This study sought to demonstrate that Michigan middle-grades schools can become more effective learning environments for young adolescents. A total of 224 Michigan schools participated in a teacher and administrator survey, 101 of which also conducted student surveys, reaching over 45,600 students in the fifth to ninth grades. Part 1, "Early Adolescence - A Period of Change," includes results on family situations; health and safety concerns; and school expectations, achievement, and support. Part 2, "Adolescent Learning and Development - The School's Role," includes results detailing the current Michigan learning environment, including teaching staff experience, training, and practices; and available instructional, parental, and community resources to support learning. Part 3, "Starting Again in the Middle - A Work in Progress," summarizes the study's findings, makes recommendations, and delineates key features of effective middle-grades schools. Key findings were: (1) too many young adolescents lose ground during the middle grades, as evidenced by widening achievement gaps between high and low achievers, declining school-based support to address barriers associated with poverty, declining student self-expectations, significant unsupervised time after school, widespread experimentation with drugs, and few opportunities to participate in alternatives to risky behavior; (2) when middle-grades schools are given the appropriate human and financial resources to implement key reforms, more students are likely to achieve at higher levels, as evidenced by better grades, higher expectations, improved behavior, innovative teaching practices, and more teacher-parent contact; and (3) the necessary human and financial resources are not uniformly available to all Michigan middle-grades schools. Contains extensive recommendations.
STARTING AGAIN IN THE
Middle

THE MIDDLE START INITIATIVE
The Importance
of Strengthening
Michigan's
Middle-Grades
Schools
Foreword

This report is a component of the Middle Start Initiative, a broad effort undertaken by the W.K. Kellogg Foundation in 1994 to demonstrate that middle-grades schools can make themselves more effective learning environments for all young adolescents. The Initiative's overriding objective is to improve the quality of education in Michigan's middle grades, particularly in schools and school districts with high percentages of students from low-income families.

The report assumes that communication of accurate, relevant data about Michigan's young adolescents, aged 10 to 15, and the schools they attend, combined with information about effective middle-grades teaching practices and policies, will create important public awareness of effective teaching and learning. Ultimately, it is believed that increased awareness will generate public support for strengthening middle-grades education for all students. The Initiative does not focus solely on middle schools, but rather on all schools that serve the middle grades, regardless of their configuration.

Middle Start strategies are based on the best available research about the effective education of young adolescents. To understand the ability of Michigan schools to engage in such exemplary practices, the Initiative has collected data on the teaching and learning environment in Michigan's middle-grades schools and classrooms, and the relationship of this environment to the achievement, behaviors, and attitudes of students.

The Michigan-specific data in this report come from a series of surveys of middle-grades teachers, administrators, and students conducted by the Center for Prevention Research and Development (CPRD) of the Institute of Government and Public Affairs at the University of Illinois. All schools in Michigan that serve young adolescents aged 10 to 15 were invited to participate in an extensive survey of teaching and administrative staff. This effort represents the first time such a comprehensive survey of schools serving young adolescents has been undertaken.

Two hundred and twenty-four Michigan schools serving the middle grades voluntarily participated in the survey, garnering responses from 6,329 teachers or other staff, and 211 administrators. Almost one-half of the participating schools (101) also conducted surveys of their students. These surveys reached more than 45,600 Michigan students in the fifth to ninth grades. In addition to the aggregated responses contributing to this report, every school surveyed received a confidential analysis of its individual survey data. The participating schools' administrators, teachers, and other community members have demonstrated an impressive commitment to review the status of their middle-grades students, facilities, and practices through the use of the Middle Start survey.

Schools that participated in the Middle Start survey are located in urban, suburban, and rural settings throughout Michigan. Efforts were made to ensure the geographic, economic, and other diversity of the respondents. Because of this diversity and the high rate of participation, the survey results are considered to be reflective of all Michigan middle-grades students, teachers, administrators, and schools.

CPRD and the Michigan League for Human Services analyzed the statewide survey information to develop this report. Through the publication and dissemination of this information, the Michigan League for Human Services seeks to encourage broad understanding and discussion of issues surrounding young adolescents and middle-grades education in Michigan.

Danny L. Peterson
Director, Child & Family Services of the U.P.
Chair, Middle Start Advisory Group
Michigan League for Human Services
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*Starting Again in the Middle*
Introduction

Just as early childhood education is seen as a positive step to place preschoolers on the road to success by the time they are school-age, the problems of older youth might be reduced by expanding our strategies toward success for middle-grades youth.

America's Middle Child

Michigan has approximately 850,000 children between the ages of 10 and 15 navigating their way through early adolescence, a time when young people change rapidly, yet still look to adults for guidance and support. The varied behaviors and development that this age group experiences provide a unique opportunity. A growing capacity for conceptual thinking, combined with curiosity, energy, and a desire to learn, makes early adolescence an ideal time to encourage healthy development and to capitalize on academic potential.

