelieve/tabid/121/Default.aspx#122516-the-16-characteristics

PAMLE is a proud affiliate of AMLE.

Introduction

Modern politics and mass media are overrun with symptoms of adversarial democracy, with individuals holding fast to entrenched positions and forward progress stymied by dogma and rhetoric. All too often young adolescents enter classrooms with similarly steadfast beliefs, seemingly unable to hear and consider those views that differ from their own. If these students are going to grow into adults capable of respecting diversity of thought and advancing society, they need the chance to practice a different brand of democracy in the classroom – the deliberative democracy.

This article seeks to describe a model for the implementation of a classroom deliberation process based on a deliberative democratic political ideal. This analysis begins by defining deliberation and breaking it down into the necessary steps of the deliberative process. This is followed by a description of the role deliberation can play within an educational setting, including a number of key gains for students, and a brief discussion of the middle level setting as the place most appropriate in which to first introduce students to the deliberative process. The article moves on to describe a model for deliberation in a middle level classroom environment, paying close attention to the structure of the deliberative process and the specific needs of young adolescents.

What is Deliberation?

While in common conversations between teachers, terms such as deliberation and debate might be used interchangeably to describe a discussion in which prolonged attention is paid to a single topic, in classroom settings where a specific deliberative approach is sought, it is important to begin by differentiating between these practices. Deliberation is not a debate where individuals act as advocates and defenders of an entrenched position, nor is it an alternating set of monologues where individuals talk, but others often do not listen (Goodin & Stein, 2008; Parker, 1997). Instead, deliberation is a form of democratic participation in which measures are taken to ensure equal participation through both speaking and actively listening to others; focusing on a process of understanding and accounting for alternating viewpoints, with a goal of achieving a

common course of action through compromise (Beck, 2005; Goodin & Stein, 2008; Levinson, 2003; Reich, 2007).

Deliberation has deep historical roots. The practice dates back to the 5th century B.C.E. in ancient Athens, where Aristotle advocated for a process in which citizens would publicly discuss and justify proposed laws to one another through a practice of weighing different ideas to come to common solutions (Gutmann & Thompson, 2004; McGregor, 2004). While the right to citizenship was very limited in ancient Greece, in the current period, deliberation has been brought back into popular discussion through the scholarship of Jurgen Habermas, who incorporates a more democratic vision in which everyone ought to have the capacity to participate in deliberative politics (Gutmann & Thompson, 2004; Levinson, 2003). While deliberation may be articulated differently by different scholars, "each definition stresses the fundamental purpose of deliberation as communicative, designed to resolve issues of contention among citizens in a forum that promotes dialogue, understanding, and an appreciation of difference" (McGregor, 2004, p. 92).

There are a number of important qualities of a deliberation. First, a deliberation must involve communicative behaviors that promote thorough group discussion, ensuring that all members of the group have equal access to participation so that a range of viewpoints and possible solutions can be evaluated (Burkhalter, Gastil, & Kelshaw, 2002; Gutmann & Thompson, 1996, 2004; Kosnoski, 2005; Levinson, 2003). Second, the deliberation must incorporate different forms of knowledge, making room for competing claims based on reason, emotion and personal experience (Burkhalter, et al., 2002; McGregor, 2004). It is essential during

reason-giving that claims of multiple epistemologies be both accessible and comprehensible to participants (Gutmann & Thompson, 2004). This requirement to hear and understand all claims in the deliberation allows participants to move beyond rationality of reason, to make room for the experiences and interpretations of participants as social beings (McGregor, 2004). Third, deliberation requires that participants identify a variety of possi-

"There are a number of important qualities of a deliberation."

ble courses of action that attempt to address a diversity of needs both of deliberation participants and of society at large (Burkhalter, et al., 2002). Identifying possible courses of action requires reciprocity in the presenting of ideas, so that each participant feels responsible and accountable during the formulation of a final decision (McGregor, 2004; Reich, 2007). Fourth, the deliberation must create evaluative criteria on which to base a group decision that are either universally or broadly accepted (Burkhalter, et al., 2002). Finally, the deliberation ends when a decision is made using the established evaluative criteria to pursue a common course of action (Burkhalter, et al., 2002; Gutmann & Thompson, 1996, 2004). This decision requires members to move past their disagreements to work with one another for a common good, a process that is often more difficult than it sounds but valuable as a method for determining a just course of action (Beck, 2005; Gutmann & Thompson, 2004).

As opposed to adversarial democracy, deliberative democracy allows society to accomplish a number of goals. Although very demanding to implement fully (Burkhalter, et al., 2002), deliberation fosters cooperation and mutual understanding, provides voice to all rather than just the powerful, allows

those with power to make decisions based on 'public' reasons, rather than individual prejudices, and allows decisions to be challenged in the future through the transparency of the method through which decisions were made (Gutmann & Thompson, 2004; Levinson, 2003). The inclusive practices of deliberation are essential elements in a democracy that overcomes its adversarial leanings in order to respond to and be accountable to the needs of the public. As Kosnoski (2005, p. 656) explains, the "goal of deliberative democracy is the transformation of participants' political interests and values through actual communication with others."

Deliberation as an Educational Practice

While we, as a society, may strive for deliberative practices as an ideal form of democratic governance, these deliberative practices can present more utilitarian uses within educational settings. Those who research deliberative democracy as educational practice build on Dewey's notion that students need to participate in public and semipublic discourses to form arguments and opinions on current political events, evaluate consequences of earlier decisions, and introduce new topics (e.g. McDevitt & Caton-Rosser, 2009; Reich, 2007). Schools represent ideal places to safely nurture the democratic values needed for living and participating in a democratic and diverse society; opportunities that ought to be seized by teachers (Beck, 2005; Levinson, 2003; Parker, 1997). For these practices to be successful, teachers need both an appropriate understanding of how best to

involve students in a deliberative process and the commitment to provide the time necessary to create and implement a rich deliberative experience for his/her students. While there are a variety of ways to approach deliberation in the school or classroom setup, there is no evidence to suggest that one particular way is better than others (Reich, 2007). Instead, the use of widely varied deliberative practices which focus on problems of interaction and/or academic controversies that exist in core subjects presents an opportunity for students and teachers to move beyond the focus on noncontroversial instruction that has become common in educational settings (McDevitt & Caton-Rosser, 2009; Parker, 1997). By focusing on more contested and controversial subject matter in a fair and balanced way, deliberation presents an opportunity for lessons that are more active and engaging for students.

Through participation in deliberations within the classroom, students learn a number of key lessons that may benefit them later in life. Lessons that engage students in adversarial democratic practices, such as debating a key classroom concept, cause students to focus more on individual achievement in a competitive manner. Such lessons often exclude those students who may be less likely to speak up, less quick to generate responses, or less capable in arguments with their peers. By instead focusing on a deliberative model, students must account for the views of all of their peers, creating an inclusive environment in which the thoughts of each student can be heard. One of the most important benefits of choosing a deliberative model rather than an adversarial debate model is that students must improve their active listening skills in order to be successful (Reich, 2007). This active listening includes not just hearing what others are saying, but improving one's ability to understand differing views through the use of "reflexive thinking" – the ability to

analyze a position from multiple perspectives before issuing a response (Burkhalter, et al., 2002; Gutmann & Thompson, 2004; McDevitt & Caton-Rosser, 2009; Parker, 1997; Reich, 2007; Wilhelm, 2009). As Levinson (2003, p. 38) explains, "it requires that children learn how to listen to each other in such a way that they actually 'hear' the import of claims that on the surface may seem bizarre, irrational, unappealing or confused."

Additionally, deliberation fosters a mutual respect between deliberation participants. Through the use of turn-taking and active-listening, deliberation promotes the ability to interact with others to solve problems, an important skill in later democratic life (Beck, 2005; McDevitt & Caton-Rosser, 2009). Students learn to control their own desire to interrupt during passionate discussion and they gain the opportunity to practice controlling their body language to avoid giving off inappropriate cues – both skills that enable a deliberative group to work more effectively toward a solution (McDevitt & Caton-Rosser, 2009; Reich, 2007). Tied to this is a need to communicate one's own positions effectively, teaching students to justify their positions in ways that others find easier to understand (Gutmann & Thompson, 2004; Levinson, 2003; Parker, 1997; Reich, 2007).

Because deliberation is not just about discussion and position taking, the need to propose, evaluate and select possible courses of action creates important gains for students as well. In a classroom deliberation, for students to be successful they must learn to criticize ideas rather than people, a process that allows participants to maintain their trust that others are working toward a solution even in the presence of disagreement (Burkhalter, et al., 2002; Gutmann & Thompson, 2004; McDevitt & Caton-Rosser, 2009; Parker, 1997; Reich, 2007). They learn to make decisions based on members of the deliberation coming together to

select a course of action that is most beneficial to the group, engendering a sense of responsibility and accountability to the group (Gutmann & Thompson, 2004; Reich, 2007).

Finally, participation in deliberation makes students more likely to employ such a process in the future as they begin to see deliberation, rather than adversarial democratic practices, as a more effective way to solve disagreements (Burkhalter, et al., 2002; Reich, 2007). They begin to take on approaches to problems that allow them to think about gains beyond their own. As Gutmann & Thompson (2004, p. 12) explain,

When citizens bargain and negotiate, they may learn how better to get what they want. But when they deliberate, they can expand their knowledge, including both their self-understanding and their collective understanding of what will best serve their fellow citizens.

Deliberation for Middle Level Students

Young adolescents are uniquely positioned to benefit most from participation in classroom deliberation. Because young adolescents are in a period of gradual and sporadic cognitive growth in which they may struggle both to grasp more abstract concepts and to produce reasoned arguments, it is appropriate to make use of more concrete and experiential learning activities (Association for Middle Level Education, 2010; Piaget, 1964; Snowman & McCown, 2012) The challenges of cognitive development are made more complex for middle level students by an increasing importance of peer opinions

and pressures. Young adolescents are at an critical transitional period between two stages in psychosocial development, shifting from a focus on developing socially-acceptable competencies to a need to establish unique personal identities (Erikson, 1993). Classroom deliberations assist in this transition by helping students to become competent and contributing group members through a process designed to build upon the unique thoughts and opinions of peer group members. Finally, middle level students deeply hold a sense of fairness and justice (Meyer, 2011), making them more open to the respectful and fair-solution orientation of deliberative democracy.

Classroom deliberation represents practices more often found within highly successful middle school settings. Within these settings, there is a decreased focus on direct instruction and an increased focus on cooperative learning and inquiry teaching (McEwin & Greene, 2010). Deliberation functions as both a collaborative effort between students and a learning activity that fosters cognitive growth through the practice of logical problem solving (Piaget, 1964) – a key feature of the more democratic inquiry learning activities suggested by Dewey (1938). Classroom deliberations also serve as sites where students can struggle with larger issues and imagine possible outcomes, key traits of formal operational thinking (Piaget, 1964; Snowman & McCown, 2012). These challenges allow young adolescents to increase both their social consciousness and personal agency – important lessons called for by Meyer (2011) as necessary improvements to current middle level education.

The Association for Middle Level Education (2010) has also suggested a number of best practices that can help

classroom teachers to achieve. These include,

- Solving complex problems in a collaborative fashion

- Assisting student in formulating positive moral principles

- Examining various assumptions and viewpoints that allow classroom issues to come alive for young adolescents

- Posing and answering questions that allow students to capitalize on their cultural, experiential, and personal backgrounds

- Embedding of egalitarian concepts in the classroom, so that students of all diversities feel that they are genuine and contributing learning community members

As the Association for Middle Level Education (2010) argues, "the future of individuals and, indeed, that of society is largely determined by the nature of the educational experiences of young adolescents during the formative years." By using deliberative classroom activities, schools and classrooms filled with young adolescents who may gain the skills that allow them improve their future.

**A Model for
Middle Level Deliberation**

While there is no one best way to create or implement a deliberation within the classroom, what follows is a suggested model designed to allow deliberation to be incorporated into a classroom of young adolescents.

The process begins when teachers decide at what points in their lessons to

include a deliberation. Deliberations are best suited to either the study of controversial topics or to challenges in course content that lend themselves to multiple courses of action (i.e. peace process in the Middle East or designing an architectural model). While this means that teachers may find it easier to make room for deliberative practices in humanities courses, there certainly are disagreements and multi-solution problems in science and math as well. Remember that in a deliberation, the goal is not to reach one final solution, but to identify commonalities within an issue and collectively decide on a course of action for the group (Goodin & Stein, 2008). Therefore, before choosing to use a deliberative approach, the teacher ought to be sure that a variety of different answers will still be equally correct and useful for the purposes of the lesson.

Although it is possible to hold a deliberation that is class-wide or

larger, the author prefers small group deliberations – including three or four members – for a number of reasons. In smaller groups, it is easier for all students to have an equal opportunity to participate and to be heard, which is essential for the deliberation process to reach its maximum democratic potential (Burkhalter, et al., 2002; McGregor, 2004; Parker, 1997; Reich, 2007). Not having to compete to participate reduces inequalities within group setting, creates space for individuals to fully embrace a participatory social role (Erikson, 1993), and increases motivation by providing enough time for each member to fully contribute (Kosnoski, 2005; Levinson, 2003). Additionally, because each member is afforded the opportunity to speak and be heard, the chances increase that students will perceive a potential to come together around shared language, understandings, or judgments (Burkhalter, et al., 2002). Parker (1997) indicated that richness of deliberation comes in the ways that students frame problems, search for related info, reference materials, seek diverse viewpoints, judge strength of arguments, adjudicate competing interpretations, and weigh alternative courses of action. The increase in individual participation time brought on by the decrease in deliberation participants in a small group setting enhances this richness.

For young adolescents who require a more concrete-logical approach (Piaget, 1964), it is important that the deliberation be structured to follow a set of distinct, sequential stages. Typically, the first of these stages is the opportunity for students to get to know the problem or controversy to which they are going to offer solutions. In a classroom, this would include either a whole-class introduction to the issue at hand, or exposure to materials that allow the students, on an individual level, to begin to think about the topic of the deliberation. It is important at this introductory stage that

students focus on developing their own perceptions and thoughts about the topic of study; therefore, interaction between students during this initial stage should be avoided. It is useful at this point to explain to students both what a deliberation is and how they will proceed (Burkhalter, et al., 2002). To help students collect their thoughts during the introductory period, suggesting that they write down some of their first impressions may better prepare them for the sharing stages that follow.

The next stage in the deliberation is perhaps the most crucial, where students will speak and listen to one another. This requires a great deal of structure on the part of the teacher, who is filling the role of moderator in a deliberative democracy by guiding students through the process in an orderly fashion that ensures equal access to participation (Gutmann & Thompson, 2004; Kosnoski, 2005). Careful attention must be paid to how groups are progressing to make sure students are treating one another in a way that is respectful of the individual ideas and contributions of each group member (Erikson, 1993).

The next stage in the deliberation is perhaps the most crucial, where students will speak and listen to one another.

At the middle level, this can be achieved through the use of timed speech acts within the small groups. In each timed speech act, one student within the group talks and the other students must remain silent. What teachers will want to avoid, however, is a situation in which students are sitting quietly and appearing to listen, but are, in fact simply thinking of what they will say next (Kosnoski, 2005). One solution is to hold students accountable to their group members for what was said, either through having students repeat back to the speaker what they think they heard or by having students write brief notes on the

speaker's position. Group participants are more likely to believe they are accountable to the group if they feel the group is respectful and accountable to them (Reich, 2007). While students are going through this process, each taking turns sharing their thoughts and positions, it is important for the teacher to remain neutral, only stepping in to guide the deliberation along in an orderly fashion, rather than reinforcing or dismissing any claims made by students (Goodin & Stein, 2008; Kosnoski, 2005).

During this turn-taking stage, it is normal for some students to make arguments based on passion and emotion rather than on reason. In many ways, this mirrors the reality of how decisions are made in a democracy and provides the opportunity to acknowledge that individuals participating in a democratic system come to understand issues in a variety of ways (Gutmann & Thompson, 2004; McDevitt & Caton-Rosser, 2009). Careful monitoring of each deliberative group is necessary to ensure that social inequalities that may be present because of the diverse backgrounds of students are not replicated in the way group members interact with one another (Gutmann & Thompson, 2004; Levinson, 2003; Reich, 2007). Replication of these inequalities often results from a failure of majority group members to understand the claims of minority groups and the failure of majority group members to recognize their own normative discourses that create power imbalances (Beck, 2005; Levinson, 2003; Reich, 2007). Even in well-designed deliberations, the differences in majority and minority group experiences can erode deliberative equality.

Teachers should help members of the majority group to better hear minority claims and help members of the minority group to better communicate claims in language understandable by the majority (Levinson, 2003). By encouraging open-mindedness and respect during the deliberative process, students are better able to "hear" what others are saying and perhaps, ultimately, some students may come to a wider acceptance of other views or changes in their own views (Burkhalter, et al., 2002; McGregor, 2004).

Following the turn-taking stage is the necessity of establishing criteria on which to evaluate possible courses of action for the issue or topic of the deliberation. In this stage, it is largely impossible to get the entire group to agree on each and every criteria – nor is this the goal. Instead, the deliberative group should only establish evaluative criteria that take into account issues on which the group can come to an agreement or reach consensus (Burkhalter, et al., 2002). It sometimes is the case that students will become more volatile around an issue they feel strongly about, which can cause trouble in reaching consensus. In this case, the teacher will need to moderate the discussion to move students to a point where they can agree to accept their differences (McDevitt & Caton-Rosser, 2009). It is useful to remind students that the deliberation seeks solution-oriented goals, rather than victory-oriented goals – that ultimately their performance is judged not on who convinced others of their positions, but on the ability of the whole group to come to a well-thought-out course of action (Levinson, 2003). Because this stage represents a break from a more traditional adversarial process of just trying to defeat views that run counter to one's own, for students engaging in deliberation for the first time, it is useful to model a process of coming to an agreement to establish evaluative criteria. In this case, it may be most help-ful to have the class watch as the teacher works with one group to determine on which criteria each member can agree, paying special attention to showing peaceful ways to move beyond differences to reach consensus.

