



A Middle Level Education  
Research White Paper

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## **A Proposal for Establishing a National Middle Level Research Project**

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March 9, 2006



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## Introduction

The intent of this paper is to put forth a proposal for a national middle level research project. It discusses the need for such a project, prior efforts for similar types of projects, and how such a project could be implemented under the auspices of the Middle Level Education Research SIG of AERA. The opinions, views, and positions stated in this paper are those of the author and are not intended to reflect the views of AERA, MLER SIG, or NMSA.

## Statement of Problem

Over the past several decades, questions about the effectiveness of the middle level philosophy on student learning and achievement have been posed by policymakers, school systems, and researchers. The National Middle School Association's *A 21<sup>st</sup> Century Research Agenda* (1997) posited, "Does it work and how do you know?" (p. 5) or later in the same publication, "Which middle level schooling practices contribute to what types of outcomes?" (p. 7). Often the question is reframed around grade configurations; is one configuration more likely than another to produce better outcomes. The author of a recent middle level publication summarized the issue in asking, "Are middle schools producing better outcomes for young adolescents than other school types?" (Hough, 2003, p. 8). Simply stated, the problem facing middle level education in the United States is the lack of definitive, scientifically-based research that empirically demonstrates that the implementation of the "middle school philosophy" or middle school recommendations has a positive effect on student learning and achievement.

Numerous publications and organizations have put forth sets of recommendations specific to middle level



education (perhaps more so than for either elementary or secondary education). The National Middle School Association first published their position statement, *This We Believe*, in 1982 which contained a list of the essential elements of a “true” middle school. In 1989, the Carnegie Council on Adolescent Development published *Turning Points: Preparing American Youth for the 21<sup>st</sup> Century*, which included eight recommendations for improving the education of young adolescents. By 1999, the National Forum to Accelerate Middle Grades Reform, an alliance of educators, researchers, national associations, and officers of professional organizations and foundations, developed a vision statement calling for all middle schools to be academically excellent, developmentally appropriate, and socially equitable (National Forum, n.d.). Along the way, a myriad of middle level reform models, initiatives, and other projects have added more specific recommendations, principles, or design elements in an effort to improve middle level education. In addition to these recommendations, in 1997 NMSA published *A 21<sup>st</sup> Century Research Agenda*, which contained specific research questions pertinent to middle level education (NMSA, 1997). The research agenda included sample questions grouped around the six tenants in *This We Believe* that characterize developmentally responsive middle level schools (NMSA, 1995).

Given the national recommendations and a research agenda developed specifically for middle level education, some researchers believed that “...middle level education research is ahead of its time, not behind” (Hough & Irvin, 1997, p. 351). Now, nearly a decade later, I don’t believe that middle level education research is still “ahead of its time.” I believe we are woefully behind and struggling to keep our heads above water at this point. In my opinion, the criticisms put forth recently by

pundits of middle level education are justified to some degree because we, as middle level researchers, have been neglectful in providing the types of research necessary to scientifically test the effectiveness of the middle school philosophy on the outcomes of young adolescents.

The most critical issue facing middle level education today is the paucity of good, reliable research studies that have been able to demonstrate, quantitatively or qualitatively, the link between the components of the middle school philosophy and any type of teaching or learning outcome. In fact there are only a handful of rigorous and generalizable studies linking these components to outcomes in student achievement (Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997; Flowers, Mertens, & Mulhall, 1999, Lee & Smith, 1993; Lee, Smith, Perry, & Smylie, 1999; Mertens, & Flowers, 2003; Sweetland & Hoy, 2000).

In a recent review of studies focused on middle level research, Hough (2003) found several notable results that serve to illuminate the current middle level research situation. First, doctoral dissertations account for the majority of research (46%). Second, AERA is the leading organization disseminating middle level research. Third, approximately two-thirds (64%) of all studies on middle level education are qualitative in nature and have increased in number over the past twelve years. Quantitative studies, once representing almost 30 percent of the total studies, now only represent about 15 percent. Other interesting results include the finding that there has been virtually no replication of prior studies and less than 14 percent of studies were comprised of mixed method designs. While this particular review of the research may have some limitations (e.g., review only included certain journals, qualitative studies were excluded), overall it



serves as a call to the middle level research community that we have not produced the types of rigorous research necessary to answer the question, “Does the implementation of middle school principles, practices, and programs produce better outcomes for young adolescents?”

The lack of empirical and reliable studies has enabled opponents of the middle school philosophy to critically attack what have typically been regarded as “best practices, programs, and structures” for young adolescents. These attacks, while often misguided or maligning, are often accepted or seen as “valid” by the general public, policymakers, and even some educators due to our inability to counter their position with irrefutable, scientifically-based evidence.