Young adolescents have many strengths that, when supported and encouraged, will ensure that they grow toward adulthood healthy and armed with the skills necessary for continued success in life and work. Essential to this journey is an environment that reflects a careful combination of new challenges and responsibilities, with ongoing nurturing and monitoring.

School achievement in the middle grades can have lasting academic consequences. Only 60 percent of students who have multiple risk factors in eighth grade (such as poverty, extensive unsupervised time, and low achievement test scores) graduate from high school on time, compared to a 90 percent on-time, high school graduation rate for eighth graders without multiple risks. Student success in mathematics and reading in the middle grades plays a paramount role in later success. Yet, one in five 14- to 15-year olds who lag behind in the development of these basic skills will drop out of school within two years.

The elements of risk and opportunity described above should inform the appropriate learning environ-
Facts About Michigan Middle Graders

Young adolescents report significant unsupervised time while at the same time facing health and safety risks and little involvement with structured, supervised activities. Although they have high self-expectations when they enter the middle grades, they show poor performance and indicate less support at school. They leave the middle grades with diminished expectations.

Increasing unsupervised time.
- 40 percent report being home alone after school at least four days/week
- One-fifth are home alone for three or more hours at a time

Health and safety risks.
- 25 percent have no regular health care provider
- 30 percent feel less safe at school than one year ago
- One-quarter have experimented with smoking; and one in six indicate more extensive use
- One-third have experimented with alcohol; and one in five indicate more extensive use
- More than one-fifth have been offered illegal drugs at school, and by the ninth grade, over one-third have experimented with them

Little involvement with structured, supervised activities.
- 45 percent of all more affluent students participate in intramural, interscholastic, and community sports and recreation programs, while less than 35 percent of all poorer students (as evidenced by their receipt of free or reduced-priced school meals) participate

High self-expectations and support at home, but diminishing performance and supports at school.
- 80 percent of students have high academic expectations
- Two-thirds of the parents of middle graders help their children with homework and talk to them about school at home
- Fewer than one-half of all seventh graders passed the math portion of the Michigan Educational Assessment Program (MEAP) tests, and only one-third passed the reading MEAP in 1995. The percentage of students passing the MEAPs varies most dramatically by school district in the middle-level years
- Nutritional supports decline over the middle grades, assisting 35 percent of the sixth graders but only 25 percent of the eighth graders
- Fewer eighth and ninth graders than fifth and sixth graders believe they are provided the challenges and supports they need from school
Facts About Michigan Middle-Grades Schools

While teachers are experienced and prefer to teach in middle-grades classrooms, they have little access to specific or ongoing professional development, and rarely have the opportunity to work collegially. There are a wide range of middle-grade facilities with various enrollment and class sizes influencing instruction. Most buildings have inadequate library and computer facilities and lack significant parental and community involvement.

Experienced teachers.

- Most have been educators for more than 15 years
- Most prefer to teach at this level

Little access to specific or ongoing instruction for staff.

- Only 14 percent have any specific middle-grades certification or endorsement
- There is a wide gap between the professional development teachers want and need, and the actual opportunities for structured learning and improvement

Rare opportunities to work collegially.

- Teachers in 40 percent of the schools report no opportunities for planning and teaching together

A wide range of middle-grades facilities.

- Schools' size, age, and configuration are often a function of geographic location, available resources, and shifting child populations
- Average enrollment more than doubles between the fifth and ninth grade
- Students in schools with high proportions of low-income students tend to have larger class sizes

Inadequate library or computer facilities.

- One-fifth use libraries as classrooms
- Schools spend, on average, less than one-half the national average on library materials
- Three-quarters report more than 100 students per computer

Low levels of parental and community involvement.

- Two-thirds of teachers communicate with parents only a few times each year
- Youth service is integrated into curriculum in less than half of the schools
- Ongoing, continuous involvement of community employers or employees is lacking

The Middle Start and other data show significant benefits for schools with successful middle-grades teaching practices. Most markedly, students are more committed, creative, successful and their behavior is improved; and teachers have more contact with the parents of middle-grades students.

This new information can help to inform the discussion about new directions for Michigan's middle-grades schools. It can help those involved with and concerned about youth to ensure that young adolescents are ready to develop into healthy and successful members of society.

The information gathered also underlines the importance of starting again in the middle. Starting again involves strengthening the public's focus on early adolescence, and strengthening the institutions that most strongly influence young adolescents: home, school, and community.

The pages that follow attempt to put this information in the context of what we all want for our children, grandchildren, nieces and nephews, the kid down the block, and all future citizens and taxpayers: a safe physical environment, a nurturing emotional environment, and a challenging academic environment in which they can thrive and succeed.
EARLY ADOLESCENCE –

A Period of Change

Part ONE
Early Adolescence: A Period of Change

At no other stage of the life cycle are the promise of finding oneself and the threat of losing oneself so closely allied.

