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The Need for Large-Scale, Longitudinal Empirical Studies in Middle Level Education Research

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Abstract

This essay describes and discusses the ongoing need for large-scale, longitudinal, empirical research studies focused on middle grades education. After a statement of the problem and concerns, the essay describes and critiques several prior middle grades efforts and research studies. Recommendations for future research efforts to inform policy decisions are provided, including roles for the Middle Level Education Research Special Interest Group (MLER SIG) of the American Educational Research Association (AERA) and other national organizations.

The purpose of this essay is to describe and explain the ongoing need for large-scale, longitudinal empirical research studies focused on middle grades education. To begin, we offer a statement of the problem and call upon stakeholders to address the problem. Then, we describe and critique prior research efforts and national middle grades studies. To conclude, we offer a set of recommendations including roles for the Middle Level Education Research Special Interest Group (MLER SIG) of the American Educational Research Association (AERA) and other national organizations.

The Problem

Central to any discipline—including middle grades education—is a robust research base. The centrality of research is undeniable because research findings have the ability to effect practice and policy. Research can also be instrumental in uncovering facets or nuances of an issue, shaping perceptions of a specific topic, gathering evidence in support of or in opposition to a particular position or idea, and affecting responses and reactions to identified issues. In middle grades education, research can influence views of middle grades policies, programs, and practices. The problem is middle grades education needs more research, particularly large-scale, longitudinal, empirical studies, to expand and deepen the middle grades knowledge base.

For decades, middle grades advocates, researchers, and associations have called for more research, especially large-scale, longitudinal research studies (e.g., Anfara Andrews, Hough, Mertens, Mizelle, & White., 2003; Hough, 2003; Hough & Irvin, 1997; Mertens, 2006; National Middle School Association (NMSA), 1997; Van Zandt & Totten, 1995). Following their analyses of “large and nationally representative data sets,” Mac Iver and Epstein (1993) described the value of “converging evidence” regarding middle grades programs and practices on students (pp. 519-520). They recommended that “data collected by middle grades researchers over the next decade should expressly address the question, How do particular practices improve education for middle grades students?” (p. 530). Ten years later, Anfara et al. reported the existence of few large-scale, longitudinal middle grades research studies. They asserted the importance of replication studies using equivalent research design, data collection methods, and analyses to investigate middle grades practices for validating prior research findings and strengthening the knowledge base. In 2010, Caskey and colleagues once again called for more large-scale, longitudinal studies to provide evidence of the effectiveness of middle grades programs and practices.

Moreover, middle grades research is a young discipline with a relatively shallow knowledge base. Because of its relative youth, the middle grades is often overlooked or not recognized as a

distinct field of education. Likewise, middle grades research is not often funded at the local, state, or national level by public or private funders. This lack of funding is particularly troubling given the scrutiny of students in the middle grades. Middle grades students are among the most—if not the most—assessed age group, and this will continue with the new Every Student Succeeds Act (ESSA, 2015). Yet, these students may not have access to teachers who have been specifically prepared or certified (licensed) to teach them. Without attention and funding, middle grades researchers cannot adequately examine the middle grades philosophy, teaching practices, organizational structures, programming, and other related issues.

The Need

We contend that the need for more large-scale, longitudinal empirical research studies focused on middle grades education has not abated. In fact, the often shifting context for educating young adolescents in middle grades schools demands more empirical research—not less. For this reason, we call on all middle grades stakeholders—teachers, administrators, policy makers, researchers, national research groups, partner organizations, and others—to advocate intentionally for more research. There are roles for all stakeholders in realizing an increase in large-scale, longitudinal middle-grades focused research studies. For example, teachers, administrators, and school districts can provide access to schools and students for researchers. Policy makers can influence the research agenda by identifying areas of discussion, decisions, and focus at both local and national levels. Researchers and national research groups can lend expertise in study design and participate in the implementation of research studies. Partner organizations can rally their affiliates and members to communicate the needs for research as well as convene interested parties for the purposes of discussing research results and their impact on policy. Indeed, stakeholders play a vitally important role in middle grades researchers' ability to conduct any large-scale, longitudinal empirical research studies.