*Research and Resources in Support of This We Believe* (Anfara, Andrews, Hough, Mertens, Mizelle, & White, 2003), the research-based companion volume to the most recent version of *This We Believe* (NMSA, 2003), contained six recommendations for the direction of future research:

- More large-scale, longitudinal studies;
- Studies combining quantitative and qualitative methodologies;
- Studies that examine more than one reform recommendation, practice, or design element;
- More studies that replicate previous methods and designs;
- Need to design and conduct more experimental studies; and
- Need to create a national database (Anfara et al., 2003).

As middle level education researchers, we need to heed these recommendations and develop more unified and focused efforts on the research that needs to be conducted to answer the critics, but more importantly, to establish a body of research that empirically tests the “middle school philosophy” in a

manner that we can ultimately say, “This we believe,” and “Here’s the research to support it.”

### **Prior Efforts to Establish a National Research Project**

In 1996, the National Middle School Association convened a task force to develop a middle level education research agenda (NMSA, 1997). In the development of the research agenda, the task force investigated three fundamental questions:

- 1) What is the most pressing middle level education question that needs to be answered?
- 2) What information and data are needed to answer question number one? and
- 3) How can the necessary information and data be collected? (NMSA, 1997)

The task force agreed that the most important question was, “What is the effect of middle level education reform initiatives on student outcomes, i.e., achievement?” (NMSA, 1997, p. 8). As far as the information and data needed to answer the question, it was agreed that a number of different constructs were needed to provide reliable results. The answer to the last question eventually led the group to propose “to undertake a comprehensive, unified study (NMSA, 1997, p. 9).

In addressing this last recommendation from the *21<sup>st</sup> Century Research Agenda*, a group of researchers informally met, in the fall of 2002, to discuss the potential for a national, middle-grades database. The outcome of this meeting was a consensus that such a task was achievable and future meetings were planned to continue the discussion and eventual planning of a national, middle-grades database. It was decided that the database would consist of both a quantitative component (surveys) and



a qualitative component (site visits). By the fall of 2003, NMSA became aware of the project and lobbied that its future development and potential funding fall within the auspices of their organization—thus becoming known as the National Middle Level Database project.

The design of the database included a stratified, random sample of 1,000 middle level schools<sup>1</sup> (20 schools in each state) nationwide that would participate in a quantitative survey of all teachers, students, administrators, and parents. The sampling frame would consist of public schools in the United States as listed in the Core of Common Data from the National Center for Education Statistics (NCES, n.d.). From the 1,000 schools, a random sample of 100 schools (2 per state) would be selected for qualitative data collection including site visits, observations, and interviews. An intentional sample of ~200 schools would also be drawn from five middle level Comprehensive School Reform (CSR) initiatives in an attempt to include a sampling of more “highly implemented” schools.

Field research associates (consisting predominantly of assistant professors and possibly graduate students) would be trained to assist in the qualitative data collection. Their role would consist of visiting 2-3 schools (out of the sample of 100) and, using standardized data collection protocols, collect qualitative data. The field research associates would be able to keep copies of all data collected at their sites for their individual research use. In addition, a copy of all qualitative data collected would be sent to the agency housing the national database to contribute to the overall database.

Following the development of the basic research design, additional meetings were

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<sup>1</sup> Middle level schools were defined as public schools containing a 7<sup>th</sup> grade and at least one contiguous grade.

planned to develop a proposal. Topics of conversation included sampling frames, survey development, rubrics for site visits, use and training of field research assistants for site visits, data collection and storage, and accessibility of data. By December 2004, a proposal had been drafted and submitted to NMSA so that they could seek external funding for the project. The MLER SIG members listed as principal investigators on the final proposal were: Gayle Andrews, Vince Anfara, David Hough, and Steve Mertens.

To date, NMSA has been unsuccessful in securing funding for the project.

### **MLER Solution**

This paper proposes that the AERA Middle Level Education Research SIG engage in a National Middle Level Research Project. The proposed project, while superficially similar to the NMSA National Middle Level Database project, is distinct in several significant ways.

First, as has been noted several times in prior meetings of this group, the MLER SIG represents the largest group of middle level education researchers in the country (approximately 170 members in 2005). Unlike NMSA or other practitioner-oriented organizations, the MLER SIG is comprised predominantly of educational researchers with varying experience, expertise, and research interests. Methodologically, the SIG consists of researchers with both qualitative and quantitative experience, as well as researchers that are able to synthesize research into larger questions or issues. Therefore, in recognizing the need for rigorous research as discussed above, it seems logical that the MLER SIG would be the most appropriate organization, possessing the necessary expertise and experience, to organize and conduct such a national project.