Just after the evaluative criteria stage, it is important for students to begin to suggest courses of action. It is possible for the students to suggest such actions before the evaluative criteria are established; in fact their own position taking will often hint at these. However, in middle level settings, the author advocates the positing of courses of action after the creation of evaluative criteria, allowing students to logically shape their offered ideas to better fit these concrete criteria (Piaget, 1964).

The final stage of the deliberation is one in which the students must choose a course of action based on the evaluative criteria they have established.

This often makes it easier for young adolescents to choose based on group consensus as the courses of action offered will have already been tailored to meet this goal.

The final stage of the deliberation is one in which the students must choose a course of action based on the evaluative criteria they have established. While successful deliberation always ends in a decision, there is not a single way of reaching that decision (Gutmann & Thompson, 2004). Students could vote; they could discuss with one another; they could systematically apply their evaluative criteria to each proposal, etc. For teachers, it is useful to delineate the differences between reaching a final solution and reaching a course of action, a process which may require the teacher to again model decision-making with one demonstration group. By indicating to students that they are deciding "what to do", rather than "what the right answer is", teachers make it easier for young adolescents to reach agreement while still protecting their own passionate positions toward the issue at hand. Though uncommon, it may be the case that a group is unable to reach a consensus on a course of action because one student appears to be holding out against the group. In these cases, it is important for the teacher, as the moderator, to step in, making room for the student to articulate their position and objections while moving the rest of the group toward a final course of action.

When groups have reached a course of action, having each briefly share their decision with the class is a useful practice. The members of the group become accountable to each other and to the class through this sharing process. Additionally, by having groups acknowledge that they reached the goals of the deliberation by working together to ultimately decide on a course of action, students are more likely to see the possibilities of success within deliberative practices and may be more confident about engaging in such a process in the future (Burkhalter, et al., 2002; Erikson, 1993; Gutmann & Thompson, 2004; Reich, 2007). While the deliberation is fresh in the minds of students, having each student write about their experience can help them to reflect upon their cognitive process throughout the deliberation (Piaget, 1964). Students should consider how each step in the process went, how their own thoughts may have changed as they worked with other group

Student Deliberation Guide

<u>Directions:</u> Use this guide sheet to progress through each of the five stages of the deliberation process. You will need scratch paper to write down your ideas and to take notes on what your other group members say.

Stage 1: Identify the problem/challenge

Write down what you already know about the problem or challenge you will be addressing.

<u>Guiding questions:</u> What issue are you addressing? What do you know about the issue? What struggles might be encountered in solving the problem? What solutions seem obvious to you?

Stage 2: Thoughts of others

Listen to each of your group members explain their thoughts and write down quick notes to remember their ideas.

<u>Guiding questions:</u> What do my group members think? How are their thoughts like yours? Where do you disagree?

Stage 3: How to pick the best course of action

Discuss with your group members how you are going to pick which final course of action to take. As a group, you will want to pick at least three things to look for that could help you to make your choice.

<u>Guiding questions:</u> How can we figure out which course of action is the one we should choose? What does the group think must be a part of the plan? What would make one plan better than another? How would the group members convince outsiders that they had made the right choice?

Stage 4: Establishing choices for a course of action

Individually write your own suggestion for a course of action. Next, listen and take notes as each group member takes their turn sharing their course of action.

<u>Guiding questions:</u> What course of action do you think would work? What courses of action do other group members suggest?

Stage 5: Making a choice

Using the "things to look for" that were picked in stage 3, as a group, decide on a final course of action. Feel free to combine parts of different courses of actions group members suggested in order to create the best plan. Be prepared to explain how the group made a final decision.

<u>Guiding questions:</u> Which course of action did our group decide on? Why did the group choose this course?

members, and what they have learned by engaging in a deliberative process.

Conclusion

Middle level educational settings provide an excellent location for the introduction of deliberative practices. Young adolescents, who thrive when lessons are concrete, experiential, collaborative, social, and inquiry-based can find each of these facets of learning combined within a classroom deliberation. By being introduced to, and learning how to achieve within a deliberation setting, middle level students avail themselves of the opportunity to participate in a democratic form of discourse that fosters equal participation, accounts for alternative viewpoints, and allows students to work together to achieve common goals. Of particular value for students is the capacity for deliberation to make room for a wider diversity of viewpoints and to give voice to all participants, most important for young adolescents who are at a period in their lives where their social stature and being is both so crucial and so vulnerable.

Participation in classroom deliberation further sets the stage for a better future. Through deliberation, young adolescents learn to hear one another and to respect diverse opinions and positions. They learn to move past the differences that can bog down attempts at progress and to work together to realize common goals and common courses of actions that respect individual differences. Finally, they develop a comfort and a belief that a process of deliberative democracy can work to solve contentious problems, allowing them to move away from the often inept adversarial political functioning that has come to mark the current era.

References

Association for Middle Level Education. (2010). *This we believe: Keys to educating young adolescents*. Westerville, OH: Association for Middle Level Education.

Beck, T. A. (2005). Tools of deliberation: Exploring the complexity of learning to lead elementary civics discussions. *Theory and Research in Social Education, 33*(1), 103-119.

Burkhalter, S., Gastil, J., & Kelshaw, T. (2002). A conceptual definition and theoretical model of public deliberation in small face-to-face groups. *Communication theory, 12*(4), 398-422.

Dewey, J. (1938). *Experience and education*. New York: Simon & Schuster.

Erikson, E. H. (1993). *Childhood and society*. New York: W.W. Norton & Company

Goodin, H. J., & Stein, D. (2008). Deliberative discussion as an innovative teaching strategy. *Journal of Nursing Education, 47*(6), 272-274.

Gutmann, A., & Thompson, D. (1996). *Democracy and disagreement*. Cambridge, MA: Belknap.

Gutmann, A., & Thompson, D. (2004). *Why deliberative democracy?* Princeton, NJ: Princeton.

Kosnoski, J. (2005). Artful discussion: John Dewey's classroom as a model of deliberative association. *Political theory, 33*(5), 654-677.

Levinson, M. (2003). Challenging deliberation. *Theory and research in education, 1*(1), 23-49.

McDevitt, M. J., & Caton-Rosser, M. S. (2009). Deliberative barbarians: Reconciling the civic and the agnostic in democratic education. *InterActions: UCLA Journal of Education and Information Studies, 5*(2), 1-22.

McEwin, C. K., & Greene, M. W. (2010). Results and recommendations from the 2009 national surveys of randomly selected and highly successful middle level schools. *Middle School Journal, 42*(1), 49-63.

McGregor, C. (2004). Care(full) deliberation: A pedagogy for citizenship. *Journal of Transformative Education, 2*(2), 90-106.

Meyer, R. (2011). Future directions: A call for actions. *Voices from the Middle, 18*(4), 21-30.

Parker, W. C. (1997). The art of deliberation. *Educational Leadership, 54*(5), 18-21.

Piaget, J. (1964). Part 1: Cognitive development in children: Piaget development and learning. *Journal of Research in Science Teaching, 2*(3), 176-186.

Reich, W. (2007). Deliberative democracy in the classroom: A sociological view. *Educational theory, 57*(2), 187-197.

Snowman, J., & McCown, R. (2012). *Ed Psych*. Belmont, CA: Wadsworth Cengage Learning.

Wilhelm, J. D. (2009). The power of teacher inquiry: Developing critical literacy skills. *Voices from the Middle, 17*(2), 36-39.

About the Author

Jason T. Hilton
Assistant Professor
Slippery Rock University

Dr. Jason T. Hilton is an Assistant Professor of Education at Slippery Rock University. His academic interests include critical pedagogy, digital literacy and democratic classroom practices. Before transitioning to higher education, Dr. Hilton was a teacher of middle level social studies.

Contact Information:

Jason T. Hilton
Assistant Professor
Slippery Rock University
1 Morrow Way
Slippery Rock, PA 16057
Jason.hilton@sru.edu

"Do not worry if you have built castles in the air. They are where they should be. Now put the foundations under them."

~ Henry David Thoreau

Recommended Quick Read

Left Brain vs Right Brain in the Classroom

Available online at:

http://www.scholastic.com/teachers/article/left-brainright-brain

Prepare your Middle Level Pre-Service Teachers for a diverse classroom!

Pennsylvania Professors for Middle Level Education (PA POMLE)
Spring 2014 Conference at Kutztown University

Focus on Diversity

When:	Friday, May 16th, 2014
Time:	9:30am-4pm
Where:	Kutztown University
	Includes an outing to Schuylkill Valley Middle School (Leesport, PA), a Schools to Watch recognized middle school.
Member Cost:	Free to PA POMLE members
Non-Member Cost:	$25 per person (note: PA POMLE membership is $100 per institution)
Registration:	Email your name, contact information, and collegiate association to Dr. Kimberly Arp at arp_kim@yahoo.com.
	If you're not currently at PA POMLE member, contact Dr. Arp at the address provided above to make arrangements to pay the registration fee ($25 per person) or to join the organization ($100 per institution).

Join us for the conference sessions
and learn how successful middle schools support diversity.
Take ideas, examples and evidence back to your classroom.
Visit to a Schools to Watch recognized middle school.

For more information contact: Kimberly Arp, President, PA POMLE
arp_kim@yahoo.com
home: 610-948-1051
cell: 281-229-2567

Spotlight on Best Practices

Cooperative Learning

Cooperative Learning is not

- Having students sit side-by-side at the same table.
- Assigning a report to a group of students where one student does all the work.

Cooperative Learning

- Involves much more than being physically near other students, discussing material, helping, or sharing material with other students.
- Uses small teams, each with students of different levels of ability, participating in a variety of learning activities to improve their understanding of a subject.
- Each member of a team is responsible not only for learning what is taught but also for helping teammates learn, thus creating an atmosphere of achievement.

Documented Results

- Improved academic achievement,
- Improved behavior and attendance,
- Increased self-confidence and motivation, and
- Increased liking of school and classmates.

Source/Website:

serc.carleton.edu/introgeo/cooperative/techniques.html

Share a Strategy!

Submit your best practice idea for publication in our next issue!

This page sponsored by:

PAMLE
Pennsylvania Association for Middle Level Education

Scan for proof that students love cooperative learning ;)

Investigating Bullying at the Middle Level: Multiple Stakeholder Perceptions

Carol E. Watson, Bridget Gargin, Julie Phegley,

Steven Viglianti, Andrew Snyder

Abstract

In recent years, the issue of bullying in schools has raised significant concern among parents and educators to the level of garnering national attention. Particularly relevant at the middle level, most schools have implemented some sort of anti-bullying program to minimize incidents and encourage students to report them. One blockade to the effectiveness of these programs is that teachers, parents, and students often have significantly differing perspectives. This study sought to clarify how parents, students, and educators identify and define bullying behaviors from their diverse group perspectives. Data was collected using an electronic survey compiled separately for each stakeholder group. Findings reveal several significant discrepancies among stakeholder group perceptions suggesting that a commonly shared meaning of what constitutes 'bullying' has not even been established. Clarification toward a shared understanding of bullying holds potential for more effective collaboration between stakeholders to more effectively address the problem.

Introduction

On August 27, 2013 after dismissal on the first day of school, Bart Palosz shot and killed himself following sustained years of bullying by peers. On September 13, 2013, CNN reported the suicide of 14-year-old Rebecca Sedwick who jumped to her death from the tower of an abandoned cement plant after being bullied for an extended period of time ("Girl Jumps", 2013). The cultural practice of 'bullying' has become a national epidemic resulting in a wide variety of injuries extending to the level of death in some cases; both against others and self-inflicted (Blosnich & Bossarte, 2010). Incidences of various types of bullying behaviors have skyrocketed in the past decade (Basch, 2011). This disturbing trend is occurring even more frequent in the context of middle schools (Cornell & Mehta, 2011). As young adolescents navigate multiple developmental changes during this period of rapid and significant growth and exploration, their con-flicting needs to identify with a supportive group/community and to develop their own individual identity establish a prime situation for bullying issues to develop (Brighton, 2007; Caskey, 2010). Ninety percent of 4th through 8th graders report being victims of bullying at some point (Sanchez, n.d.).

Most middle schools have implemented some sort of program or plan to address bullying issues and incidents that occur in their building. Some are established programs created by educational professionals or groups adopted by many schools (such as Olweus), and others are individually developed for that particular school. Either way, the vast majority are developed by adults, and consequently, based on adult perceptions of what the problem is and how best to address it (Green, 2007; Limber, 2011). Although both are adults, the perspectives of middle level educators and the parents of young adolescents are often motivated by very different views. Additionally, young adolescent students tend to have very different perceptions from adults on almost everything (Association for Middle Level Education, 2010). Much is written about the issue of bullying using a dictated list of criteria as an assumed definition. Some even go so far as to state that, in many cases, students misunderstand exactly what bullying is (Bieber, 2013; Cornell & Mehta, 2011). The new perspective we would like to bring to the forefront on this relevant topic is the valuable voice of real middle level students. Rather than dictate a definition to them, we suggest asking them to share their definition. Only they can tell us how they feel, what is really happening, what works, what is 'lame', when it is unrealistic to expect kids to 'snitch' on others, and

what might be done instead to make a more significant impact.

Review of Literature

Multiple researchers offer differing definitions of exactly what constitutes 'bullying' behavior. Dan Olweus, developer of a commonly used anti-bullying program, defines bullying as "when he or she is being exposed repeatedly to negative actions on the part of one or more students" (Green, 2007). Cornell & Mehta (2011) describe bullying as "the use of one's strength or status to injure, threaten, or humiliate another person". Bryn (2011) suggests "...bullying is aggressive behavior that is intentional and involves an imbalance of power or strength. It is also repeated over time" (p. 216). Bullying is often defined as unprovoked aggressive behavior repeatedly carried out against victims who are unable to defend themselves (Smith, Ananiadou, & Cowie, 2003; Whitted & Dupper, 2005). Emerging commonalities from the literature include differentiation between an aggressor and a victim, intent to harm or intimidate, and an imbalance of power.

Many experts differentiate between forms or types of bullying, such as verbal/physical/nonverbal-nonphysical (Yerger & Gehret, 2011), direct/indirect (Green, 2007), and cyber-bullying (Devoe, Murphy, and NCES, 2011). Causes for bullying are an ongoing focus of many studies, but seem to be connected to issues such as low self-esteem, or the need to 'fit in' or identify with a social group. Many bullies are demonstrating learned behaviors from their own home contexts, such as an 'authoritarian' or physical style of discipline (Yerger & Gehret, 2011). Bullying victims are usually identified by a characteristic that sets them apart from the dominant social group or the perceived norm such as diverse sexuality (Holmgren et al,

2011), lower socioeconomic status (Alikasifoglu et al, 2007), or immature social skills (Yerger & Gehret, 2011). The combination of all of these contributing factors results in a very complex situation for educators, parents, and students to manage successfully.

This investigation seeks to identify and clarify varying stakeholder perceptions of exactly what constitutes bullying. This inquiry is based on the premise that in order to facilitate a productive discussion among all stakeholders, there must be a shared understanding of what constitutes bullying behavior; what is within the definition and what is not. The goal of this study is that this clarification can lead to a more effective collective effort to address bullying behaviors in middle schools. With these issues in mind, research questions guiding this investigation include:

1. How do the perceptions of various groups of stakeholders (educators, parents, and middle school students) compare on what behaviors and situations constitute 'bullying'?

2. What are perceptions of various stakeholders on the effectiveness of the established anti-bullying initiative currently in place at one sampled middle school?

Method

This investigation began with the informal inquiry of four undergraduate teacher candidates in a middle level teacher education program sparked by involvement with research articles and discussion about the research process in coursework. Teacher candidates expressed concern about the significant rise in bullying incidences across the country, particularly concentrated in the middle grades. As they brainstormed how they could make a difference, they began to wonder about the effectiveness of bullying programs currently being implemented in middle schools. Continuing discussion focused on how much input student voices may or may not have in the creation, implementation, and effectiveness of such programs. Finally, the group began to question

the existence of a shared meaning of what constitutes bullying behavior among teachers, parents, and students. We realized that a common understanding would certainly be a prerequisite on which to base effective communication about any issue.

All participants were recruited from one middle school building identified for its location near the university, and its past willingness to participate in collaborative activities with the university. The population is historically white/middle class with the surrounding residential area rural/suburban. Student ethnicity in the district overall is as follows: 89% White, 5% Hispanic, 3% Black, 2% Asian, and 1% Unspecified. The percentage of students eligible for free or reduced lunch is 17%. The building includes grades five through eight with a total of 845 students and 61 teachers. The administration does have a program in place to address bullying.

The questionnaire (see Appendix A) was designed to require participants to think deeply and in more specific detail about their own perceptions of what criteria identifies behaviors as bullying. Different types of questions were used to target the same information toward strong credibility. Both open-ended and closed questions as well as a list of scenarios were employed. Various response formats to questions were also incorporated in an effort to mine a broad range of responses toward meaningful and revealing data. These included: yes/no, yes/no/not sure, 5 point Likert scale, and open textboxes.

Data was collected and compiled within a secure website (www.instantsurvey.com) which is only accessible through the individual account of the advising professor/researcher requiring name and confidential password. No identifying characteristics were collected through the electronic survey except the role of the stakeholder (educator, parent, or student). Individuals within each of these categories are not identifiable by any criteria. The e-mail sent to potential participants includes all pertinent information about the study in the message before offering the link to the survey itself. If participants did not wish to participate, they simply did not click on the link. Clicking on the interactive survey link and responding to survey questions is considered consent to participate. This investigation was approved prior to being conducted through the IRB process of the participating university.