Prior Efforts and National Studies

Over the past several decades, there have been numerous national recommendations for improving or reforming middle grades education. Seminal publications include the National Middle School Association's vision

statement, *This We Believe* (1982), *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Council on Adolescent Development, 1989), *Turning Points 2000: Educating Adolescents in the 21st Century* (Jackson & Davis, 2000), *Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform* (National Association of Secondary School Principals, 2006), and the National Forum to Accelerate Middle-Grades Reform's *Mission and Vision* (2014a) for high-performing schools. The recommendations share many commonalities including: (a) developmentally appropriate curriculum, instruction, and assessment practices; (b) properly preparing educators to work with young adolescents; (c) creating small, personalized learning environments; (d) implementing democratic decision-making and leadership; (e) ensuring the health, wellness, and safety of young adolescents; and (f) involving parents, families and communities in the educational experience. To address these recommendations, middle grades education researchers and organizations have engaged in efforts to develop national research agendas, generate large-scale, longitudinal studies, and conduct research examining multiple components of middle grades education (e.g., interdisciplinary teaming, common planning time, teacher certification or licensure).

NMSA's 21st Century Research Agenda (1997)

In 1995, NMSA reissued their vision statement, *This We Believe: Developmentally Responsive Middle Level Schools*, which “further clarified the middle level philosophy” (NMSA, 1997, p. 2). The revised statement cited 12 characteristics delineating “a vision of what developmentally responsive middle level schools could and should be” (NMSA, 1995, p. 10), including qualified and committed educators, shared vision, high expectations for all, adult advocates, family/community partnerships, and a positive, supportive school climate. When these characteristics are in place, NMSA believed that schools serving young adolescents would be able to provide curriculum that is challenging, relevant, integrative, and exploratory; varied teaching, learning, and assessment practices; flexible organizational structures; and programs and services that foster health, wellness, safety, guidance, and support (NMSA, 1995). The intent of the *21st Century Research Agenda* was to “develop and promote a middle level research

agenda that would foster awareness, describe situations, clarify and define concepts and issues, extend current knowledge, test assumptions, and contribute to understandings of how research is translated into practice in middle level classrooms” (NMSA, 1997, iii).

In 1996, NMSA convened a Research Agenda Task Force to initiate discussions leading toward the development of a comprehensive middle grades education research agenda. The work of the task force focused on three questions:

1. What is the most pressing middle level education question that needs to be answered (i.e., do middle school work)?
2. What information and data are needed to answer the first question?
3. How can the necessary information and data be collected?

The task force generated an initial set of questions and issues and then solicited input from members of the NMSA’s Research Committee, the MLER SIG, and at working sessions scheduled during the annual NMSA conference. The final set of research questions contained in the *21st Century Research Agenda* reflected “the collective wisdom of scholars and researchers from diverse areas of expertise across geographic, ethnic, gender, and cultural boundaries” (NMSA, 1997, pp. 8-9).

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, p. 9).

A potential criticism of NMSA’s *A 21st Century Research Agenda* is that it was structured around and focused on the 12 characteristics of *This We Believe: Developmentally Responsive Middle Level Schools* (NMSA, 1995). While other sets of national recommendations (e.g., *Turning Points: Preparing American Youth for the 21st Century*) were available at the time of publication, they were not included in framing the context of the research agenda.

National Middle Grades Database Project (2003)

In addressing the last recommendation from the *21st Century Research Agenda*—to undertake a comprehensive, unified study—a group of researchers met informally 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 fall of 2003, NMSA became aware of the project and lobbied that its future development and potential funding was within the auspices of their organization—thus becoming known as the National Middle Grades Database project.

The design of the database included a stratified, random sample of 1,000 middle grades schools (20 schools in each state) nationwide that would participate in quantitative surveys of all teachers, students, administrators, and parents. The sampling frame would consist of public schools in the US 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 (two per state) would be selected for qualitative data collection including site visits, observations, and interviews. An intentional sample of approximately 200 schools would also be drawn from five middle grades 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 two to three schools (from the sample of 100) and, using standardized data collection protocols, gather qualitative data. The field research associates would be able to keep copies of all data collected at their schools 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 planned to develop a proposal. Topics of conversation included sampling frames, survey development, observation protocols 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. However, efforts to secure funding for this project were unsuccessful.