Second, is the issue of funding for such a large-scale project. Unlike the NMSA database project, this project would not require external funding from a government or private agency. As most of us are aware, funding for such a project would be very difficult to obtain. The success of this project relies on the commitment and expertise of the MLER SIG membership. Members will be asked to participate in and contribute to a national middle level research project. This “grassroots” approach will require SIG members to take on new responsibilities if they opt to participate.

The project design would provide SIG members with professional development focusing on specific methodological issues (e.g., classroom observations, facilitating focus groups, survey development) through annual or biennial trainings at the annual meetings of AERA or NMSA. SIG members would be provided with data collection measures and rubrics that are already developed and validated. Armed with professional training and developed measures, SIG members would select middle level schools in their communities where they could collect data.

Third, the proposed project would serve to address two of the areas delineated in the SIG’s strategic plan. This plan, developed by the SIG officers and council members in 2003, identifies five areas important to the growth and development of the MLER SIG. Two of the areas identified are relevant to the proposed project. The strategic plan calls for a symposium or summit to address some aspect of middle level education research. While there has been some conversation about potential topics, there is no general consensus about what the focus of the symposium or summit should be. In addition, for several years now the MLER SIG officers and council members have considered the possibility of conducting a conference-within-a-conference prior to the annual AERA meetings. Presenters at the

annual AERA meetings may have up to 20 minutes to discuss a research project or findings and very little, if any, time to engage in serious conversation with audience members about the research. Most presenters do not feel that they can do justice to their research or have the opportunity to discuss their research with their peers in such a limited time frame. Therefore, the SIG has contemplated sponsoring the conference-within-a-conference for several years. Unfortunately the impetus for such a project has been absent — until now.

As an example, if the SIG sponsored the conference-within-a-conference, it could be used as a means to provide training or develop expertise for SIG members interested in participating in the national middle level research project. The conference-within-a-conference idea could actually occur twice within a year—once at the annual AERA meetings (in the spring) and once at the annual NMSA conference (in the fall). In this way, novice researchers or those feeling the need to develop particular methodological or analytical skills would have two opportunities a year to attend professional development workshops tailored toward middle level research. These biennial workshops might consist of trainings in classroom observations, face-to-face interviewing techniques, data coding, software applications, survey development, etc.

Another area identified by the SIG officers and council members as an area of growth and development was the facilitation of research projects—national in scope and impact—which would involve multiple SIG members. The national middle level research project would accomplish this task. The project would be open to any SIG member wishing to participate. It is hoped that such a project would also attract new SIG members, those that are already established researchers, as well as new and



emerging researchers. The project is “national” in scope, consisting of data collection from middle level schools across the country. The impact of this project is promising, however, it is premature to estimate the types and degrees of impact such a project would have.

Fourth, there is clearly a need for a national middle level research project culminating in the development of a national, middle level database comprised of both quantitative and qualitative data from a large, representative sample of middle grade schools across the county. Armed with such a database, middle level researchers, both established and emerging, would have access to reliable and systematic data from which to conduct research on the effectiveness of what has come to be known as the “middle level philosophy.”

Lastly, beginning in 2002, the National Forum to Accelerate Middle Grades Education established the State Schools-to-Watch program, a derivation of the successful National Schools-to-Watch program. Currently, there are nearly 60 schools in 11 states participating in the State Schools-to-Watch program with more to be added in 2006 and subsequent years (see [www.schoolstowatch.org/](http://www.schoolstowatch.org/)). The National Forum has recently become concerned about research to support and demonstrate the effectiveness of the program.

Unfortunately, no systematic or consistent data has been collected from any of these schools over this four-year period. As part of the data collection for the National Middle Level Research Project, we could intentionally sample the schools-to-watch across the 11 states. These schools would add to our national project, and research on this sub-sample would provide the National Forum and individual state Schools-to-Watch teams with the data they require.

A national middle level research project could serve as the catalyst to bring these components or needs together in a

systematic and productive manner. It could provide the medium whereby researchers, trained through the biennial conference-within-a-conference workshops, utilizing reliable and established protocols and measures, could systematically and reliably collect quantitative and qualitative data from a national “sample” of middle level schools, including an intentional sample of State Schools-to-Watch schools. These data could then become part of the national project, available to researchers to conduct rigorous research studies utilizing a variety of methodologies including quantitative, qualitative, mixed methods, and meta-analyses.