Data analysis began with the research team examining feedback across the questionnaire items within each stakeholder group independently for patterns to identify criteria they used to define bullying. Subsequently, emergent themes defining each stakeholder group were compared to the other groups to identify agreements and conflicts. For the purpose of this study, the term consensus will be defined as 75% or more in agreement. Merriam-Webster (n.d.) defines consensus as "a general agreement" and "the judgment arrived at by most of those concerned." This percentage meets and exceeds these minimal definitions and was also found to be a natural break in the data. Finally, the items specifically designed to address the second guiding question about the existing bullying program in this building (items 4-8) were examined for perceptions and evidence of its level of effectiveness. Although research team members read and reviewed all data individually prior to team meetings in order to be familiar, all identification of themes, patterns, and trends was developed during face-to-face team discussions. In this way, team members were able to question initial ideas, call for evidence to support themes, and develop consensus through a very collaborative process adding credibility to the results (Leedy & Ormrod, 2012; Merriam, 2001).

Findings

Educator Perspectives

Although there is consensus among the educator respondents on six of the scenario items, significant disagreement is reflected toward the remaining four as to whether or not the situation constitutes bullying (see Appendix B). Three of these four descriptions do not clearly indicate repeated incidences of the behavior. This may be a contributing factor since educators named this as important criteria, although several other descriptions without clearly described repetition did reach the level of consensus as bullying. The description provoking the largest percentage of 'not sure' involved a common practice for school athletic teams. A scenario depicting a common school practice with which they were familiar seemed to cause a great deal of uncertainty among educators. In fact, several scenarios reflected significantly high numbers choosing the 'not sure' option.

The strongest consensus among educators was repetition; this criterion seems to be the primary determinant identifying a behavior as bullying from their perspective. Many respondents were very hesitant to call an incident bullying unless scenarios specifically described repetition over a period of time. Several responses rose to the level of becoming annoyed at being asked to consider a situation without being provided this information. One example of this read, "Was the behavior occurring over a period of time???!!! Some of these did not fit that description!" Although it is mentioned in some literature definitions of bullying as a factor, most sources do not name

it as a requirement to identify bullying behavior. Other emergent themes from educator perceptions are naming various types of bullying (such as physical, emotional, cyber, active, and passive), presence of an imbalance of power (also indicated by exerting power, vulnerable), and intentionality.

Educator responses communicated a strong sense of formality through the vocabulary and language utilized. Many answers sounded like prepared phrases that had been learned and repeated from other sources as opposed to individual thinking. For example, the sequence 'physically, verbally, emotionally' and the term 'intimidate' were used frequently. The specific words 'action' and 'behavior' were used in almost every response. Several responded to the scenarios with more of a checklist assessment hesitating to identify actual bullying unless all criteria they deemed necessary was clearly stated in the description. The overall theme of educator responses was identification (by specific, prescribed criteria) followed by management of the bullying incidence.

Parent Perspectives

Parent consensus on whether or not the scenarios constitute bullying is six out of ten in agreement. These six particular scenarios are the same ones with which the educators are in agreement. Percentages indicated a relatively decisive perspective on the part of most of the parents illustrated by low numbers in the 'not sure' choice across all of the scenarios, and higher numbers in the 'yes' and 'no' categories. Although the four scenarios not reflecting consensus are the same ones as the educators, all four consistently reflect a higher percentage choice of 'yes' indicating a tendency toward positively identifying situations as bullying.

The primary pattern reflected in verbal responses from parents focuses on how the victim is made to feel. The majority of responses when asked to identify the one criterion that determines whether or not a situation constitutes bullying focuses singularly on the victim's feelings often without even mentioning the bully's behavior. Typical examples include: "anything that would intentionally cause distress," "does it frighten, intimidate, or sadden the person to whom it is aimed," "basically how it affects the child." The term 'target' was used by several parents to refer to victims of bullying behaviors. Repetition of a behavior is also significantly evident in parent responses as a component of bullying. This criteria to identify a behavior as bullying was communicated using a broad variety of vocabulary including constantly, continually, regular, repeatedly, more than once, repetitive, on a continuing/repeated basis, over a sustained period, consistently, and persistently.

Parent feedback has a clear focus on differentiating between the aggressor and the victim, but not always directly using that terminology. For example, some were as simple as, 'one kid picking on another,' while others described, 'a person who takes advantage over someone who they deem is weaker than them.' Some examples of this pattern are expressed through parent frustration that others may *not* focus on differentiating between the bully and the victim such as this question, 'If a child starts a fight and the other child fights back, why do both get in trouble? Are you supposed to let them beat the crap out of you?' Many responses mention possibilities for the bully's motivation and how the victim was made to feel. Other prominent themes include an imbalance of power (communicated as weaker, inferior, exert control), and frustration with the issue in general. One parent talked

Schools to Watch

The mission of the Pennsylvania Don Eichhorn Schools: Schools to Watch Program is to assist Pennsylvania middle grades schools build capacity and recognize schools achieving academic excellence, based on the rigorous 37 criteria established by the National Forum to Accelerate Middle Grades Reform.

Schools To Watch is a project of the National Forum to Accelerate Middle Grades Reform. To learn more, visit the National Forum website.

www.middlegradesforum.org

Is Your School Ready to Rise to the Challenge?

In Pennsylvania contact Bruce Vosburgh STW State Director

1905 Lenape Unionville Road Kennett Square, PA 19348 Mobile: 610-945-4434 Email: bvosbur@comcast.net

Website: www.pamle.org

about thinking about calling the police, while another suggested 'a right hook to the nose.'

Language used by parent participants is mostly informal and incorporates a wide range of vocabulary. Descriptions use words and phrases from common student talk such as pick on and mean as well as more sophisticated terminology such as intimidation, harassment, and ostracizing. The overall theme of parent responses was frustration on behalf of the victims of bullying.

Student Perspectives

Student feedback indicates consensus on 7 of the 10 scenarios. The 6 scenarios that educators and parents both came to consensus on are included in the students' 7 agreements. Overall, the percentage of student responses in the 'yes' choice to positively identify scenarios as bullying is very high. In nine out of ten of the scenarios, the student 'yes' percentage is higher than both the educators and the parents. Of the three remaining situations in which consensus is not reached, one involving a teacher in the potential bully role in very close to a positive identification. The other two descriptions clearly evoke widely varying perspectives as none of the groups is close to consensus.

The overwhelming pattern found in student verbal responses is a very strong focus on feelings and emotions, primarily but not exclusively, of the victim. Commonly used vocabulary reflecting this includes cry, upset, feel bad, mad, sad, angry, and fear. One student indicates how crucial the victim's feelings are in identifying bullying by stating that the only determining factor is, "if someone's feelings are hurt." Several others suggest the bullies' motivation: 'to make themselves feel good,' '...for a laugh or for attention.' Behaviors are described as hurtful, mean, cruel, menacing, and rude. Many responses were focused on a description of resulting feelings, for example, 'making others feel bad about themselves,' and 'being rude or mean to someone.' Others communicated in a more specific and somewhat graphic nature by listing examples of bullying behaviors. Some of the typical examples include gossiping, name calling, bad names, teasing, pressuring, embarrassing, making fun of, threatening, fighting, hitting, punching, and beating up.

Most of the language used by the student participants is short, concise, and informal. It is almost always written from a first person perspective as indicated by the liberal use of personal pronouns (I, me, my, we) indicating a direct and individual connection with the topic. Several of the student respondents chose to use various tools

for visual emphasis. All capitals, multiple question marks and exclamation points, and multiple swear words were all employed throughout the student responses. One explained, 'IF THAT PERSON SAYS STOP!! and I continue … THAT IS BULLYING!!' Another pleads, 'BULLYING IS A MAJOR PROBLEM PLEASE STOP BULLYING!!!!!!!' A third simply suggests, 'people should stop being asshole and be nice to each other.' All of these examples support the overall theme communicated by student feedback focusing on feelings and emotions.

Stakeholder Group Comparisons

Although the three stakeholder groups were found to be very close to agreement with each other as far as which scenarios constituted bullying behavior and which did not, the values and perspectives toward the issue itself as communicated through open-ended inquiry indicate significant differences. Table 1 displays the main criteria to identify a situation as bullying and whether or not each stakeholder group included it in their definition.

Verbal feedback from the educator group seems to be focused specifically on systematically ana-

Table 1: Bullying Criteria Identified by Stakeholders

criteria	educators	parents	students
repetition/ongoing	yes	yes	no
imbalance of power	yes	yes	no
intent to hurt	yes	yes	no
identifies various types of bullying	yes	yes	no
clear differentiation between bully and victim	no	yes	yes
causing hurt	no	yes	yes

lyzing the 10 scenarios at the beginning of the questionnaire with a goal toward right or wrong conclusions. One educator stated, "…repeated over time? Many of these examples did not have enough information to make that determination." Another questioned, "Were the comments meant to be helpful or…mean? Were the actions warranted or uncalled for?" Both comments indicate that the answers to these questions would result in a clear yes/no determination of whether or not the scenario constituted bullying. From their perspective, it seems to be an exercise in checking off a set of predetermined criteria.

Alternately, verbal feedback from parents and students centers less on the artificial scenarios provided and more on real life examples from their own experiences. There is more of a sense of open definition as opposed to labeling right and wrong answers. Comments are less rigidly tied to specific determining criteria and are more open to interpretation. Some typical examples are as follows: "being mean or cruel to another person," any action to make another person feel isolated…," and "teasing, frightening, threatening, or hurting others."

The chart display makes clear that despite the close agreement on specific scenarios among the three groups, significant differences in thinking and perspectives exist. As reflected on the chart, educators and students clearly think about whether or not a behavior constitutes bullying in very different ways. Educators focused on it, while students didn't even discuss it. Although the display visually looks like educators and parents agree with each other on these first four criteria, their ways of talking and thinking about it are very different. Educators used the criteria as a tool to 'rule out' bullying as a conclusion, while parents tended to suggest that these were all elements related to the bullying issue, but not necessarily required to be present in any given situation to identify it as bullying.

The final criteria of the importance of identifying the bully from the victim is clearly a disconnect educators on one side, and parents and students on the other. One educator stated, 'When problems occur, the situation is dealt with by talking with the students involved and contacting their parents' indicating no differentiation between the aggressor and the victim. On the other hand, parent comments center

clearly on identifying and dealing with the bully. One suggests, '…expel the student that is causing the issue,' while another expresses concern that others *don't* differentiate, 'They sometimes blame the kids being bullied.' One student comment goes beyond to clearly identify three roles in the bullying issue, '…especially involving bullies, victims, and witnesses.'

Other patterns reflected among stakeholder groups indicating conflicting perspectives are displayed in the Table 2.

Although it did not rise to the level of standing out as a pattern, the issue of teachers participating in bullying behavior was raised more than once in both the parent and student responses. Several comments were very strong for example, 'teachers are the BIGGEST bullies and after screaming and coercing and intimidating children all day, they tell the kids NOT to bully.' One student suggested, 'Teachers should be required to take bullying classes!' In addition to verbal comments, a high level of uncertainty and lack of consensus was indicated in particular on the

Table 2: Additional Bullying Criteria Identified by Stakeholders

patterns	educators	parents	students
language style/ perspective	formal 3rd person voice	informal mixed voice	deeply personal 1st person voice
role in relation to issue	authority	bystander	victim
descriptions	general/removed "actions/behaviors"	not specific/ personal "intimidate/ threaten"	specific/ emotional "hurt/upset/cry"
general perspective toward the issue of bullying	very complex methodical management process	frustrated	very simple emotional just stop it
focus on	behaviors of all	victim's feelings	victim's feelings

'They don't really do a lot – depends on the student being bullied.'

~Student perspective

two scenarios that involved adults in the possible bullying role. Further investigation of instances and frequency of teachers participating in bullying behaviors toward students may be useful.

Current Anti-bullying Initiative

Educators consistently reported that the school does have a program in place and described it in a very consistent way. Several comments indicated knowledge and some frustration that incidences consistently go unreported by other students. The focus described is on rewarding positive behaviors as opposed to addressing negative ones. Many offered additional ideas/suggestions that that seemed to be split between addressing the behavior itself (immediate consequences) and the futility of addressing just the behavior (you can't legislate morality).

Parent feedback on the school's current bullying policy and program is mixed and inconsistent. Most comments fall into two themes: don't know, and lots of talk with no action. Several parents shared lengthy personal experiences, none of which had a positive ending. The overall feeling seems to be frustration.

Students report a wide variety of responses to the existence and effectiveness of anti-bullying practices currently at their school. Some use the same words used by the educators such as zero tolerance, Pride program, assemblies, and bully slips (anonymous reporting system). A few gave longer descriptions of these options available to students. Several students indicated they were unaware of any program or practices to address bullying. Many used the generic pronoun 'they' when talking about how bullying issues are addressed in their building. Some comments indicated significant dissatisfaction such as, 'Teachers seem oblivious to it,' 'They only listen to certain problems and take care of very few,' 'talk about it in a gay way,' and 'They don't really do a lot – depends on the student being bullied.' Several student comments incorporated multiple curse words. One student summed up, 'they don't do shit.'

Discussion

Many interesting disconnects emerged from comparing scenario agreement both within and across stake-
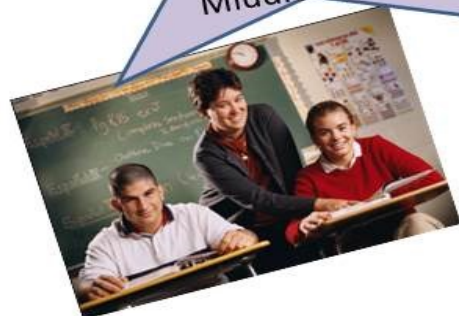

This We Believe: Celebrating Middle School Successes

Conference for Pre-Service Teachers

Provided by the South East Region of the
Pennsylvania Association for Middle Level Education

This one has passed but another will be announced soon!

Tips on

ACT 48 HOURS WILL BE AVAILABLE!!!

Components of a Successful Middle School

Adolescent Development: Implications for the classroom

How to register

Send your name, name of college, and contact information (phone number and email address) along with payment to Dr. Kim Arp, 65 Percheron Dr., Spring City, PA 19475 or email arp_kim@yahoo.com. Questions? Call 281-229-2567.
Checks can be made payable to : PAMLE SE Region

holder groups, as well as verbally communicated perspectives from the open-ended questions. It is clear that in many cases, each of these groups has a lack of consensus among its own members. But even more significant between the three groups are the varying perspectives in how they think about those behaviors and bullying as an issue.

Educator feedback communicates a sense of separation from the experience of being bullied in contrast to student comments which reflect an intimate, personal connection to the experience. This is further illustrated by the fact that educator perceptions are communicated from a third person perspective (as a distanced observer) whereas students offered their comments from a first person perspective (as an intimately involved participant). Parents seem to be somewhat caught in the middle between their children's experiences and an effort to make sense of the situation. Both adult stakeholder groups (educators and parents) describe bullying behaviors in a broad and generic descriptive manner, while the students provide a list of specific actions they define as bullying. The adult stakeholders also both focus on the behavior, action, or incident itself, while the students focus much more directly on the resulting feelings/emotions.

All three groups clear view the same issue from a significantly different perspective. If all were to sit down to discuss bullying as an issue (perhaps as a prerequisite to determining what can be done about it), participants would not even be working with a commonly shared meaning of what was under discussion. Based on the findings of this investigation, they would not be talking about the same thing. How can anything valuable or effective come from such a level of miscommunication?

To address the secondary issue of existing bullying initiatives, unless all perspectives were solicited, considered, and incorporated into the design of an anti-bullying program, it seems unlikely to hold any hope of having an impact to address the issue. Further, it is least likely that young adolescent students themselves are commonly instrumental in the design and implementation of such initiatives; whether created by a publisher for broad use or designed specifically for a single middle school. Students are the people most intimately involved in the issue, but most often the least consulted when looking for solutions.

Further study focusing on the differing stakeholder perspectives toward bullying is clearly warranted. Similar investigations involving varied demographics (ethnic, socio-economic, and/or population density diversity) would enhance these findings toward our understanding of how bullying affects all stakeholders in different settings. A broader study incorporating a larger participant sample could add credibility to these original findings. In thinking about further research, we do want to point out that this methodological design incorporated both quantitative and qualitative data in order to arrive at the conclusions discussed. Both contributed a significantly unique part toward understanding the overall issues under examination. It is the opinion of this research team that without the combination of both modes of data collection, the insights shared would not be nearly as significant.

Based on findings of this study, previously conducted research, and strong middle level philosophy, it is our premise that nothing is more important than the young adolescent voice. If we expect to make a difference for victims, witnesses, and bullies, we need to understand the issue from *their* perspective. We need to ask, listen, and respect their voices before we can find ways to empower all middle level students to build a more positive environment in collaboration with us for the benefit of everyone.

References

Basch, C. E. (2011). Aggression and violence and the achievement gap among urban minority youth. *Journal of School Health*, 81, 619-625.

Bieber, K. (2013). *Do Students Understand What Researchers Mean by Bullying?* (Unpublished Doctoral Dissertation). University of Nebraska, Lincoln.

Blosnich, J., & Bossarte, R. (2010). Low level violence in schools: Is there an association between school safety measures and peer victimization? *Journal of School Health*, 81, 107-113.

Bryn, S. (2011). Stop Bullying Now! A Federal Campaign for Bullying Prevention and Intervention. *Journal of School Violence*, *10*(2), 213-219.

Cornell, D., & Mehta, S. B. (2011). Counselor Confirmation of Middle School Student Self-Reports of Bullying Victimization. *Professional School Counseling*, 14(4), 261-270.

DeVoe, J., Murphy, C., & National Center for Education Statistics (2011). *Student Reports of Bullying and Cyber-Bullying: Results from the 2009 School Crime Supplement to the National Crime Victimization Survey*. Web Tables. NCES 2011-336.