CPRD Studies (1992-2006)

Several large-scale quantitative studies examining the components of the middle school concept and their impact on teacher and student outcomes have been conducted by the Center for Prevention Research and Development (CPRD) at the University of Illinois. These studies resulted from CPRD's role as a research and evaluation partner in numerous regional and national middle school reform initiatives from 1992 through 2006, including: Association of Illinois Middle Level Schools; Michigan Middle Start Initiative funded by the W. K. Kellogg Foundation; Mid South Middle Start Initiative funded by the Foundation for the Mid South; and National Turning Points Network.

A cornerstone of CPRD's work is the *School Improvement Self-Study*, a data collection system consisting of a set of survey measures designed specifically for middle grades schools that have been validated (Flowers, Hesson-McInnis, Bishop, & Mertens, 2007; Hesson-McInnis, Bishop, Mertens, & Flowers, 2007; Mertens, Flowers, Hesson-McInnis, & Bishop, 2006, 2007).

In a 1998 study, CPRD researchers examined data from 155 schools and found improved reading and math achievement among schools who had implemented best middle grades teaching practices and learning environments (Mertens, Flowers, & Mulhall, 1998). The 1998 study further showed positive improvements in student adjustment, behavior, self-esteem, and academic efficacy.

In another set of studies examining interdisciplinary teaming and common planning time in 70 to 135 schools, CPRD researchers

demonstrated that teachers in schools that were engaged in high levels of common planning time reported statistically higher implementation of both interdisciplinary team practices and classroom practices (Flowers, Mertens, & Mulhall, 2000a, 2000b; Mertens & Flowers, 2003, 2006). Further, teachers with higher levels of common planning time were found to report higher levels of job satisfaction and more collegial and productive interactions with their colleagues (Flowers, Mertens, & Mulhall, 1999). Additionally, high levels of common planning time were found to have positive impact on student achievement, particularly among schools with higher percentages of at-risk students (Flowers et al., 1999, Mertens & Flowers, 2003, 2006; Mertens et al., 1998) and a positive impact on student adjustment such as lower levels of depression and fewer behavior problems (Mertens et al., 1998).

CPRD also examined teacher certification in 134 schools and found that teachers with middle grades-certification or elementary certification were more likely to engage in both team practices and classroom instructional practices that are effective for young adolescents (Mertens, Flowers, & Mulhall, 2002). Further, in schools with high levels of teaming and common planning time, middle grades certified teachers reported the highest level of effective team and classroom practices (Mertens et al.).

Some limitations of the CPRD studies should be noted. First, the majority of the data is self-reported through surveys; at the time, project funding did not include opportunities to collect interview, observational, or other types of qualitative data. Second, the data are selective as they were collected primarily through large-scale, statewide or regional projects. The study samples were nonrandom as schools were actively solicited to join statewide or regional projects.

MLER SIG National Common Planning Time Project (2006-2012)

In 2006, the MLER-SIG initiated a National Middle Grades Research Program with three specific aims: (a) design collaborative research projects; (b) support the development of middle grades researchers; and (c) develop a national database of middle grades education research. After considerable discussion, the program leaders launched the National Project on Common Planning Time. The leadership

selected common planning time (CPT)—a regularly scheduled time for teacher teams to plan within the instructional day—as the topic for a national-level study. While researchers had already identified benefits of CPT for students and teachers, additional research was needed about how teachers use CPT. Following the decision to study CPT, the project leaders developed training materials and research protocols for the project.

This two-phase project explored teachers' understanding of CPT, CPT activities, teacher preparation and professional development concerning CPT, and the benefits and barriers associated with CPT. During Phase I (2007-2009), project researchers used standardized protocols to observe CPT meetings and interview the teachers who participated in CPT meetings. Then, researchers submitted their qualitative data to the national database, which includes data from 29 schools in 13 states. In Phase II (2009-2012), project researchers used the online CPT Teacher Survey—developed from constructs of the CPRD's *School Improvement Self-Study* (Mertens et al., 2006)—to examine teachers' perceptions of CPT, CPT activities, decision-making practices of teams, and interactions of team members during CPT. Data from more than 500 surveys was gathered from 23 schools in 7 states.