### **Benefits of Participation**

A National Middle Level Research Project would provide numerous benefits to SIG members. Some of these have already been mentioned in the prior section. SIG members will be able to participate in the implementation of a project of national-scope that will be designed by a team of experienced SIG researchers. While the research design and timeline for a project of this scale has yet to be defined, in order to be rigorous and scientifically-based, it would need to consist of various components, including qualitative, quantitative, and mixed methods.

Through yearly or biennial conferences, SIG members would be provided with the training and professional development to develop or refine their methodological skills. This would enable middle level researchers to become more familiar with particular methodologies (e.g., focus groups, survey development) and develop expertise in that area by participating in the data collection from a national sample of middle level schools.

Such an approach would address a parallel issue, “How, and to what degree, are we training the next generation of middle



level researchers?" Where will these researchers come from and who will train them? How do we ensure that the promising research of the past 30 years will continue into the future? The answer is that there needs to be a concerted effort to develop and train young researchers and graduate students in rigorous research methodologies and procedures.

Participants in the SIG project will be responsible for collecting reliable and valid data, using identical data collection protocols, and providing a copy of their data to the SIG project management team. SIG researchers participating in the project will then have access to the "bank" of national data being collected by their colleagues throughout the country.

SIG researchers participating in the project will have several outlets for peer-review publications. First, research articles derived from the project could be submitted for publication in a special volume of the *Handbook of Research in Middle Level Education*. The Handbook series (currently five volumes) was initiated by Vince Anfara, series editor, in 2001 and is sponsored by the Middle Level Education Research SIG. A second option is a possibility that the SIG will be asked to consider adoption of a peer-review, middle level research journal at the April 2006 SIG Business Meeting. If the SIG votes to adopt and sponsor such a journal, the research from the National Middle Level Research Project would have a tailor-made outlet for dissemination. In addition, it would be possible to have a yearly theme issue devoted to presenting 4-5 research articles from the project. Additionally, utilizing the research results from their data collection, project participants will be able to submit peer-review papers for presentation at the annual AERA meetings. It would also be possible for the SIG to sponsor a symposium containing several papers discussing the data

collection and/or analyses of data from the national middle level research project.

### **MLER Implementation**

The implementation of such a national scale project would require several stages. Initially, the concept would need to be presented and discussed with the MLER SIG membership. The membership would then need to decide if there is sufficient interest in pursuing the project. Assuming that the SIG were to decide to move forward, it is feasible to imagine that a committee would be created to investigate next steps and other courses of action. One of the more pressing issues would be the planning of the conference-within-a-conference for the annual AERA meetings in Chicago in 2007. Planning for such an event would need to begin by late spring 2006.

NMSA's *21<sup>st</sup> Century Research Agenda* (1997) reminds us that several critical elements are necessary in order to embark on such an endeavor. The most essential of these are a plan (i.e., research design), adequate funding, and a suitably large body of researchers to actually implement the plan. Funding is obviously a major issue for a project of this scope and was a topic of central concern in the development of the proposal for NMSA's National Middle Level Database project. It is the general consensus of the group of researchers that worked on that proposal that if we wait until funding is available, we'll be waiting a very long time. In fact, the elements and ideas put forth in this paper assume that funding will not be available and that middle level researchers will be responsible, at least initially, for developing methodologically sound data collection strategies. Perhaps in a few years, when the project is more established, we will be able to attract the attention of agencies or foundations willing to help fund the project. For now, I believe that we need to be realistic and accept the



fact that funding is not available. Given that assumption, the MLER SIG needs to decide if, as the largest group of middle level education researchers in the country, they are willing and committed to initiate this project.

In proposing such a Herculean task, it is important to recognize that a project such as this will take years to implement and perhaps many more years before the data collected is available for analyses by middle level researchers. There are many logistical and organizational details that still need to be discussed and resolved. Questions such as, “How will the data be stored,” “Where will it be stored,” and “How will researchers gain ready access to the data,” are not answerable at this time. However, the potential benefits, both intrinsic and extrinsic, are monumental and will provide middle level researchers with the ability to finally answer the question, “Does it work?”

## Summary

In 1997, Hough and Irvin stated, “Contrary to popular belief, middle level education research is ahead of its time, not behind” (Hough & Irvin, 1997, p. 351). While that may have been the case in 1997, it is not the case now. Middle level education research is woefully behind in producing the types of scientific, rigorous studies necessary to measure the effectiveness of the middle school philosophy in improving the educational settings, practices, and programs for young adolescents of the 21<sup>st</sup> century. In order for middle level education research to once again get “ahead of its time,” we need to focus our attention and efforts on a national middle level research project. The organization best suited to engage in a national project is the Middle Level Education Research SIG.



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