Girl jumps off building after bullying. (2013, September). CNN. Retrieved from http://www.cnn.com/video/?/video/us/2013/09/13/nr-pkg-ganim-sedwick-bullying-suicide.cnn&iref=obnetwork#/video/us/2013/09/13/nr-pkg-ganim-sedwick-bullying-suicide.cnn

Glasner, A. (2010). On the front lines: Educating teachers about bullying and prevention methods. *Journal of Social Sciences* (15493652), 6 (4), 535-539.

Good, C. P., McIntosh, K., & Gietz, C. (2011). Integrating bullying prevention into schoolwide positive behavior support. *Teaching Exceptional Children*, *44*(1), 48-56.

Green, G. (2007). Bullying: A concern for survival. *Education*, 128(2), 333-336.

Holmgren, J., Lamb, J., Miller, M., & Werderitch, C. (2011). *Decreasing bullying behaviors through discussing young-adult literature, role-playing activities, and establishing a school-wide definition of bullying in accordance with a common set of rules in language arts and math*. Retrieved from ERIC database. (ED518484)

Hunt, C., Peters, L., & Rapee, R. (n.d). Development of a measure of the experience of being bullied in youth. *Psychological Assessment*, 24(1), 156-165.

Leedy, P. D., & Ormrod, J. E. (2012). *Practical research: Planning and design.* Upper Saddle River, NJ: Prentice-Hall.

Limber, S. (2011). Development, evaluation, and future directions of the olweus bullying prevention program. *Journal of School Violence, 10*, 71–87.

Merriam-Webster Dictionary (n.d.). Retrieved from http://www.merriam-webster.com/dictionary/consensus

Merriam, S. B. (2001). *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass Publishers.

Association for Middle Level Education. (2010). *This we believe: Keys to educating young adolescents.* Moorabbin, Vic: Hawker Brownlow Education.

Pearce, N., Cross, D., Monks, H., Waters, S., & Falconer, S. (2011). Current evidence of best practice in whole-school bullying intervention and its potential to inform cyberbullying interventions. *Australian Journal of Guidance & Counseling*, *21*(1), 1-21. doi:10.1375/ajgc.21.1.1

Phillips, V. I., & Cornell, D. G. (2012). Identifying victims of bullying: Use of counselor interviews to confirm peer nominations. *Professional School Counseling*, 15(3), 123-131.

Appendix A

questionnaire items

1. What is your definition of 'bullying'? (textbox)

2. Identify whether or not you consider each described situation to be bullying. (yes/no/not sure)

    a) Susan walked up to a lunch table to sit down, but several of the girls moved their backpacks to the seats so there was no place for her to sit.

    b) Steven sent Julie a text message that said, "You're ugly and stupid and nobody likes you!"

    c) As Nick was climbing onto the bus, two girls in the front seat said, "You're too fat to sit in a seat on this bus" and then laughed.

    d) Mr. Franklin held Maria after the other students left class and suggested she get tutoring to catch up with the rest of the class.

    e) Mark picked a fight with Javier in the lunch room because he talked to Mark's girlfriend.

    f) Everyday before practice, the freshmen were required to clean up the locker room after practice.

    g) As Erika walked to class, Abe waited for her and tried to yank her pants down every day.

    h) Mrs. Blair made a comment to a student in the hall between classes about their clothes not being clean.

    i) Kelly called 7 girls invited to Jillian's birthday party and told them not to go because Jillian lived in a trailer and had lice.

    j) Fred tried to hit Alex in the head with a snowball every day on the way home from school.

3. What are some determining factors you use to decide whether or not a behavior is bullying? (textbox)

4. Have you experienced being bullied in the past year? (yes/no)

5. Have you seen someone else bullied in the past year? (yes/no)

6. To what level do you think bullying is a problem at your school? (Likert scale)

7. How does your school address bullying issues? (textbox)

8. What do you think should be done to address bullying issues? (textbox)

Appendix B

scenarios		educators	parents	students
Susan walked up to a lunch table to sit down, but several of the girls moved their backpacks to the seats so there was no place for her to sit.	yes	58%	70%	82%
	no	25%	19%	10%
	not sure	17%	11%	8%
Steven sent Julie a text message that said, "You are ugly and stupid and nobody likes you!"	yes	83%	89%	95%
	no	8%	9%	5%
	not sure	8%	2%	0%
As Nick was climbing onto the bus, 2 girls in the front seat said, "You are too fat to sit in a seat on this bus" and then laughed.	yes	92%	91%	92%
	no	8%	7%	8%
	not sure	0%	2%	0%
Mr. Franklin kept Maria after the other students left the classroom and suggested that she get tutoring to catch up with the rest of the class.	yes	0%	0%	2%
	no	100%	98%	98%
	not sure	0%	2%	0%
Mark picked a fight with Javier in the lunch room because he talked to Mark's girlfriend.	yes	25%	38%	57%
	no	50%	50%	25%
	not sure	25%	12%	18%
Every day, only the freshmen are required to clean up everyone's mess in the locker room after practice?	yes	25%	36%	38%
	no	33%	48%	25%
	not sure	42%	16%	38%
As Erika walks to class, Jackson waits for her and tries to yank her pants down every day.	yes	100%	100%	98%
	no	0%	0%	2%
	not sure	0%	0%	0%
Mrs. Blair made a negative comment to a student in the hall between classes about their clothes not being clean.	yes	50%	59%	69%
	no	17%	30%	21%
	not sure	33%	11%	10%
Kelly called 7 girls who were invited to Jillian's birthday party and told them not to go because Jillian lived in a trailer and probably had lice.	yes	92%	86%	95%
	no	8%	12%	5%
	not sure	0%	2%	0%
Fred hit Alex in the head with a snowball every day on the way home from school.	yes	75%	96%	79%
	no	0%	0%	0%
	not sure	25%	4%	21%

Percentages in red indicate consensus within the stakeholder group.

Sánchez, C., & Cerezo, F. (2010). Personal and social characteristics of schoolchildren involved in bullying in primary education. *Electronic Journal of Research in Educational Psychology*, 8(3), 1015-1032.

Sanchez, M. (nd). Facts and statistics. Retrieved from http://www.makebeatsnotbeatdowns.org/facts_new.html

Sbarbaro, V., & Smith, T. (2011). An exploratory study of bullying and cyberbullying behaviors among economically/educationally disadvantaged middle school students. *American Journal of Health Studies*, 26(3), 139-151.

Stop Bullying. (n.d.). Retrieved from http://www.stopbullying.gov/index.html

Yerger, W., & Gehret, C. (2011). Understanding and dealing with bullying in schools. *Educational Forum*, 75(4), 315-326.

Save the Date!

The PA-POMLE
Spring Conference
Friday, May 16
Kutztown University

Focus: Diversity

Please join us to extend your professional knowledge and enjoy the camaraderie of fellow colleagues as we turn our attention to Summer.

About the Authors

Carol E. Watson, Assistant Professor
Kutztown University

Bridget Gargin, Julie Phegley, Steven Viglianti, and Andrew Snyder, Undergraduate Students
Kutztown University

Carol E. Watson, lead author, collaborated with undergraduate students on this paper as an independent, non-credited research activity. She teaches courses at Kutztown University, primarily in middle level, diversity, and social studies. She was the primary writer of the AMLE SPA describing the Kutztown University middle level program.

Bridget Gargin, Julie Phegley, Steven Viglianti, and Andrew Snyder completed this research project as an independent study of research methods. They are now employed as noted below.

Bridget Gargin, Teacher
Rodney E. Thompson Middle School
Stafford, VA

Julie Phegley, Teacher
A.G. Wright Middle School
Stafford, VA

Steven Viglianti, Teacher
Governor Wolfe Elementary School
Bethlehem, PA

Andrew Snyder, Teacher
Northampton Area Middle School
Northampton, PA

Contact Information:

Carol E. Watson
Assistant Professor
Kutztown University
108 Beekey Education Center
Kutztown, PA 19530
watson@kutztown.edu

Book in an Hour:

A Way to Utilize Authentic Literature In the Content Area Classroom

Lisa Ciecierski and Bethany L. Scullin

Abstract

Authentic literature is often not incorporated into middle school content area classrooms because of the length of time needed for students to read and discuss the text. This study investigates how three sixth grade social studies classrooms respond to a lesson utilizing the Book in an Hour format. The authors conducted the Book in an Hour lesson using a piece of authentic literature, *The Macaroni Boy* (Ayers, 2003), which directly corresponds with the students' current unit of study on The Great Depression. Using constant comparative analysis, student and teacher interviews, students' written reflections, and student artifacts were analyzed to develop five overarching themes: understanding of the content and the book, active engagement, feelings of accomplishment and success, positive perception of the activity, and literacy behaviors.

I would love to use novels to teach in my social studies class, but I just don't have time. I have to make sure I cover the curriculum.

--8th Grade Teacher

This was a common reply from the content area teachers we talked to when we asked them if they used authentic literature in their content area classroom. These feelings were not just contained in middle school social studies classrooms, but were also shared in science, math, and even language arts. It reinforces the belief that American schools have embraced the notion of covering curriculum (Daniels & Zemelman, 2004). Like the teacher in the opening vignette, teachers often feel pressure to cover material in a timely manner. This pressure often occurs as teachers prepare students for high stakes tests (Ness, 2009). Although the teachers we talked to understood that there were benefits to using authentic literature, such as novels with their students, they just didn't feel that they had enough time.

Even though teachers feel pressure to "cover" the content in their classroom and may believe "content is king" (McCoss-Yergian & Krepps, 2010, p. 5), there is also pressure to incorporate literacy into history/social studies, science, and technical subjects (Schoenbach, Greenleaf, & Hale, 2010) because of the nationwide implementation of the Common Core State Standards for English language arts (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010).

We were asked by a sixth grade social studies teacher to work with her students in a manner that would also allow her to meet the requirements of the district and the state while also utilizing authentic literature. We eagerly accepted her invitation and share our experience here. We conducted an instructional lesson where students would read a "Book in an Hour" (Childrey, 1980) in a collaborative manner.

We begin by presenting the definition of authentic literature as well as the benefits of utilizing authentic literature. We continue by sharing the in-structional lesson which includes a summary of the book we read and the steps we followed during the instructional lesson. Next, we discuss our data collection methods as well as our data analysis. This is followed by presenting our findings from this inquiry. We close by discussing the implications for the future.

Authentic Literature

According to Merriam-Webster's Dictionary (2005), the word authentic means "real, genuine" (p. 32). Authentic literature is often defined as text presented in the original language of the author (Routman, 1991). In other words, literature that is not rewritten and is not presented in a condensed manner.

There are numerous benefits to utilizing authentic literature in the classroom. When teachers use authentic literature in the

classroom, there is an increase in enthusiasm, motivation, and interest (Billman, 2002; Broemmel & Rearden, 2006; Chick, 2006; Lindquist, 2002; Soalt, 2005; Zambo, 2009). Sparking interest and motivation in students is increasingly important in middle school.

When students learn with authentic literature, they are able to build their vocabulary (Fang & Wei, 2010; Gareis, Allard, & Saindon, 2009). Although the words are not identified for teachers, as they are in an anthology, authentic literature provides multiple opportunities to incorporate vocabulary instruction, teaching the same types of skills: prefixes, suffixes, root words, synonyms, antonyms, paraphrasing, and so on (Gareis, et al., 2009).

Authentic literature has the potential of engaging students in higher order thinking (George & Stix, 2000; Villano, 2005) and bringing content area material alive (George & Stix, 2000), while also offering the potential to maximize students' understanding of the content being studied (Atkinson, Matusevich, & Huber, 2009; Shelly, 2007; Taliaferro, 2009; Villano, 2005). Interest and motivation often contribute to how students learn. They are able to connect to the topics being studied when learning through authentic literature and their learning is often beyond the literal level. Therefore, students' understanding of the topics and concepts being taught are often deeper.

In conclusion, the benefits of utilizing authentic literature to teach in the content areas are multiple. Finding ways to incorporate authentic literature into the middle school classroom, while still meeting district and state expectations is a prospect worth exploring. We decided to do just that as we engaged students in reading a book in an hour.

Instructional Lesson

As in any type of lesson, preparation was needed. To begin, we chose a novel that we felt was characteristic of authentic literature, was relevant to students, would fit into the curriculum, and would provide the opportunity for literacy connections. We also made sure the novel was between 150 to 200 pages. Although it is possible to use a novel of greater length, this would require more time, and may span into two class periods. In addition, we wanted to choose a novel which students might be able to connect with and find relevant.

In this sixth grade classroom, students learn about world cultures. We chose the book *Macaroni Boy* (Ayres, 2003) for several reasons. First, we felt this book was characteristic of authentic literature. It is realistic fiction and set during the time of The Great Depression. The book shares the story of Mike Costa whose family has immigrated into the United States from Italy. The characters in the book are lifelike and easy to relate to. Mike Costa, the main character, is about the same age as the sixth grade students we were working with. In addition, the Costa family resides in the warehouse and factory district in Pittsburgh, Pennsylvania. Pittsburgh, Pennsylvania is a mere two-hour drive from where the students live, giving students the opportunity to make "real world" connections. Mike is tormented by a school bully, Andy Simms, who calls him "Macaroni Boy." An element of mystery is added when dead rats begin to show up on the streets and Andy changes his nickname for Mike to "Rat Boy." At about the same time as the dead rats appear, Mike's grandfather becomes very ill. Throughout the book, Mike tries to solve the mystery so his grandfather can be well again, and the bully plays an interesting role in this dilemma. The story is told in a manner that encourages students to connect to what they are reading. We

felt reading this book would provide multiple opportunities for the teacher to make literacy connections to her social studies curriculum. Furthermore, the book is 177 pages long, just about the length appropriate for a one day lesson.

Our next step in preparing the lesson was to physically tear the book apart. We noted how many students were in each of the class periods and prepared our books accordingly. For example, there were twenty-five students in three of the five periods. So for these three periods, we divided the book into twenty-six sections, leaving one section

Figure 1

1	1 – 8
2	9 – 14
3	14 – 22
4	23 – 28
5	29 – 36
6	37 – 42
7	43 – 50
8	51 – 58
9	59 – 65
10	66 – 74
11	75 – 82
12	83 – 90
13	91 – 98
14	99 – 86
15	87 – 94
16	95 – 102
17	103 – 110
18	111 – 118
19	119 – 126
20	127 – 134
21	135 – 142
22	143 – 150
23	151 – 160
24	161 – 168
25	170 – 177

to be modeled for students. Next, we typed the page ranges and highlighted the section each student would be responsible for (see figure 1). These small sheets of paper were attached to each section. We also prepared directions for the foldable that students would complete after they read the book (see figure 2).

Figure 2

Book-in-an-Hour

You will create a foldable to represent your "Book-in-an-Hour" experience. For this foldable, you will use what you read as well as what you listened to as the other students shared their sections. You will want to make sure you are detailed in sharing your thoughts and your knowledge.

Name of the Book	Wonderings	Facts	Connections
Symbol or illustration that represents the process or the book Name _____	Questions/wonderings you have about your section . . . Questions/wonderings you have while listening to others . . .	What did you learn about the time period? Make sure to include something you learned from your section and something you learned while listening to the other sections.	Which character did you connect with the most? Why?
Thoughts about the Book	**Answers & Wonderings**	**Looking Forward**	**Book-in-an-Hour**
What did you think about the book? Why?	What answers did you find? What do you still want to know?	If you could write a sequel to the book, what do you think would happen? Why do you think this might happen?	What did you think about reading a book in an hour? Please be descriptive in your answer. You may use the back if you need to.

When we visited the classroom, we modeled the procedures students would proceed through to participate in the Book in an Hour activity. Students would have approximately fifteen to twenty minutes to read their section. Their purpose while reading was to capture the events of their section. This was to include the facts of the story as well as the feelings of the characters. In order for students to do this, they had to effectively summarize their section so that students were able to holistically understand the events, story context, and characters. We reminded students that summaries are short, include the most important ideas, and must be written in their own words (Friend, 2001). It was important for students to understand the purpose of reading the book was not only to gain information but also for enjoyment. Finally, we let students know it was perfectly fine and even expected for them to have questions while they were reading. They should wonder what happened before and after their section. Students were provided with paper in order to jot down notes while they were reading to aid in their summarizing task. After they finished reading, students prepared a short, one to two minute summary sharing what they read with the entire class. Once everyone had completed this, they were ready to collaboratively read the book in an hour.

To guide their collaborative reading, a few guidelines were shared. Students should always read with a purpose (Neufeld, 2005) and this experience was not any different. While students listened to the other sections, they wrote facts about the time period they heard along with questions or wonderings they

had, thoughts they considered, and conclusions and inferences they drew. This way, students were active participants in all parts of the book, not just their own section. We also made sure students were aware of how important it would be for them to speak loudly and clearly while they shared their summary. When students were not sharing their piece, they needed to make sure they had their eyes on the speaker to help them focus and add to the community of learners (Watkins, 2005) we were hoping the learning experience would foster. To model, I (first author) read the summary I created of the first section of the story. After I was finished, the second student shared their summary, followed by the third student, and so on. We continued until we *read* the entire book.