CPT researchers and project leaders reported findings at the annual AERA meetings and the Association for Middle Level Education (AMLE) as well as in publications of the *Educational Researcher* (Mertens, Anfara, Flowers, & Caskey, 2011), *Middle School Journal* (Mertens, Flowers, Anfara, & Caskey, 2010), and *Research in Middle Level Education Online* (Cook & Faulkner, 2010). The project leaders also co-edited *Common Planning Time in Middle Level Schools: Research Studies from the MLER SIG's National Project* (Mertens, Anfara, Caskey, & Flowers, 2012)—a volume in The Handbook of Research in Middle Level Education series—to describe the project, review the research literature, knowledge base, detail the methods, and report findings from state-level studies and the national database.

The CPT project was a first attempt by the MLER SIG to initiate a quasi-national project that SIG members could participate in and benefit from. The project has two major limitations. First, the study samples for both phases were smaller than anticipated and the

findings generated from studies utilizing these samples may not be as generalizable as initially anticipated. Second, due to financial and other limitations, the project was designed as a cross-sectional study. A longitudinal research design would have provided more detailed and reliable data concerning the uses and implementation of CPT.

Federally-Funded Studies

In 2010, the U.S. Department of Education (USDE) introduced a groundbreaking grant program called the Investing in Innovation Fund or i3. The program is unique because it was designed to develop, test, validate, and scale-up promising innovations to our country's K-12 educational challenges (U.S. Department of Education, n.d.). It is a competitive grant program that provides funding to local educational agencies and nonprofit organizations, but they must have an established record of improving student achievement and they must partner with the private sector or philanthropic community in order to be funded. Additionally, i3 grantees are also required to design and carry out rigorous evaluation studies of their projects that are aligned with the What Works Clearinghouse standards for educational research (What Works Clearinghouse, 2014). As such, the USDE required studies such as randomized controlled trials (RCTs) and quasi-experimental designs with large samples capable of producing strong evidence of effectiveness. The USDE provided support to evaluators in this endeavor through technical assistance advisors, trainings, and documentation as evaluators designed their impact studies, implementation studies, statistical analysis plans, and reported the outcomes of their i3 projects. The i3 program changed the landscape of education research, raising the bar for educational research for the field.

Several i3 grants were awarded to projects with a specific focus on the middle grades, including two grants to the National Forum to Accelerate Middle-Grades Reform. The Forum's grants include the i3 *Schools to Watch Transformation Network Project* (2010-2015) focused on whole school middle-grades reform and the i3 *Middle-Grades Leadership Development Project* (2013-2017) designed to strengthen the leadership skills and behaviors of principals, leadership teams, and teacher leaders in middle-grades schools. To date, the i3 2010 STW Project is completed and findings from the evaluation

showed that the 18 project schools in three states who implemented whole school reforms made significant improvements including school cultures that support high expectations; shared leadership and decision making; professional learning environments; and a sense of shared accountability (Flowers, Begum, Carpenter, Mulhall, & Poes, 2014). Among the highest implemented schools in the i3 STW Project, they were successful in making substantial improvements in both middle-grades programs and practices (STW criteria, collaboration, instructional practices) and math achievement during the grant period (Flowers, Begum, Carpenter, & Mulhall, 2015).

Although some individual i3 projects have reported the results of their evaluation, to date, a summary of the meta-analysis results across the first round of all i3 projects funded in 2010 has not been released. Therefore, at this time, there is limited reporting of research findings from the i3 projects. It is anticipated that the meta-analysis results will be available later this year or in early 2017.

Other Efforts

Other large-scale research efforts have also focused on middle grades education. In particular, the Balfanz studies and the Schools to Watch studies warrant attention.

Balfanz studies. Dr. Robert Balfanz at Johns Hopkins University and his colleagues conducted an impactful, large-scale, longitudinal study from 1996 to 2004 to track the outcomes of students beginning in sixth grade through their high school graduation. Specifically, by tracking 13,000 public school students in Philadelphia, Balfanz and his colleagues found that the majority of students who do not graduate from high school displayed warning indicators far before they dropped out, many appearing as early as sixth grade (Balfanz, Herzog, & Mac Iver, 2007; Neild, Balfanz, & Herzog, 2007). The early warning indicators included: attending school less than 80% of the time; poor classroom behavior; a failing grade in mathematics class; and a failing grade in English/language arts/reading class. When at-risk middle school students demonstrated any of these four indicators, Balfanz and his colleagues found that they had nearly a 75% chance of dropping out of high school, with that likelihood increasing among students who displayed more than one indicator (Balfanz et al., 2007; Neild et

al.). The results of this research suggested that middle grades schools could use these factors to identify and support struggling students with interventions to assist both their academic and behavioral outcomes (Neild et al.).

The Balfanz studies, while utilizing a strong and reliable research methodology, are limited in that the data were collected from urban schools in Philadelphia, and later in Boston and Indianapolis. Subsequent studies in urban schools in larger cities such as Chicago, New York, and Los Angeles could strengthen the results of the existing studies.

School to Watch studies. The Schools to Watch (STW) program was launched by the National Forum to Accelerate Middle-Grades Reform in 1999. Through the STW program, the National Forum identifies schools across the US that are on a trajectory of meeting the Forum's criteria for high performance (National Forum to Accelerate Middle-Grades Reform, 2014b). The program currently includes nearly 400 schools across 18 states that have been designated as STW schools. Until recently, research on STW schools has been limited to individual states or selective combinations of states. Cook, Faulkner, and Kinne (2009) conducted a statewide study of Kentucky middle grade schools which included 10 STW-designated schools. In a dissertation study, Falbe (2014) compared achievement test data from STW schools in four states (Colorado, New York, Ohio, and Virginia). In 2016, Mertens and Flowers conducted a national study comparing the demographic characteristics of 166 schools that were designated as STW schools ($n = 131$) versus those that applied but were not designated ($n = 35$) in 15 of the 18 states currently implementing the STW program. To date, this is the only large-scale, quasi-national analysis of the STW schools; however, future research efforts with the large-scale, longitudinal sample are forthcoming.

Although the STW initiative has been underway for more than a decade, little research has examined the characteristics, attributes, or outcomes of the national sample of STW schools. As noted earlier, existing studies have focused on selected regions or states and the one national study is limited to a descriptive analysis of a sample of the STW schools, not the entire network. Studies focusing on the national sample of STW schools are critically needed as

such studies have the potential to impact regional, state, and federal education policy.

NCES' Middle Grades Longitudinal Study 2017 (2018-2020)

In 2012, the National Center for Education Statistics (NCES) decided to initiate a new national, longitudinal study focusing on middle grades education. The Middle Grades Longitudinal Study of 2017–18 (MGLS:2017) will be the first study to follow a nationally-representative sample of students as they enter and move through the middle grades (NCES, n.d.). The data collected through repeated measures of key constructs will provide a rich descriptive picture of the experiences and lives of all students during these critical years and will allow researchers to examine associations between contextual factors and student outcomes. Because mathematics and literacy skills are important for preparing students for high school and are linked with later education and career opportunities, the study is placing a focus on student growth in these areas and student instruction. The MGLS:2017 will also have an emphasis on inclusiveness by oversampling students in several of the Individuals with Disabilities Education (IDEA) categories (NCES). The first round of data collection will begin in fall 2018 with sixth graders and NCES expects that the first round of MGLS:2017 data will be available to middle grades researchers starting in 2020.

MLER SIG's Research Agenda Project (2016)

Prior to the 2015 annual meetings of the AERA, 22 MLER SIG members met to discuss the need for and the development of a new middle grades education research agenda. After reviewing NMSA's 1997 *A 21st Century Research Agenda*, the group discussed and identified the various components currently deemed important to middle grades education and the education of young adolescents. In discussing and reaching consensus concerning the specific research areas, it was agreed that these topics and components would be the focus of collaborative research efforts for the next five years; after which, the research agenda would be revisited and updated as necessary. Nine work groups and co-leaders for each group were established after this inaugural meeting:

1. Educator development (teacher pre-service & professional development, administrators, and teachers as leaders);
2. Organizational structures that support learning;
3. Cultural responsiveness (including diversity, social justice, equity, etc.);
4. Special populations;
5. Developmental aspects of young adolescents;
6. Social-emotional learning (climate and culture);
7. Digital technologies;
8. Pedagogy (curriculum, instruction, and assessment); and
9. Vision statement (overview and purpose, guidelines and recommendations for large-scale empirical studies).