Once we read the book, students combined the information they read themselves and what was shared by their fellow classmates to create a foldable. This foldable encompassed a variety of skills and standards to include vocabulary, facts gained from the story about the time period, connections students made, inferences and conclusions, as well as predictions and extensions. The foldable and the students' personal summary served as an evaluation tool to measure students' comprehension on their section as well as the rest of the book (see figure 3).
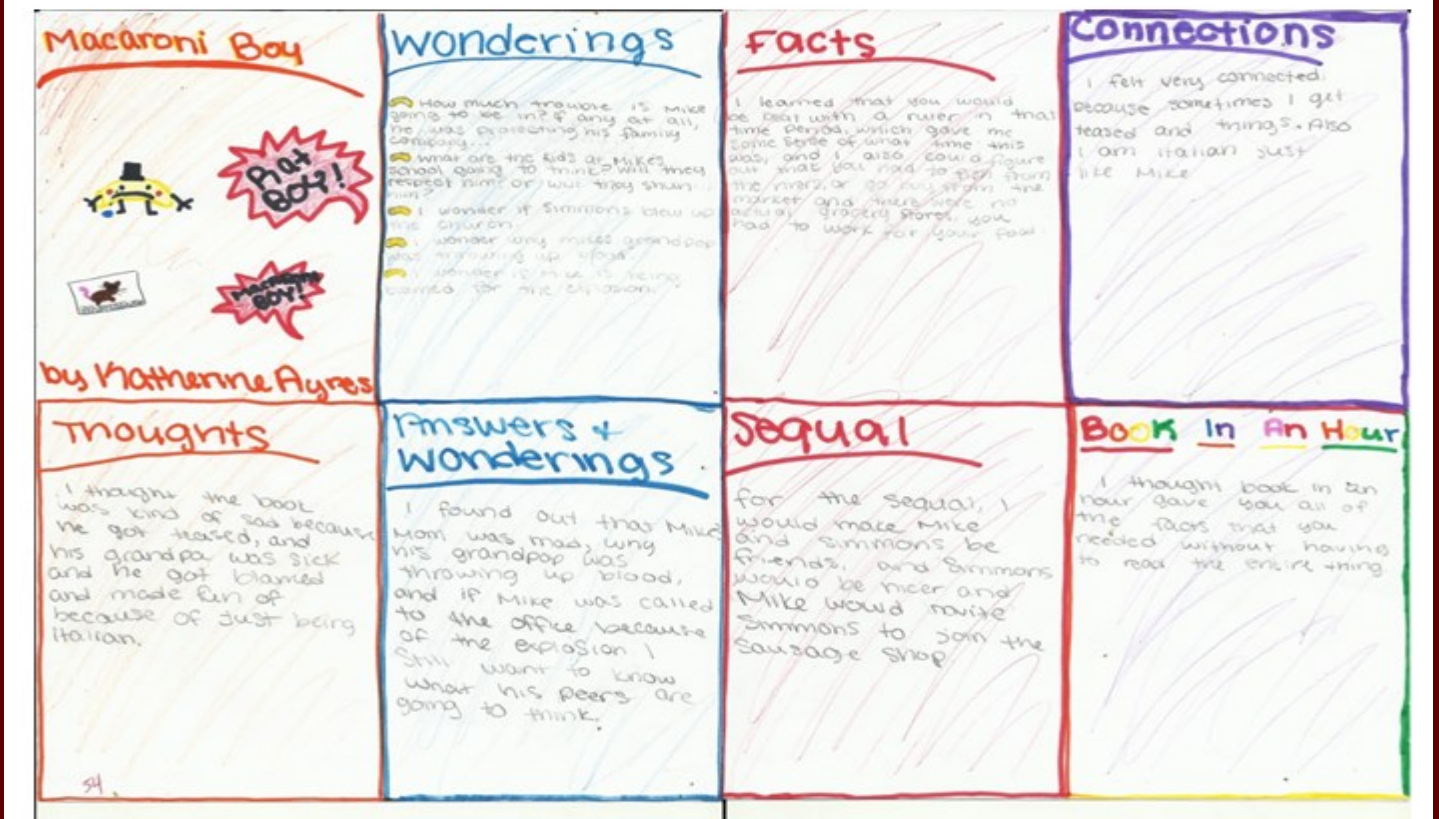
Data Collection and Analysis

Seventy-five sixth grade students from an urban school in northwestern Pennsylvania participated in this naturalistic interpretive research study. Student and teacher interviews, student artifacts, and student reflections were all sources of data.

The first author interviewed teachers and students. These interviews were conducted in a manner that would encourage open dialogue and establish rapport (Rubin & Rubin, 2005). Although conversational in style, focused interview questions were prepared ahead of time. These initial questions were added to as needed.

While participating in the lesson, the teachers wrote down their observations of their students, their mannerisms, and their participation levels. We also collected the students' foldable (Zike, 2008), or interactive graphic organizer, where students shared their interaction with the text and reflected on the Book in an Hour activity.

> *"It felt like we were more involved with each of us sharing our summaries and writing the questions."*

Figure 3

The data was analyzed using constant comparative analysis (Strauss & Corbin, 1994). We read and reread teacher and student interviews, teacher observations, and student reflections to find emerging themes from both the students' and the teachers' responses. We developed five overarching themes as we analyzed the data.

Findings

As we analyzed the interviews, reflections, observations, and the foldables, we drew several conclusions which represent five themes: understanding of the content and the book, active engagement, feelings of accomplishment and success, positive perception of the activity, and literacy behaviors.

Understanding of the Content and the Book

Many students felt reading the book in this format made the book and the material easier to understand for several reasons. One student talked about how the characters helped him understand the time period. We felt this was important to note. First, textbooks are often the primary mode of instruction in content area classrooms (Vacca, Vacca, Gove, Burkey, Lenhart, & McKeon, 2009) even though many students find them too difficult and/or too boring (Ivey, 2002). Additionally, students often have a difficult time connecting to the textbook when it is used in isolation. This student, and several others, communicated that they were able to understand the content because of how the characters were portrayed in the book. One student shared, *"I never would have known what I learned from reading the social studies textbook. The textbook is just too general"* and another shared what they learned but in a more enjoyable way, *"we learned about the Great Depression but had fun doing it instead of reading a boring textbook."* These responses demonstrated students' ability to com-

prehend what they had read in order to build on what they already understood about The Great Depression.

They were also able to make connections to what they had learned in their social studies class. One student shared, *"We were learning about this in social studies class. I understand the time period better now."* Another student explained that they were able to understand everything while they participated in the activity. They shared, "*I learned a lot of events from the book."* We noticed this activity strengthened their understanding of The Great Depression because it continuously built on their previous knowledge of this important era in history.

Students also found value in the type of thinking they needed to do while participating in book in an hour. *"I thought book in an hour helped break down the main ideas in the book so that the book was easier to understand. It really helps you relate to the book, and allows you to use your imagination."*

While we are not advocating for the total abandonment of content area textbooks, we are proposing that supplementing experiences, such as Book in an Hour, can promote a deeper understanding of the content.

Active Engagement

We learned by observing students, that they were actively engaged in the process. Once students understood what was expected of them, they quickly began the task. After all, they had a limited amount of time to produce a summary that would contribute to the class's understanding. In analyzing various forms of data, we learned that students felt more involved during the entire process.

While students were listening to the summaries, they jotted down questions they had. One student said, "*It felt like we were more involved with each of us sharing our summaries and writing the questions."* Another stated, "*I also felt that we were more involved in the reading of the book."* Students listened attentively to the other student's summaries so they could see how they all fit together. *"You got to see how the story pieced together like a puzzle."* The teacher also noticed how focused her students were. In some cases, she was surprised and pleased.

Feelings of Accomplishment and Success

An overwhelming majority of students noted that they experienced a feeling of success after they completed the book in an hour activity with *Macaroni Boy* (Ayres, 2003).

"This was kind of cool because it would usually take a week to read a book, but it only took an hour."

Many students mentioned reading a book in an hour was not something they ever thought they could do. One student shared, *"I never knew that you could read a book in an hour and understand the whole thing!"* while another stated, *"I still can't believe I read a book in an hour. Not many people can say that they have read a book in an hour."* Student expressed that they were "proud" of their accomplishment and felt that what they had done was "impressive."

Several studies have been conducted exploring the connection between students who experience academic success and their attitudes towards reading. These studies found that students who experience academic success possess more positive attitudes toward reading and higher levels of reading related self-esteem (Kaniuka, 2010; Vitale & Kaniuka, 2009). While many struggling readers do not have the opportunity to experience academic success, the Book in an Hour activity might be a way to not only provide a space for struggling readers to feel successful at reading, but also have the opportunity to participate in this success with the entire class.

Positive Perception of the Activity

The teacher and the students expressed they thoroughly enjoyed participating in the activity. There were a few reasons for these positive perceptions. First, teachers and students alike were thankful for the length and the manageability of the activity. The teacher shared that she loved it because it was so easy to implement it. She wrote, *"It doesn't take very much time to prepare, and at the end of the hour, you have read an entire book."* The teacher also liked how the activity

could be extended into so many areas based on the purpose of the lesson. For example, for our purposes, we focused on questioning and predicting. You could bring in many other literacy skills such as speaking and listening skills or connecting with the text. The teacher also shared, "*I love how the students could share what they knew in so many ways.*" This occurred even though we set up guidelines prior to beginning.

Another aspect of the activity was the ease in time and manageability. Many students appreciated that it did

not take an exorbitant amount of time to write their summaries and then collaboratively read the book. They enjoyed the "*shortcut*" the activity provided, "*the process of reading the book,*" and the amount of time it took. "*This was kind of cool because it would usually take a week to read a book, but it only took an hour.*" They were also thankful that the activity was creative and timely, "*Book in an hour was a very creative process that took little time at all.*" Many were surprised by what they were able to accomplish in such a short amount of time and expressed the desire to repeat the activity in the future. One student shared, *"I feel like Book in an Hour should be used more often in the classroom."* We thought it was promising that students not only enjoyed the experience but also wanted to repeat it in the future.

Reading Behaviors

We recognize the importance of integrating literacy into all aspects of the curriculum. We also recognize that all learning experiences must be more than just "fun" and must be directly connected to academic standards. While analyzing the results we found a combination of both. As previously discussed, we found that students thoroughly enjoyed the experience. We also found they were able to learn, practice, and demonstrate their proficiency of various reading behaviors.

To begin was the skill of summarizing. Although this often times seems like a simplistic skill, it is sophisticated. This situation was not any different. Students not only had to produce a summary that effectively summarized their section, they also had the responsibility of including the facts as well as the feelings of their characters comprised in their portion of the novel. We told students how important this was and that not only were we reading this book to learn but also for enjoyment. Students rose to this task. As previously noted, the students' summaries were detailed; consequently, students were able to comprehend the entire book as students shared their summaries. They were also able to experience the emotions of the story. One student shared, *"I felt like I really felt the emotions of the story while we were sharing."* Several students echoed this feeling of understanding how the characters were feeling throughout the story.

Students citing textual evidence to support their thinking is a major component of the English Language Arts and History and Social Studies Common Core State Standards (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010). We learned that this may be another avenue for students to practice this important skill.

Questioning defined as self-generated requests for information within a subject, relies on considering what is known and what is unknown about a topic and making an effort to develop existing knowledge of the topic (Taboada & Guthrie, 2004). Learners who create and answer their own questions are identified as playing an active role in the learning process (Collins, Brown, & Newman, 1989). In the Book in an Hour activity, students wrote questions they had while reading their section. Formulating questions while reading is a natural process for students which helps monitor comprehension. Students should have questions in this situation because they were only reading a portion of the text. The questions students formulated were written on a variety of levels to encourage a variety of types of thinking. Students could then monitor their comprehension while they listened to the book to see if they were able to answer the questions they formulated. They also added new questions as they were listening. One of the students commented specifically on this process, "*I think it was good because it was easier to read because you are writing summaries and asking questions so it makes it less hard.*" This active reading is a practice with many benefits and one we hope students will utilize in the future.

It is important for students to make connections while they are reading to deepen their learning. Students were asked to identify one character who they felt that they connected to the most. As we analyzed students' artifacts, we found students made meaningful connections between the characters in the book and themselves. Some of these connections referred to the stamina of the main character and his belief in not giving up and the responsibility of some of the characters. In the past, these students had a difficult time understanding character traits. However, they demonstrated their understanding of character traits

in a natural, unprompted manner while making these connections.

Another way we assessed if students comprehended the entire book was by having them write a sequel for the book as a whole. Overall, students demonstrated their ability to write a prediction that reflected their comprehension of the book they had read. Duke and Pearson (2002) note that good readers frequently make predictions about what should come next. The students' sequels directly connected to *Macaroni Boy* (2004), while their predictions were insightful, interesting, and often demonstrated the students' interest in the book.

Students citing textual evidence to support their thinking is a major component of the English Language Arts and History and Social Studies Common Core State Standards (National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010). We learned that this may be another avenue for students to practice this important skill. Without prompting, we noticed many students cited the reason for their thinking. One example of this was shared by a student talking about what a difficult time this was for many people. "*I learned that it was a very hard time period for most people. First, the fact that Mike got paid to clean out the rat traps, and that was part of the money their family lived off of. Also, people were living off of the fish from the river. One more thing is that some people actually had to steal food from places to stay alive.*" As the students drew conclusions of the facts they learned about the time period from the book, they naturally cited evidence to support their conclusions and the facts they wrote. This is important for students to practice in a variety of venues.

Thoughts for the Future

As with any inquiry project, there are always aspects that should be thought of for the future. Overall, this was a successful project. However, there are several factors we think educators should take into consideration when implementing the Book in an Hour activity. First, we noticed some apprehension when we first introduced and explained the procedures for the experience. We heard murmurs of disbelief as we announced the idea of reading a book in an hour. Some were concerned they would not understand the book unless everyone produced a quality summary as explained by one student, "*...if one kid doesn't give a good enough summary then the whole book could be messed up.*" None the less, we explained that we would be monitoring each student's verbal summary for accuracy and completeness. For example, when a student forgot to mention a particularly important fact, we prompted the student to explain the specific part before continuing. In another instance, a lower performing student struggled with providing clarification of a character's actions. We politely interjected and provided a deeper explanation of a character's actions in a non-threatening manner.

Another concern that surfaced was that several students wanted to read the book on their own. While this is a good thing, it is not the purpose of the Book in an Hour activity. We suggest providing several copies of the book in its original form, if funds permit, in order to provide the opportunity for students to read the book independently, should they so choose. We also suggest going to the school's library and consulting the librarian to provide students with

available book titles from the same time period or topic.

While we acknowledge ways to strengthen the Book in an Hour experience, we also conclude that overall, this was a successful learning experience that elicits numerous positive results. It is a strategy worth considering, especially by teachers who want to consider utilizing authentic literature in their classroom coupled with the feeling of not having time because they have to cover the curriculum. After all, an hour is a small amount of time to spend when considering the potential benefits.

References

Atkinson, T.S., Matusevich, M.N., & Huber, L. (2009). Making science trade book choices for elementary classrooms. *The Reading Teacher, 62,* 487– 497. doi: 10.1598/RT.62.6.3

Ayres, K. (2003). *Macaroni boy*. New York, NY: Yearling.

Billman, L. (2002). Aren't these books for little kids? *Educational Leadership, 60* (3), 48–51. Retrieved from: www.ascd.org

Broemmel, A.D. & Rearden, K.T. (2006). Should teachers use the Teachers' Choices books in science classes? *The Reading Teacher, 60*, 254 –265. doi: 10.1598/RT.60.3.5

Chick, K. (2006). Fostering student collaboration through the use of historical picture books. *The Social Studies, 97* (4), 152–157. doi: 10.3200/TSSS.97.4.152-157

Childrey, J. A. (1980). Read a book in an hour. *Reading Horizons, 20*(5), 174-176.

Collins, A., Brown, J. S., & Newman, S. E. (1989). Cognitive apprenticeship: Teaching the crafts of reading, writing, and mathematics. In L. B. Resnick (Ed.), *Knowing, learning and instruction: Essays in honour of Robert Glaser* (pp. 453-494). Hillsdale, NJ: LEA.

Daniels, H., & Zemelman, S. (2004). *Subjects matter: Every teacher's guide to content-area reading.* Portsmouth, NH: Heinemann.

Pearson, P. D. & Duke, N. K. (2002). Comprehension instruction in the primary grades. In C. C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 247–258). New York, NY: Guilford.

Fang, Z. & Wei, Y. (2010). Improving middle school students' science literacy through reading infusion. *The Journal of Educational Research, 103,* 262–273.doi: 0.1080/00220670903383051

Friend, R. (2001). Teaching Summarization as a Content Area Reading Strategy. *Journal of Adolescent and Adult Literacy, 44*(4), 320-329.

Gareis, E., Allard, M., & Saindon, J. (2009). The novel as textbook. *TESL Canada Journal, 26*, 136–147. Retrieved from: www.teslcanadajournal.ca

George, M.A. & Stix, A. (2000). Using multilevel young adult literature in middle school American studies. *The Social Studies, 91* (1), 25–31. Retrieved from: http://www.tandfonline.com

Ivey, G. (2002). Getting started: Manageable literary practices. *Educational Leadership, 60*(3), 20–23. Retrieved from: wvww.ascd.org

Kaniuka, T. S. (2010). Reading achievement, attitude toward reading, and reading self-esteem of historically low achieving students. *Journal of Instructional Psychology, 37*(2), 184-188.

Lindquist, T. (2002). *Why and how I teach with historical fiction.* Available: http://teacher.scholastic.com/lessonsrepro/lessonplans/instructor/social1.htm

McCoss-Yergian, T. & Krepps, L. (2010). Do teacher attitudes impact literacy strategy implementation in the content area classroom? *Journal of Instructional Pedagogies, 4,* 1–18. Retrieved from: www.aabri.com/jip.html

National Governors Association Center for Best Practices and Council of Chief State School Officers. (2010). *Common Core State Standards*. Washington, D.C.: NGA Center and CCSSO.

Neufeld, P. (2005). Comprehension instruction in content area classes. *The Reading Teacher, 59*(4), 302-312.

Routman, R. (1991). *Invitations: Changing as teachers and learners K-12.* Portsmouth, NH: Heinemann.

Rubin, H. J. & Rubin, I. S. (2005). Qualitative interviewing: The art of hearing data. Thousand Oaks, CA: SAGE.

Schoenbach, R., Greenleaf, C., & Hale, G. (2010). Framework fuels the need to read: Strategies boost literacy of students in content-area classes. *Journal of Staff Development, 31*(5), 38–42. Retrieved from: www.nsdc.org/news/jsd/index.cfm

Shelley, W. (2007). Using trade books to improve science education. *Science Scope, 31* (1), 69– 71. Retrieved from: www.nsta.org

Soalt, J. (2005). Bringing together fictional and informational texts to improve comprehension. *The Reading Teacher, 58* (7), 680–683. doi: 10.1598/RT/58.7.8

Strauss, A. & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273-285). Thousand Oaks, CA: SAGE.

Taboada, A. & Guthrie, J. T. (2004). Growth of cognitive strategies for reading comprehension. In J. T. Guthrie, A. Wigfield, & K. C. Per-encevich (Eds.), *Motivating reading comprehension: Conept-oriented reading instruction* (pp. 273-306). Mahwah, NJ: Erlbaum.

Taliaferro, C. (2009). Using picture books to expand adolescents' imaginings of themselves and others. *English Journal, 99* (2), 30–36. Retrieved from: www.ncte.org

Vacca, R.R., Vacca., J.L., Gove, M.K., Burkey, L.,C., Lenhart, L.L., & McKeon, C.C. (2009). *Reading and learning to read.* Boston, MA: Pearson.

Villano, T.L. (2005). Should social studies textbooks become history? A look at alternative methods to activate schema in the intermediate classroom. *The Reading Teacher, 59,* 122–130. doi: 10.1598/RT.59.2.2

Vitale, M.R. & Kaniuka, T.S. (2009). Exploring barriers to the role of corrective reading in systemic school reform: Implications of a three-part investigation. *Journal of Direct Instruction. 9*(4), 13-34.

Watkins, C. (2005). *Classrooms as learning communities*. New York, NY: Routledge.

Zambo, D. (2009). Using visual literacy to help adolescents understand how images influence their lives. *TEACHING Exceptional Children, 41*(6), 60–67. Retrieved from: http://www.cec.sped.org/

Zike, D. (2008). Dinah *Zike's reading and study skill foldables.* New York: McGraw-Hill Companies, Inc.

About the Authors

Lisa Ciecierski, Instructor
Edinboro University of Pennsylvania

Bethany L. Scullin, Instructor
Edinboro University of Pennsylvania

The authors are doctoral candidates at Kent State University.

Lisa Ciecierski is currently a faculty member with Edinboro University of Pennsylvania. Her specializations are in the area of Literacy, Social Studies, and Middle Level Education. Her research interests include reading and writing in middle school content area classrooms, specifically in urban settings.

Bethany Scullin is currently a faculty member with Edinboro University of Pennsylvania. Her specializations are in the area of Literacy and Urban Education. Her research interests include culturally relevant literature with African American adolescents and struggling readers and writers in university classrooms.

Contact Information:

Lisa Ciecierski, M. Ed.
    Middle & Secondary and Educational Leadership Department
    Edinboro University of Pennsylvania
    238 Butterfield Hall
    Edinboro, PA 16444
    lciecierski@edinboro.edu

Bethany L. Scullin, M. Ed.
    Middle & Secondary and Educational Leadership Department
    Edinboro University of Pennsylvania
    217 Butterfield Hall
    Edinboro, PA 16444
    bscullin@edinboro.edu

save the DATE

one STUDENT at a time

A UNIQUE CONFERENCE EXPERIENCE

PAMLE & PASAP COMBINED CONFERENCE
Penn Stater Conference Center
State College, PA
February 22-24, 2015

For additional information visit us at: www.pamle.org

TWO CONFERENCES FOR THE PRICE OF ONE

The PAMLE Conference will again be held in conjunction with PASAP (Pennsylvania Association of Student Assistance Professionals) Conference at the Penn Stater Hotel and Conference Center in State College from February **22-24, 2015.**

This combined event will allow participants to attend sessions hosted by both organizations. We are very excited to be working with PASAP to offer our membership a broader professional development experience and access to more resources.

PAMLE is a proud affiliate of

Association for Middle Level Education
Formerly National Middle School Association

Addressing Pre-Service Middle School Mathematics Teachers' Understanding of Volume Through an Inquiry Based Approach

Brian Bowen

Abstract

This study examines an intervention designed to impact the knowledge of volume held by pre-service middle grades mathematics teachers. The inquiry based intervention focused on examining the relationship in volume between geometric figures as a means of deriving volume formulas. Initial data collected suggests that the pre-service teachers in the study were limited in their ability to recall volume formulas. Following the intervention, participants showed significant progress in their knowledge of volume, which may also have implications for their instructional decisions.

Introduction

For several semesters I have taught a geometry class designed for pre-service middle grades mathematics teachers (PSTs). During this time an issue that has continued to surface is the way in which these PSTs speak about their past experiences learning mathematics during their middle grades experience. For many, the use of rote memorization was often the primary way in which content was conveyed from teacher to student. For example, when the PSTs were asked to describe the way in which they learned formulas related to volume, many described being "handed a piece of paper and told to memorize." Research suggests that these experiences may not only have a negative effect on the mathematical knowledge held by the PSTs, but also on the pedagogical approaches they will choose once they themselves become classroom teachers (Ball, 1998; Lortie.1975). The study described here is an examination of an intervention, applied in my undergraduate geometry class, to provide pre-service teachers concrete learning models in an area where their prior experiences were predominately focused on rote memorization.

Theoretical Background

Research on learning mathematics strongly supports pedagogical approaches that support active learning built on concrete experiences (e.g., Boaler, 1997). For middle grades learners this is especially critical because most are in what Piaget described as the concrete operational stage of development (Piaget, 1965; Shayer, Küchemann,, & Wylam, 1976). Within this stage students are "better able to cognitively grasp higher-level principles when ideas are taught with the use of hands-on activities and real materials rather than presented in a lecture" (Brown and Knowles, 2007, p. 30). Therefore, when middle grades learners are not afforded the opportunity to engage in learning their long term conceptual understanding may be negatively impacted.

The impact of limited concrete mathematical learning experiences is especially troubling for PSTs. It is widely accepted that teachers' knowledge of content influences the way in which their students learn mathematics (Ball, Thames, & Phelps, 2008). Teachers who rely upon a procedural knowledge of mathematics, but lack conceptual understanding, may struggle to form clear explanations and make appropriate connections, which results in a less effective learning environment (Borko et al. , 1992). Furthermore, the way in which teachers themselves learned mathematics as a student also serves to influence their own pedagogical practice. This phenomenon, described by Lortie (1975) as the apprenticeship of observation, suggests that if teachers' experience learning mathematics revolves around rote memorization, these same instructional approaches may appear in their own teaching practice. Therefore, providing opportunities for PSTs to engage in concrete learning opportunities

has the potential to impact their own conceptual understanding and pedagogical practices.

The study described below examines an intervention in my undergraduate geometry class that provides an opportunity to engage in concrete learning experiences related to the volume of three dimensional figures. Volume on the middle grades level is a rich area for research as the Common Core State Standards has established knowing and applying formulas for volume as an eighth grade standard (CCSSM, 2010). At the same there is a limited amount of research on middle grades teachers' knowledge of geometry (Jones, Mooney, & Harries, 2002).

Study

Overview

The participants for this study were 33 pre-service middle grades mathematics teachers in either their sophomore or junior year. These PSTs had previously taken at least three college level mathematics courses on route to earning a certification to teach mathematics in grades four to eight. The study took place over three class periods during a college level geometry class designed for teachers. The principal investigator for this study was also the instructor for the class.

The choice of a geometric topic to focus on for this study was largely driven by the course in which the intervention took place. The decision to focus specifically upon formulas related to volume came from observations of PSTs in prior semesters. When provided formulas for volume, PSTs were very comfortable in performing calculations. However, many students struggled in their ability to recall the formulas and discuss the ways in which they were derived. Thus, the purpose of the in-

tervention was to engage PSTs in a series of lessons that would afford an opportunity to engage in concrete activities that would build their conceptual understanding of these volume formulas.

Pre-Intervention Data Collection

The study began by gathering data related to PSTs knowledge and experiences related to volume formulas. The first set of tasks asked the PSTs to provide the formula for the volume of a rectangular prism, pyramid, cylinder, cone, and sphere. Results (Table 1) indicated that the PSTs' ability to recall formulas for the volume three dimensional figures was limited at best.

Table 1.
Correctly Identify Volume Formula

Shape	Percent Correct
Prism	27%
Pyramid	9%
Cylinder	9%
Cone	9%
Sphere	6%

The second set of tasks from the preassessment asked the PSTs to compare the relative volume of pairs of three dimensional figures. For example, the first question asked what would hold more a cube or pyramid given they have the same base and height. The results (Table 2) indicated that many of the PSTs were able to identify the relationship between a cube and pyramid and a cylinder and cone, but were less successful when comparing a cylinder to a sphere.

Table 2.
Percentage Able to Correctly Identify Relationship in Volume

Shapes	Percent Correct
Cube and Pyramid	70%
Cylinder and Cone	88%
Cylinder and Sphere	12%

The third question from the preassessment questionnaire shifted the focus from content knowledge of mathematics to the learning experiences the PSTs engaged in while studying volume of three dimensional figures. The responses indicated that very few PSTs participated in any form of constructivist activities when learning volume formulas, instead rote learning was more often the norm. The following responses are representative of many of the PSTs' descriptions.

⇒ "Volume was taught to me by memorizing formulas and using them on the test"

⇒ "I was provided with formulas and told to memorize them. Please help!"

⇒ "Most of the concepts taught to me were through memorization"

⇒ "Given equations also given information then told to plug the given information into the equation and solve"

⇒ "More use of formulas and memorizing them first rather than fully understanding"

Data from the pre-assessment suggested that the PSTs did possess a general understanding about the relationship in volume between two sets of three dimensional figures. However, PSTs were very limited in their ability to recall formulas or able to derive these formulas from past learning experiences. PSTs description of their past learning experiences suggested activities that focused largely upon memorization.

Description of Intervention

Volume of Rectangular Prisms and Pyramids. The intervention began by focusing on the meaning of volume in terms of cubic inches. PSTs constructed multiple cubes from paper nets each with the dimension one by one by one inch. The PSTs then used these cubes to fill a larger cube with dimensions four by four by

four inches also constructed from a paper net (Figure 1). After physically completing the task, PSTs were asked to make a connection between the filling of the larger cube and what they knew of the formula for rectangular

Figure 1. Volume of Rectangular Prism

prisms. While some PSTs described the volume of the rectangular solid as length x width x height, others were also able to view the volume as the area of the base times the number of layers or the height of the prism. This observation was useful in the later discussion deriving the volume formula for a cylinder.

The next step in the intervention was to examine the volume of a pyramid. This was a significant shift for the PSTs as some knew the formula for the volume of a rectangular prism, but very few knew the formula for a pyramid. PSTs began their exploration of the volume of a pyramid by constructing a pyramid from a net that had the same area base and height as the cube from the previous work. The PSTs were tasked with examining the relationship between the volumes of the two figures. Using cereal, PSTs began to use the volume of the pyramid as a unit of measure. Using the pyramid as a scoop (Figure 2), the PSTs began filling the cube with the pyramid, arriving at the observation that it took the volume of

Figure 2. Volume of Pyramid

three pyramids to equal the volume of one cube. Using their observations the PSTs extrapolated that the volume of a pyramid is one-third that of a cube or that the volume of a pyramid can be stated as 1/3 bh where b is the area of the base of the pyramid.

Volume of cylinder and cone. In the next step of the intervention the PSTs constructed a cylinder and cone from nets. Each of these figures had the same height and base. We initially focused on developing the formula for the volume of the cylinder. PSTs were tasked to identify similarities in the characteristics of rectangular prism and cylinder, particularly in the way in which volume was determined in the previous activity. PSTs reasoned that both the rectangular prism and cylinder have layers of equal sized representing the height. (A pyramid is an example of a shape whose layers

would not remain constant). From this observation the PSTs reasoned that once the area of the base was found they would need then to multiply this by the number of layers or height which then can be restated as the area of the base (πr^2) times the height.

 The next task was to derive the formula for the volume of a cone. Given the work from the previous day the PSTs began using the cone as a unit of measure and filling the cylinder (Figure 3). The PSTs discovered that it took the volume of three cones to fill the cylinder. This was the same pattern that emerged from their work with the relationship between a rectangular prism and pyramid. The PSTs reasoned that the volume of a cone was 1/3 bh where b is the area of the base of the cone.

Volume of a sphere. The final part of the intervention focused on the volume formula for a sphere. Unlike the previous steps in the intervention, creating a sphere from a paper net is rather difficult. Instead each group was given a half

Figure 3. Volume of Cone

sphere constructed from half of a whiffle ball. The PSTs constructed a cylinder from a paper net that had the same diameter and height as a whole whiffle ball. PSTs began their investigation by using the half sphere as a unit of measure and filling the cylinder (Figure 4). The PSTs found that it took the volume of three half spheres to fill the cylinder.

Figure 4. Volume of a sphere

Unlike the work comparing the volume of pyramids to cubes and cones to cylinders, PSTs struggled with defining the volume of a sphere in terms of the volume of cylinder. After several efforts drawing out the process of filling the cylinder PSTs described the volume of a sphere as 2/3 the volume the cylinder or 2/3 bh where b is the area of the base. An example of one group of PSTs' reasoning for this is given below.

⇒ We know it takes 3 halves of a sphere to fill 1 cylinder.

⇒ We are looking for the volume of a sphere… 1 sphere = 2 halves.

⇒ This means 1 sphere is 2 out of the 3 halves needed of the volume of a cylinder.

The finding of the formula for the volume of a sphere to be 2/3 bh or $2/3 \pi r^2 h$ proved to provide some disequilibrium as the formula presented in most mathematics textbooks for the volume of sphere is $4/3\pi r^3$. The difference between the formulas that most puzzled the PSTs was the change of 2/3 to 4/3 as this would seem to indicate that the volume of the sphere is larger than that of a cylinder. To address this issue the PSTs began to look at how the height of a sphere could be described in terms of diameter. The substitution of diameter (d) for height (h) did not completely resolve the difference in formulas. The next step was to substitute twice the radius (2r) for diameter (d), which resulted in the following algebraic manipulation to the more common formula for the volume of a sphere.

2/3 b h

$2/3 \pi r^2 h$

$2/3 \pi r^2 d$

$2/3 \pi r^2 2 r$

$2/3 \pi r^3$

Data and Data Analysis

Post-intervention was collected at two points, once immediately following the intervention and then again six weeks later. The purpose of the second post-intervention data collection was to determine if the intervention had the potential for a long term impact on PSTs' knowledge. The use of the second-post intervention data also partially addresses the limitation involved in using identical pre and post data collection instruments. At both points PSTs were asked the same questions from the pre-assessment- recall formulas for volume and identify volume relationships. In addition PSTs were also asked to discuss insights gained and connections made to their future instructional practice.

Data collected immediately after the intervention (Table 3) showed a significant improvement in the PSTs' ability to identify the formula for the volume of the four shapes. As this data was collected after three days of activities around this topic, improvements were expected. Six weeks following the in-

tervention, during which volume was not reviewed, these improvements were largely maintained. This suggests that the intervention may have a lasting impact.

Pre-assessment data suggested that the majority of PSTs incorrectly identified the relative volume of a cylinder and sphere. Nearly 90% of the PSTs responses indicated that when given a sphere and cylinder with the same height and diameter, that the sphere would have the greater volume. In the immediate and six week post intervention assessments PSTs showed a significant improvement in this comparison (Table 4), as well as a modest improvement in the comparison of the comparison of the cylinder and cone.

Data collected post-intervention also examined the way in which the PSTs perceived the lesson impacting their own knowledge. When asked to describe significant insights gained from the intervention, many PSTs spoke of how the concrete approach provided an opportunity to make sense of the volume formulas. The idea of sense making was often exhibited in terms of PSTs describing the intervention as building their understanding of how or why.

Table 3. Percent of Pre-Service Teachers Able to Correctly Identify Volume Formulas

Shape	Pre-Assessment	Immediate Post-Assessment	Post-Assessment at 6 Weeks
Prism	27%	97%*	84%*
Pyramid	9%	84%*	81%*
Cylinder	9%	87%*	94%*
Cone	9%	84%*	81%*
Sphere	6%	87%*	77%*

Statistically significant relative to pre-assessment at .05 significance level

Table 4.Correct Responses Comparing Volume

	Pre-Assessment	Post-Assessment	Post-Assessment at 6 Weeks
Cube to Pyramid	70%	97%*	97%*
Cylinder to Cone	88%	97%	100%
Cylinder to Sphere	12%	97%*	87%*

Statistically significant relative to pre-assessment at .05 significance level

The quotes below are examples of this sense making.

⇒ "Yes, I learned not only what each of the volumes were for these figures, but learned why the volumes are what they are."

⇒ "Using the models really helped me understand the meaning of the formulas so I could grasp the concepts more easily."

⇒ "I can remember how to find volume more easily now that I have worked to figure them out. No more memorization of formulas."

PSTs were also asked what elements of the intervention they would integrate into their own instruction. That is, given that most PSTs described their prior experiences in this area as focused on memorization, would this inquiry based approach impact their preferred way to present this topic to their future students. Nearly all PSTs' responses discussed using an approach that involved the use of models and student exploration. Several PSTs, including the one quoted below, made an explicit connection between the ways in which their own learning experiences differed from this intervention.

"I will definitely use the concrete activity of filling actual objects to have them solve for volume. I struggled immensely with geometry in 9th grade and would have loved to be able to actually tac-tilely learn as opposed to just jotting down formulas."

Discussion and Implication

The results of this study suggest two positive implications. First, direct interventions using an inquiry based approach may significantly impact PSTs' knowledge of previously held mathematical ideas. The PSTs in this study began with a disjointed knowledge of volume formulas. The use of concrete learning experiences provided an opportunity for the PSTs to discover connections between the volumes of the figures. Discovering these connections allowed the PSTs to derive the formulas and relationships between shapes, building conceptual knowledge of content that was prior relegated to memorization.