In April 2015, the MLER SIG membership was notified about the new project and invited to participate by selecting one of the work groups of most interest. Work groups were then charged with initiating a literature review of their topic/issue to identify current research efforts, gaps in the research literature, and research questions to address the gaps. Subsequent meetings were held at the annual AMLE conference in 2015 (Columbus, OH) and the annual AERA meetings in 2016 (Washington, DC). The final MLER SIG research agenda will be presented at an invited research session at the 2016 annual AMLE conference in Austin, TX.

Recommendations

Research and Resources in Support of This We Believe (Caskey et al., 2010), the research-based companion volume to AMLE's vision statement, *This We Believe* (NMSA, 2010), contained seven recommendations for the direction of future research:

1. More large-scale, longitudinal studies;
2. Studies combining quantitative and qualitative methodologies;
3. Studies that examine more than one reform recommendation, practice, or design element;
4. More studies that replicate previous methods and designs;
5. Need to design and conduct more experimental studies;

6. Need to create a national database; and
7. Need to engage in collaborative research initiatives (Caskey et al.).

Over the past decade, the MLER SIG has addressed many of these recommendations. From 2006-2012, the SIG conducted a national research study focused on the implementation and use of common planning time in middle grades schools. This large-scale, mixed-methods study involved over 80 SIG members, produced numerous national presentations and publications, and created a quasi-national database of various factors related to common planning time in middle grades schools. The SIG has demonstrated its capacity to design and implement large-scale empirical research studies and to disseminate results from studies through national presentations and publications. With the publication of a new middle grades research agenda, an immediate next step for the SIG could be to initiate another national research project focusing on one or more areas of concern identified in the new agenda.

The types of research efforts we envision—and are in need of—can only be realized through the efforts of all stakeholders, including teachers, administrators, policy makers, researchers, national research groups, partner organizations, and others, playing their role to address the issue. While many avenues of stakeholder advocacy exist, we offer the following suggestions for teachers, administrators, policy makers, and researchers: (a) read, review, and reflect critically on research findings; (b) apply research findings to inform policies, programs, and practices; (c) encourage the dissemination, distillation and discussion of research reports at state and local school board meetings; (d) accept invitations from middle grades researchers to participate in research studies at the state, district, school, and classroom level; and (e) fund research initiatives that focus on the middle grades, especially, the education of young adolescents.

For national research groups and partner organizations, we recommend the continued development of strong relationships between these organizations. We also suggest that to move forward, research groups will need the intentional advocacy of partner organizations such as middle grades organizations. Over the past decade, the SIG has made a concerted effort to foster and develop meaningful relationships

with other middle grades organizations, including the Association for Middle Level Education, the National Forum to Accelerate Middle-Grades Reform, and the National Association of Professors of Middle Level Education. With the recent announcement and development of the National Center for Education Statistics' Middle Grades Longitudinal Study, the SIG has collaborated with NCES staff in providing recommendations and advice on the implementation of this first ever national study of the middle grades. Through these partnerships and collaborations, we want to not only conduct more large-scale empirical studies, but to disseminate the results to larger audiences, and ultimately, to impact policy discussions and decisions.

As middle grades education researchers, we especially need to heed the above recommendations and develop, conduct, and disseminate more large-scale, longitudinal empirical research studies. Research published from such efforts will provide the necessary foundations to impact and influence policy decisions at the local, state, and federal level. For too long, educational researchers, especially those in middle grades education research, have had little impact on the development and implementation of educational policy. The efforts proposed in the paper would provide the research basis needed to influence educational policies.

Summary

In 1997, Hough and Irvin (1997) suggested, "Contrary to popular belief, middle level education research is ahead of its time, not behind" (p. 351). We contend that this is no longer the case. Despite the recent development of a number of large-scale studies and research efforts, middle grades education research remains woefully behind in producing the types of large-scale, longitudinal, scientific, and 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 21st century. For middle grades education research to once again get "ahead of its time," we need to focus our attention and efforts on more large-scale, longitudinal, empirical research efforts.

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