A second implication of this type of intervention is the potential to influence the pedagogical approaches of future middle level mathematics teachers. Providing PSTs with learning experiences that differ (in a positive manner) from their own k-12 experience may serve as an impetus for PSTs to reconsider their own approach to mathematical instruction. PSTs' post intervention responses support this implication. However, further investigation is warranted to determine the extent to which these PSTs actually integrate concrete learning experiences into their instruction when they become in-service middle grades teachers.
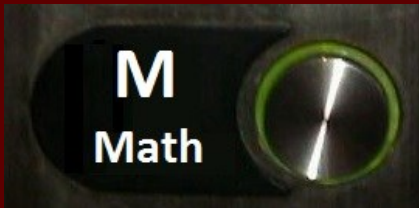
References

Ball, D. L. (1988). Unlearning to teach mathematics. *For the learning of mathematics*, 8(1), 40-48.

Ball, D. L., Thames, M. H., & Phelps, G. (2008). Content Knowledge for Teaching What Makes It Special?. *Journal of teacher education*, *59*(5), 389-407.

Boaler, J. (2000). Mathematics from another world: Traditional communities and the alienation of learners. *The Journal of Mathematical Behavior*, *18*(4), 379-397.

Borko, H., Eisenhart, M., Brown, C. A., Underhill, R. G., Jones, D., & Agard, P. C. (1992). Learning to teach hard mathematics: Do novice teachers and their instructors give up too easily? *Journal for research in mathematics education*, 194-222.

Brown, D. F., & Knowles, T. (2007). *What every middle school teacher should know*. Heinemann Educational Books.

Jones, K., Mooney, C., & Harries, T. (2002). Trainee primary teachers' knowledge of geometry for teaching. *Proceedings of the British Society for Research into Learning Mathematics*, *22*(2), 95-100.

Lortie, D. C. (1975). *Schoolteacher: A sociological study* (pp. 1-54). Chicago: University of Chicago Press.

National Governors Association Center for Best Practices & Council of Chief State School Officers. (2010). *Common Core State Standards for Mathematics.* Washington, DC: Authors.

Piaget, J. (1965). The stages of the intellectual development of the child. *Educational psychology in context: Readings for future teachers*, 98-106.

Shayer, M., Küchemann, D. E., & Wylam, H. (1976). The distribution of Piagetian stages of thinking in British middle and secondary school children. *British Journal of Educational Psychology*, *46*(2), 164-173.

About the Author

Brian Bowen, Assistant Professor
West Chester University

Brian Bowen is currently an assistant professor in the Department of Mathematics at West Chester University of Pennsylvania. His research interests include mathematics education.

Contact Information:

Brian Bowen, Ph. D.
Department of Mathematics
West Chester University
700 South High St, West
Chester, PA 19383
bbowen@wcupa.edu

Middle Level Education Month

Do You Know?

The Association for Middle Level Education has joined with the National Association of Secondary School Principals, The National Forum to Accelerate Middle-Grades Reform, and Adolescent Success to declare March the official month to focus on students ages 10 to 15 and celebrate middle level education.

Now known as Middle Level Education Month (MLEM), the key messages for the celebration are

- The importance of parents being knowledgeable about young adolescents and being actively involved in their lives;
- The understanding that healthy bodies plus healthy minds equal healthy young adolescents;
- The realization that the education young adolescents experience during this formative period of life will, in large measure, determine the future for all citizens; and
- The knowledge that every young adolescent should have the opportunity to pursue his or her dreams and aspirations, and post-secondary education should be a possibility for all.

Now You Know!

Please consider submitting your MLEM ideas for publication in our fall issue!

CALL FOR MANUSCRIPTS
Betwixt and Between:
Education for Young Adolescents

Middle level educators are cordially invited to submit work for the on-line journal, Betwixt and Between: Education for Young Adolescents.

Gather your ideas and submit them to the Editor, Deana Mack (mack@calu.edu).

Deadline for submissions: **May 15, 2014**

The Journal of the Pennsylvania Professors of Middle Level Education (PA POMLE)
and
the Pennsylvania Association for Middle Level Education (PAMLE)

How Demonstrating Care for Young Adolescents Improves Learning

Dave F. Brown

Abstract

The transition from elementary school to the middle level creates stress for many students due in part to increased academic expectations. These unprecedented transitional and developmental changes negatively affect their academic performances in ways that can be ameliorated through educators' purposeful demonstrations of care. The author of this treatise provides the rationale for demonstrating care in middle schools based on a compilation of research on young adolescents' developmental traits and the impact of care on their learning. Students describe the components of care that positively affect their attitudes toward learning. The author provides numerous strategies that teachers should utilize to demonstrate care for students, and describes the positive effects of care on students' learning.

Introduction

Debates on what effective teaching entails have occurred for years—some advocating that teachers are merely "born" perhaps implying that teaching is an art; others pinpointing an emphasis on pedagogy—teaching as a science (Stronge, 2002; Thomas & Wingert, 2010). Many educators believe that quality teachers are effective because they command both the art and science of teaching (Burden, 2003; Chisnall & Brown, 2013; Stipek, 2006). One of the components of effective teaching is demonstrating care for students—an attribute that may be construed as an "art" of teaching; yet, continues to be found as well, an essential aspect of effective pedagogy (Cameron, 2012; Hurd, 2012; Payne & Slocumb, 2011).

Learning is never as simple as presenting content and expecting students to merely regurgitate it on demand for homework, quizzes, or tests. That perspective implies that learning is merely a cognitive process. Learning is an equally social and emotional activity as much as it is a cognitive event—particularly during young adolescence (Brown & Knowles, 2007; NMSA, 2010; Sousa, 2010; Walsh, 2004). Every learning situation is punctuated by social, emotional, and cultural thoughts and experiences embedded before, during, and after learning occurs. Neuroscientist David Sousa noted, "Schools tend to be so focused on academics and testing that they are often unaware of the powerful effect that social and cultural forces have on students" (p. 16).

The emotional component of learning is especially influenced via the brain development of young adolescents. The prefrontal cortex, found in the frontal lobe of the brain, is responsible for reasoning, preplanning, making mature decisions, reflecting on behaviors, and controlling impulses: basic behaviors required for genuine learning. If young adolescents' prefrontal cortexes were completely grown, learning might be a more cognitive process. Young adolescents, instead, bring emotion into learning situations because daily experiences are handled by the emotional center of the brain—the amygdala—instead of by the slowly developing prefrontal cortex (Giedd, 2004).

Socialization challenges, as well, dominate the thinking of young adolescents as they seek emotional safety in a newfound jungle of social threats and fears that didn't exist in their elementary years (NMSA, 2010). Doda and Knowles (2007) reported the following comment from a student describing the social challenges of middle school:

I think every middle school teacher should know, or try to understand the social whirlwind of statuses that forms and so quickly hardens with every student in their [sic] place. What may seem, to a teacher, a classroom full of students peacefully

working, may be exactly the opposite to a student. It becomes a room full of pitfalls, danger signs, and safe havens situated carefully in familiar territory. Every student, boy or girl, has their [sic] place, their territory, their paths, the people they can stay with on their level. While some students may not be directly aware of it, they always have a subconscious understanding of where they fit. (p. 29)

Students whose academic skills are lacking

need the most care

The significant cognitive growth occurring during young adolescence creates a hyperawareness of social standing, abilities, and misgivings among students in middle school.

All learning, therefore, is affected by students' social and emotional states of mind. The adolescent learning experience is never a simple process of providing content and expecting immediate transfer into long-term memory. Effective middle level educators initiate learning experiences with an inviting psychological environment, created especially for young adolescents—an environment predicated on a philosophy and practice of *care*. Researchers have discovered that caring for students is an essential teacher behavior that has a critical impact on students' attitudes toward learning and their ability to learn (Caine & Caine, 1994; Cameron, 2012; Chaskin & Mendley Rauner, 1995; Sousa, 2010). Teaching is both science and art; and, effectively demonstrating care requires teachers utilizing both of these aspects (Stronge, 2002).

Young adolescents experience many developmental processes that accentuate social and emotional needs that continuously affect learning. Caring

middle level teachers are the antidote for young adolescents' challenging behavioral changes—and no other pedagogical strategies have a more striking impact on learning (Cameron, 2012; Goodman, Sutton, & Harkevy, 1995). One set of researchers discovered that caring for students " . . . promoted learning and overpowered the comparative effects of instructional methodologies" (Goodman, Sutton, & Harkevy, p. 696). Another researcher noted, "Caring did not substitute for learning; caring established an effective culture for learning" (Lipsitz, 1995, p. 666). Caring for students enhances and builds mutually respectful relationships between teachers and their students and a resultant high level of trust needed to promote cognitive growth.

It may seem to some that caring for students is a natural character trait of all teachers; but, students reveal that many teachers don't demonstrate care. Stipek (2006) reported that 64 percent of students from a 1997 Public Agenda survey proclaimed they would learn more if their teachers demonstrated care for them as people. Only 30 percent agreed that their teachers actually care about them in this manner. Students of diverse ethnic backgrounds felt less care from teachers than their European-American White classmates.

Students whose academic skills are lacking need the most care; but better students actually receive more demonstrations of care from teachers than those who struggle (Stipek, 2006). Studies with dropouts reflect the lack of concern among teachers for students who need it the most (Cameron, 2012; Hurd, 2012; Payne & Slocumb, 2011). Cameron stated in her interviews with high school dropouts,

The dominant theme to emerge from every conversation was each young person's sense that their (sic) school experiences and relationships neglected the complexity of their lives and minimized them as individuals. They felt they were not *known* as whole persons, and not being known was an overarching factor in their decisions to leave school early" (p. 7) [italics in original].

"Knowing" students is a critical aspect of care that students revealed in several research studies conducted over many years. (Brinthaupt, & Lipka, 2002; Eccles & Midgley, 1989; Goodman, Sutton, & Harkevy, 1995; Lipsitz, 1995; Stipek, 2006). Knowing students may the most essential component of care because of its role in creating mutually respectful relationships between students and teachers.

Greater Academic Expectations = More Student Stress

Middle school can be daunting at times for young adolescents because of greater academic expectations and the accompanying stress that students experience from attempting to adjust. Pressure exists for former elementary children as they hear adults commonly use the phrase, "Middle school is a critical time because we have to get students ready for high school." Many parents experience panic in believing that their children's futures will be determined by their middle school academic performances—which at some point are almost always lower than their elementary grades (Alspaugh, 1998). Other parents who are feeling as frustrated as their children secretly hope that their children don't

> ## Each teacher is responsible for eliminating stress in his or her classroom.

decide to drop out due to the challenges of middle level (Cameron, 2012). Young adolescents hear about and are keenly aware of their parents' greater expectations.

Teachers' expectations are greater, too, for students' academic behaviors such as improved abilities in organizational skills, study habits, note taking, and test taking proclivities. Year-after-year of informal surveys with middle level teachers yielded a common complaint and goal for their students: to be better organized (Brown, 2003). This is a humorous expectation considering young adolescents' under-developed prefrontal cortex, responsible for organizational abilities. Yet, encouraged by the intent to fully prepare young adolescents for future high school demands, teachers challenge middle schoolers to "get their act together before they risk failure in this class."

As students rush to their lockers, frantically try to open them in less than a minute, and attempt to grab the "right" materials for the next class, they often come up short—entering class with the wrong folders, no writing utensil, and missing their homework—lost somewhere in the morass of their lockers. Caring teachers understand the locker challenge; and grant students permission to return and rectify the problem; but many teachers pride themselves on the traditional punishment at middle school—another "F" for forgetting their materials and a lesson in the perils of acting irresponsibly.

The student traps continue as some ill-informed middle level teachers continue to "lay down the law" demonstrating their unresponsiveness to young adolescents' traits and needs.

Brown and Knowles (2007) describe other examples of insensitive teacher-behaviors such as

- "refusing to lend a pencil, protractor, or paper to students;

- using quizzes to 'catch' students who may not understand material;

- applying punishment to an entire class for one student's mistake;

- threatening students;

- making fun of students";

- inappropriately using sarcasm;

- rushing lesson delivery even though students don't comprehend principles being taught; and,

- designing lessons in which information is taught too abstractly for young adolescents. (adapted from p.93)

It is common for some middle level teachers to use unresponsive practices based on an inherent belief that "We're not an elementary school; so don't try to make us into one." Young adolescent characteristics occur when students are between the ages of 10 – 15—they need caring teachers precisely at this point of their lives, no matter which schools they attend or what they're named (elementary, middle, or junior high).

Added academic expectations occur during middle school as teachers often have less time to provide individualized assistance to struggling students due to seeing 100 – 150 students a day in short 45 minute periods. Middle level students, as a result, are likely to re-

ceive less feedback and teacher intervention than they did in their self-contained elementary classes (Eccles & Midgley, 1989; Roeser & Lau, 2002). Many teachers ultimately expect young adolescents to be proactive in asking for help; although students often lack the social skills and assertiveness to do so (Cameron, 2012; NMSA, 2010). With large teaching loads, an impersonalized learning environment, and expectations to complete unrealistic volumes of abstract content, middle level teachers often create an unprecedented level of stress for students—stress that can be partially alleviated by demonstrating care (Brinthaupt, 2013).

The issuing of grades during middle level years is the first experience that many fifth or sixth grade students have with traditional letter grades. Letter grades create a level of comparison much more public than many elementary children recognized prior to entering middle school. Two researchers discovered that middle level teachers "emphasized social comparison and competition more . . . and were less trusting and more controlling of students compared to the adolescents' elementary teachers" (Eccles & Midgley, 1989, cited

in Roeser & Lau, 2002, p. 110). Traditional grades, a loss of decision-making opportunities, and a tightly-structured daily routine make middle schools a more stressful and often uncomfortable environment—described by one student as, " . . . like a prison" (Brown & Knowles, 2007, p. 67).

Experiencing stress limits one's cognitive functioning. Stress affects students during the learning process by

- creating a sense of helplessness;
- slowing or blocking cognitive processing ability;
- reducing the amount of risk-taking during learning;
- preventing the brain from forming permanent new memories; and,
- reducing task focus and flexible problem solving abilities (Sousa, 2010).

Each teacher is responsible for eliminating stress in his or her classroom. Often traditional classroom environmental conditions such as desks arranged into rows, strictly individualized learning, and impersonal relationships among teachers and students exacerbate stress rather than eliminate it. Sousa (2010) summarized the negative effects of stressful classrooms on learning:

"Unless the perception of threat is reduced, the brain persists in doing its primary job—protecting the individual from harm. During fear, sadness, or anger, neural activity is evident in the lower brain, and the reflective, cognitive brain [prefrontal cortex] does not receive the sensory input of important items, such as the content of the day's lesson." (p. 50)

Low Self-esteem and Its Effect on Learning

The combined stress of greater academic demands, challenging content, and a focus on social rather than academic concerns are components of young adolescent age and growth that lead to a drop in self-esteem (Harter, 2005). Their growing cognitive abilities result in self-awareness and an increase in reflective processes. As young adolescents more acutely notice their social worlds, from classmates to movie stars to pop singers and to top athletes, they can't help wanting to be different. Young adolescents' introspection manufactures a self-scrutiny often accentuated by dissatisfaction with many personal traits, and naturally, negatively affecting self-esteem (Harter, 1999).

Young adolescents want to be different in many ways. They want to

- be taller
- be skinnier
- have long curly blond hair
- have straight brunette hair
- have more muscles and be able to run faster
- have straight and whiter teeth
- have larger breasts
- have nicer clothes
- shorter feet
- longer hands
- darker or lighter skin, and
- know exactly what to say when they meet that person with whom they are most enamored.

As students travel the halls throughout the day, it is unlikely that their teachers recognize or respond to their students' self-criticism. Personal criticism, however, takes it toll on self-esteem, as middle level students' lack of self-confidence affects behavior and academic performance (Brinthaupt & Lipka, 2002).

An enhanced self-esteem is a requirement for optimal effort toward learning; but without confidence, many young adolescents lose their previous academic risk-taking skills that led to elementary school successes. Research clearly indicates that risk-taking is an essential requirement for further academic growth (Brinthaupt, Lipka, & Wallace, 2007; Caine & Caine, 1994; Walsh, 2004).

Students' Perceptions of Care

Teachers may not be able to clearly articulate their philosophy of education; but their students recognize it from the first meeting and everyday following without any formal teacher declarations. Teachers' philosophies are evident in the way they speak to students, listen to students, structure the classroom, deliver lessons, and provide feedback to students' academic efforts. Every verbal and nonverbal response is an opportunity for students to recognize whether teachers care about them. Each lesson delivered and paper returned demonstrates teachers' attitudes toward students. Whether teachers care is

Genuine learning is based on building trusting relationships with students; and knowing students well is the most reliable method to developing trust.

never a mystery to their students; and teachers can't hide their feelings for students.

When asked how they know teachers care, Bosworth (1995) reported that students responded by noting that teachers

- "Walked around the room talking to everybody to see how they were doing and to answer questions;
- helped students with school work;
- noticed and inquired about changes in behavior;
- recognized different learning styles and speeds;
- sought to know students as unique human beings;
- showed respect for students through actions such as 'talking in a quiet voice or talking to you in private or alone';
- [did] a good job of explaining the content area, making sure that all students understand; and
- encourage[d] students to improve." (691-92)

Cameron's (2012) interviews with high school dropouts revealed similar needs for teacher involvement in their lives: " . . . when asked what they most liked about school, each participant responded with stories about teachers who cared well for them" (p. 12).

Interviews by Ladsen-Billings (1994) with middle level students revealed the following indications that their teacher cared about them:

- "She listens to us!
- She respects us!
- She lets us express our opinions!
- She looks us in the eye when she talks to us!
- She smiles at us!
- She speaks to us when she sees us in the hall or in the cafeteria!" (p.68)

Young adolescents frequently misinterpret tranquil conversations as hostile and unfriendly due to their reliance on the emotional center of the brain—the amygdala—to decode verbal and nonverbal messages. They also have inaccurate responses to facial expressions; often perceiving negative expressions when adults' intentions are friendlier messages. Students' recognition of teachers' nonverbal and verbal responses as an important aspect of care reveal their need for active interpersonal responses from teachers. Genuine listening is an essential trait among caring teachers.

Teachers' Responsibilities in Demonstrating Care

Middle level teachers are responsible for creating a culture of mutual respect through demonstrations of care. An essential objective for middle level teachers must be reducing the stress that young adolescents often experience due to their social and emotional developmental processes. Teachers can create a psychological safe environment by

- designing introductory exercises in which students share personal stories with one another;
- sharing appropriate personal information with students (family interests, favorite teams, etc.);
- designing collaborative learning experiences to encourage socialization and full class participation;
- playing music as students enter the room;
- preventing bullying;
- focusing on and designing mastery learning experiences instead of using traditional grading practices;
- reducing the use of punishment;
- avoiding yelling at students;
- encouraging and recognizing students' efforts; and,
- creating opportunities for all students to succeed academically—regardless of their developmental levels.

Perhaps the most significant nonverbal action by teachers that affects students' perception of care is smiling. As Sousa (2010) explains, " . . . neuroimaging studies show that the (amygdala) responds to positive emotional influences" such as smiling (p.53). In studies recording recall of words, respondents who viewed happy faces had better

About PA-POMLE

Pennsylvania Professors of Middle Level Education

Formed in 2010, PA-POMLE is a group of professors from institutions of higher education across Pennsylvania who have organized to:

- Provide a professional network to enhance the exchange of information and ideas, as well as to encourage the discussion of topics related to preparing middle level educators.

- Contribute to the development of an expanded middle level research base, and provide additional means for sharing and disseminating current research and best practices among those across Pennsylvania and beyond interested in middle level education.

- Serve actively as advocates for the middle level education movement, especially in terms of promoting middle level concepts among various publics commonly dealt with in the preparation of middle level educators.

- Share in the advocacy for the middle level movement by supporting the stated purposes and goals of the Pennsylvania Association for Middle Level Education (PAMLE).

Membership in PA-POMLE is institutional, meaning that any Pennsylvania institution of higher education with a PDE approved Middle Level Certification program is invited to join. All professors from member institutions shall be considered official members of the group.

For more membership information, contact Dr. Whitney Wesley, treasurer at WWESLEY@edinboro.edu

Employment Outlook

Employment of middle school teachers is projected to grow 12 percent from 2012 to 2022, about as fast as the average for all occupations. Growth is projected due to expected increases in enrollment combined with declines in student–teacher ratios. However, employment growth will vary by region. The median annual wage for middle school teachers was $53,430 in May 2012.
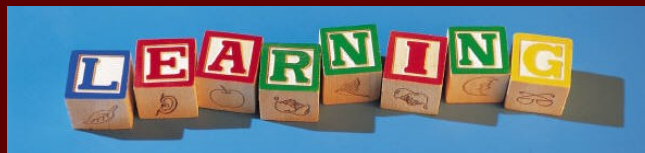
Source: Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2014-15 Edition*, Middle School Teachers, on the Internet at http://www.bls.gov/ooh/education-training-and-library/middle-school-teachers.htm (visited *January 20, 2014*).

recall and higher activity in the prefrontal cortex of the brain than those who saw "grumpy expressions." The message for middle level teachers is that students are more likely to respond favorably with teachers who smile often and demonstrate a sense of humor. Smiling eliminates stress for students while creating a more psychologically safe learning environment.

Perhaps one of the most challenging tasks for teachers is to eliminate the traditional use of competition and comparison among students. Most students spend their fifth through eighth grade years in Piaget's (1977) concrete stage of cognitive development. Cognitive growth occurs during the middle level years when students comprehend concepts and principles in a manner that transports them from concrete learning into formal operational learning. Moving into the advanced stage of formal operations requires many opportunities for reflection, and takes time and many concrete experiences for students.

Young adolescents also need teachers who recognize their learning challenges. Middle level teachers should promote academic growth by recognizing students' efforts more so than emphasizing comparisons with other students. "When schools minimize competition and differential treatment based on ability, students in middle school are less likely to feel angry and depressed, to be truant, or to show declines in self-esteem, academic values, and achievement" (Roeser, Eccles, & Sameroff, 2000, p. 462). Minimizing competition must become a valued environmental condition for middle school educators; and be reinforced throughout the building for it to have a positive impact on students' cognitive growth. The resultant effect is greater risk taking among students; which promotes cognitive growth.

The most significant action that teachers must take to show they care is developing a personal relationship with each student. Demonstrating care begins on the first day of school as teachers distribute questionnaires to each student to discover what students' interests are. Topics include personal interests, such as family, pets, and vacations; favorite subjects; and, perceived strengths and challenges as learners. The questionnaire should also provide students with an opportunity to state personal learning goals for the year. Teachers use the questionnaires throughout the first week of school in conversations with students, recognizing their personal interests and also identifying how they can help each student academically.

Caring teachers know something about their students' lives that have nothing to do with school; and they use this information in private conversations, weave it into lesson plans, and employ it frequently to encourage and motivate students. Genuine learning is based on building trusting relationships with students; and knowing students well is the most reliable method to developing trust. In Cameron's (2012) interviews with dropouts, they described the kind of relationships they wanted and needed with their teachers: " . . . all characterized the teachers they loved as ones who treated them as equals, as friends. In such a relationship, the partners give and take, reflect on each other's needs, and make adjustments in order to foster communication and growth" (p. 45).

Teacher Care Creates Genuine Learning

Middle school is a transitional period for students unlike any other. Berk described it in noting that school transitions " . . . disrupt close relationships with teachers at a time when adolescents need adult support" (Berk, 2008, p. 580). Middle level teachers also often " . . . emphasize competition during a period of heightened self-focusing; reduce decision making and choice as the desire for autonomy is increasing; and, interfere with peer networks as young people become more concerned with peer acceptance" (Berk, p. 580). The structure of middle level schools and the nature of young adolescence both cause stress for students; even though educators may not be aware of the effects of the transition and their students' ages.

Effective middle level schools are purposely designed to address young adolescents' physical, social, emotional, cognitive, and identity developmental needs. School structures and daily schedules, however, are insufficient by themselves to meet and address the highly social and emotional needs of middle level students. If middle level educators intend to promote cognitive growth, then their personal behaviors must alleviate student stress and send a message to young adolescents that their classrooms are friendly and inviting environments. The crowning effect; the most meaningful aspect of middle level schools that genuinely influence whether students will learn in each classroom is purposeful demonstrations of care by every adult in the building.

Research indicates " . . . that a strong, positive attachment to an adult, such as a teacher, is associated with more favorable development, self-esteem, and greater resilience among adolescents" (Brinthaupt, Lipka, & Wallace, 2007, p. 211). Once positive relationships develop between students and teachers, students are much more likely to develop and initiate the metacognitive strategies essential to learning—positive attitudes toward learning, favorable effort required for learning, and use of advanced cognitive strategies needed to comprehend the abstract content delivered at middle level. As Stipek (2006) declared, "When students have a secure relationship with their teachers, they are more comfortable taking risks that enhance learning—tackling challenging tasks, persisting when they run into difficulty, or asking questions when they are confused" (p. 46).

Genuine learning occurs when young adolescents move from concrete operational development into formal operations; as opposed to when they receive As on their report cards or garner above average state test scores. Teachers who ignore young adolescents' needs for caring interpersonal relationships lose a critical ingredient for real learning. Middle level educators can create a much more comfortable learning culture and environment for young adolescents by demonstrating care. Developing caring classrooms takes time; a component of teaching that educators often decry as not having enough of; but, failing to demonstrate care will reduce the opportunities for meaningful learning for an entire academic year.

Developing caring classrooms takes time

References

Alspaugh, J. W. (1998). Achievement loss associated with the transition to middle school and high school. *Journal of Educational Research*, *92*, 20-25.

Berk, L. E. (2008). *Infants, children, and adolescents* (6th ed.). Boston, MA: Pearson.

Bosworth, K. (1995). Caring for others and being cared for: Students talk about caring in school. *Phi Delta Kappan*, *76*(9), 686-93.

Brinthaupt, T. M. (2013). Should schools be in the business of enhancing student self-perceptions? In K. Roney, & R. P. Lipka (Eds.), *Middle grades curriculum: Voices and visions of the self-enhancing school* (pp. 53—70). Charlotte, NC: Information Age Publishing.

Brinthaupt, T. M., & Lipka, R. P. (Eds.) (2002). *Understanding early adolescent self and identity: Applications and interventions*. Albany, NY: State University of New York Press.

Brinthaupt, T. M., Lipka, R. P., & Wallace, M. A. (2007). Aligning student self and identity concerns with middle level practices. In S. B. Mertens, V. A. Anfara, Jr., & M. M. Caskey (Eds.), *The young adolescent and the middle school* (pp. 201-218). Charlotte, NC: Information Age Publishing.

Brown, D. F. (2003). Informal assessment of middle level teachers' perceptions of prioritized learning outcomes. Unpublished raw data. West Chester University of Pennsylvania: 2000 - 2003.

Brown, D. F., & Knowles, T. (2007). *What every middle school teacher should know* (2nd ed.). Portsmouth, NH & Westerville, OH: Heinemann & National Middle School Association.

Burden, P. R. (2003). *Classroom management: Creating a successful learning community*. Hoboken, NJ: John Wiley & Sons.

Caine, R. N., & Caine, G. (1994). *Making connections: Teaching and the human brain*. Menlo Park, CA: Addison Wesley.

Cameron, J. (2012). *Canaries reflect on the mind: Dropouts' stories of schooling*. Charlotte, NC: Information Age Publishing.

Chaskin, R. J., & Mendley Rauner, D. (1995). Youth and caring. *Phi Delta Kappan, 76*(9), 667-74.

Chisnall, K., & Brown, K. M. (2013). From external control to self-direction. In K. Roney, & R. P. Lipka (Eds.), *Middle grades curriculum: Voices and visions of the self-enhancing school* (pp. 53—70). Charlotte, NC: Information Age Publishing.

Doda, N., & Knowles, T. (2007). Listening to the voices of young adolescents. *Middle School Journal, 29* (3), 26-33.

Eccles, J. S., & Midgley, C. (1989). Stage-environment fit: Developmentally appropriate classrooms for young adolescents. In C. Ames & R. Ames (Eds.), *Research on motivation in education: Vol. 3, goals and cognitions* (pp. 13-44). New York: Academic Press.

Giedd, J. N. (2004). Structural magnetic imaging of the adolescent brain. In R. E. Dahl & L. P. Spear (Eds.), *Annals of the New York Academy of the Sciences: Vol. 1021*. *Adolescent brain development: Period of vulnerabilities and opportunities* (pp. 77 – 85). New York: The New York Academy of Sciences.

Goodman, J. F., Sutton, V., & Harkevy, I. (1995). The effectiveness of family workshops in a middle school setting: Respect and caring make a difference. *Phi Delta Kappan*, *76*(9), 694-700.

Harter, S. (1999). *The construction of self: A developmental perspective.* New York: Guildford Press.

Harter, S. (2005). Self-concepts and self-esteem, children and adolescents. In C. B. Fisher & R. M. Lerner (Eds.), *Encyclopedia of applied development science* (pp. 972-977). Thousand Oaks, CA: Sage Publications.

Hurd, E. (2012). A framework for understanding multicultural identities: An investigation of a middle level student's French-Canadian Honduran-American (Mestizo) identity. *Middle Grades Research Journal, 7(2), 111—127.*

Ladsen-Billings, G. (1994). *The dreamkeepers: Successful teachers of African American Children. San* Francisco: Jossey-Bass.

Lipsitz, J. (1995). Prologue: Why we should care about caring. *Phi Delta Kappan, 76(9), 665-666.*

National Middle School Association. (2010). *This we believe: Keys to educating young adolescents*. Westerville, OH: Author.

Payne, R. K., & Slocumb, P. D. (2011). *Boys in poverty: A framework for understanding dropout*. Bloomington, IN: Solution Tree Press.

Piaget, J. (1977). *The development of thought: Elaboration of cognitive structures*. New York: Viking.

Roeser, R. W., & Lau, S. (2002). On academic identity formation in middle school settings during early adolescence. In T. M. Brinthaupt & R. P. Lipka, (Eds.), *Understanding early adolescent self and identity: Application and interventions* (pp. 91-131). Albany, NY: State University of New York Press.

Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (2000). School as a context of early adolescents' academic and social-emotional development: A summary of research findings. *The Elementary School Journal*, *100*(5), 443-471.

Sousa, D. A. (2010). *Mind, brain & education: Neuroscience implications for the classroom*. Bloomington, IN: Solution Tree Press.

Sousa, D. A. (2011). *How the brain learns* (4th ed.). Thousand Oaks, CA: Corwin.

Stipek, D. (2006). Relationships matter. *Educational Leadership*, *64* (1), 46-49.

Stronge, J. H. (2002). *Qualities of effective teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.

Thomas, E., & Wingert, P. (2010, March 15). Why can't we get rid of failing teachers? *Newsweek* 24--33.

Walsh, D. (2004). *Why do they act that way? A survival guide to the adolescent brain for you and your teen*. New York: Free Press.

About the Author

Dave F. Brown, Professor
West Chester University

Dave F. Brown, Ed. D., is an educational researcher and consultant providing professional development for middle level teachers. The 3rd edition of his co-authored book, *What Every Middle School Teacher Should Know* is available in July 2014. Contact Information:

Dave F. Brown, Ed. D.
West Chester University
700 South High St.
West Chester, PA 19383
dbrown@wcupa.edu

In the News

About our Journal

Betwixt and Between: Education for Young Adolescents, a peer-reviewed journal, is an open access journal promoting research in the Commonwealth of Pennsylvania regarding theories and best practices in the education and development of young adolescents.   One of our goals is promote the sharing of formal and informal research related to the improvement of middle level education. Some issues may be thematic as determined by the editors in response to topics of timely interest. Submitted manuscripts should be responsive to this purpose and reflect research or analyses that inform practices in these areas.   Submissions are accepted from any source but submissions from teachers/professors/researchers working in Pennsylvania will be given priority in the acceptance and publication process.   All correspondence regarding *Betwixt and Between: Education for Young Adolescents* should be addressed to Deana Mack, Editor, mack@calu.edu.

Format Guidelines for Betwixt and Between (B & B)

All submissions must be prepared using word processing software and saved in Microsoft Word (.doc or .docx) or rich text format (RTF). Manuscripts must comply with the guidelines in the Publication Manual of the American Psychological Association, current edition. Double space all text; including quotations and references, use 1 inch margins for top and bottom, and use 1.25 inch right and left margins. All text should be Times New Roman 11-point font. Complete references should be placed at the end of the manuscript, using the "hanging indent" function. Additional article publication formatting details are listed on the PA-POMLE and PAMLE web sites.

The Review Process:

- Manuscripts are peer reviewed in the order they are received.

- Manuscripts must be received by the second Friday in August for consideration for the fall issue and by the first Friday in January for the spring issue.

- It is the policy of B&B not to return manuscripts. Authors will be notified of the receipt of the manuscript. After an initial review by the editors, those manuscripts that meet the specifications will be sent to peer reviewers. Authors will be notified if the manuscript is judged to be not appropriate for review. Following peer review and editor review, the author(s) will be notified as to the status of the manuscript. The journal editors reserve the right to make editorial changes in the manuscript.

- Authors are expected to take full responsibility for the accuracy of the content in their articles, including references, quotations, tables, and figures.

- Authors of manuscripts accepted for publication are expected to make a presentation about their article at the next PA-POMLE or PAMLE conference.

- There is no remuneration for articles accepted for publication. There is no fee for the review of the manuscript.

Manuscript Submission Guidelines:

Submission Guidelines

1. Manuscripts must be submitted electronically via email attachment to Dr. Deana Mack (mack@calu.edu).

2. Submissions must include three separate files saved in Microsoft Word (.doc or .docx) or rich text format (RTF) as follows:

   Submission:

   Cover Page – Include the information listed below in a separate file
   Manuscript Title
   Thematic Topic (if appropriate)
   Submission Date
   Author's Name
   Author's Institutional Affiliation and Address
   Author's E-mail Address
   Author's Complete Mailing Address
   Biographical Information (not to exceed 30 words per author)

   Abstract – In a separate file describe the major elements of the manuscript in 100-150 words. Do not include your name or any other identifying information in the abstract.

   Manuscript – In a separate file include the manuscript, references, and supporting charts, table, figures, and illustrations as defined above.

   - Do not include the author(s) name(s).

   - Manuscripts should be no more than 15 pages of narrative (excluding references, tables, and appendices), using the latest APA style, and double-spaced on one side of 8-1/2 by 11-inch paper with justified margins.

   - Pages should be numbered consecutively including the bibliography, but the author's name should not appear on the manuscript itself.

   - Charts or illustrative material will be accepted if space permits. Such materials must be camera-ready. Photographs can be used with proper release forms and high quality resolution.

3. The editor reserves the right to edit articles accepted for publication.

Upcoming Events

April 29, 2014
Practical Strategies that Work Conference
Sponsored by: NW Region PAMLE
Titusville Middle School
5-8 pm

May 16, 2014
Annual Spring Conference
Focus on Diversity
Sponsored by: PA-POMLE
Kutztown University

May 22, 2014
Meet and Greet
Sponsored by: SE Region PAMLE
Radnor Hotel Bar
5-7 pm

February 22-24, 2015
2015 PAMLE-PASAP Conference
The Penn Stater Conference Center
State College, PA

February 23, 2014
PA-POMLE Regular Winter Meeting
The Penn Stater Conference Center
State College, PA

Professional Development

We believe in the value of professional development as not only a means of learning but also as a means for meeting others who care about middle level students and their futures. P

lease join us at
one of our events.

Betwixt and Between
Education for Young Adolescents

VOLUME 1 ISSUE 1
SPRING 2014

ISSN 2333-0813

A Publication of the Pennsylvania Association for Middle Level Education
and Pennsylvania Professors of Middle Level Education

http://www.pamle.org
http://www.papomle.org

Betwixt and Between is available online by scanning the QR code.