Erik Erikson

Each year, approximately 850,000 young adolescents attend Michigan schools. By the turn of the century, the 10- to 15-year-old age group is projected to increase by more than 40,000 children. These youngsters currently represent nearly 10 percent of the state's population, or two of five students who enter the school doors each day in local communities across Michigan. Young adolescents today experience a world very different from the one encountered by their parents, teachers, and other adults in their lives. They are growing up during a time of rapid and significant cultural and socioeconomic change, when parental time and support are often less available, and when schools and community institutions report that they too often lack the resources to step in and guide youngsters' achievements and developments.

Early adolescence is a period of fast-paced and varied physical, emotional, social, and intellectual change and development. During these years, young people explore who they are and think about who they will be. This exploration manifests itself in risk-taking and experimentation with new attitudes and behaviors. Healthy risks within safe, secure limits are valuable to character development; however, risks taken in an atmosphere lacking adult guidance and positive alternatives may put adolescents in harm's way. When appropriately channeled, young adolescents' enthusiasm for new experiences creates an optimal learning environment, one in which they can learn to manage risks, and develop their own sense of responsibility in relationship to the larger society. Although peers become increasingly important and influential in peripheral matters such as dress, music, and leisure activities, most middle graders still trust adults. Adult values continue to be influential. At this critical juncture, positive support from adults (and peers) can encourage young adolescents to take risks within safe boundaries.

Michigan Middle Graders Represent a Significant Proportion of the State's Residents and the School Population

Michigan’s youth develop in a variety of home and school settings, and experience a wide range of challenges and varying levels of support. Although something can be learned about the homes, health, and activities of the state’s young adolescents from the U.S. Census, KIDS COUNT in Michigan, and other studies, this report also has the benefit of information garnered from the Middle Start survey. The survey is a significant piece of research that tells, from their own perspective and that of their teachers and administrators, what Michigan students are experiencing inside their schools and in other parts of their lives. Using the Middle Start survey and supplemental data, this report illuminates four areas of early adolescent life: home and family situations; health and safety concerns; experimentation and involvement with positive activities; and academic expectations, achievement, and support. The findings in each area are detailed on this and the following pages.

**Home and Families**

Family situations have changed dramatically since most adults were young adolescents. Changes in family structure, stagnating wages, and a fundamental restructuring of Michigan’s economy have resulted in more intense economic pressures on many families. These pressures have resulted in more unsupervised time for youth, as fewer families have the benefit of a stay-at-home parent.

Economic and social realities account for the fact that only one-third of Michigan’s middle-grades youngsters have a parent who is not employed outside the home. Almost 40 percent of the state’s middle graders report being home alone after school at least four days a week. Nearly one-quarter of all Michigan children live with only one parent, and experience the accompanying pressures on parental time and support. Additionally, despite a low unemployment rate, median income in the state has stagnated over the last five years, resulting in low family income levels for many middle

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**Many Michigan Middle-Graders Spend a Significant Amount of Time Alone After School**

- 3 Days Alone: 10.1%
- 2 Days Alone: 18.9%
- 1 Day Alone: 18.5%
- 4 or More Days Alone: 37.4%
- No Days Alone: 24.2%

*Source: Center for Prevention Research and Development, University of Illinois, 1995.*
You have to see school as a mountain. Some kids start up the mountain with hiking shorts and a backpack and hiking shoes. Other kids start up with no backpack, no shoes, and maybe no breakfast.

Principal, Muskegon, MI

**Home and Families (continued)**

graders. A large number (140,000, or 16 percent) of Michigan middle graders are growing up in households with incomes below the 1996 federally-determined poverty line of $15,600 for a family of four. Another 145,000 youngsters are being reared in minimally more secure families with gross incomes above the poverty line, but below the $28,900 income level. These families are still determined needy enough to receive publicly funded nutritional support and medical care for their children.

Approximately one-fifth of the middle-grades students surveyed are African American, Hispanic, Asian American, or Native American. Due in large part to housing patterns, many of the state's minority children are enrolled in racially segregated schools. Over one-half of Michigan's minority students attend schools in districts in which more than three-quarters of the youngsters are of their same racial/ethnic background. For many young adolescents who come from a same race, same economic background elementary school, their first contact with youngsters from a different background is often at the middle-grades level. This factor presents an opportunity for learning how to live in a diverse society. It can also represent an adjustment for middle graders, who may be experiencing contact and interaction with people who are significantly different from themselves for the first time. This challenge is compounded by the fact that the middle-grades years are a particularly difficult time for young adolescents to feel different from their peers.

**Ethnicity of Michigan's Middle Graders**

- White 72%
- African American 4%
- Hispanic 2%
- Asian American 2%
- Native American 2%
- Other 9%

**Ethnicity**

**of**

**Michigan's Middle Graders**

**White 72%**

**African American 4%**

**Hispanic 2%**

**Asian American 2%**

**Native American 2%**

**Other 9%**
Health and Safety Concerns

At all life stages, health and education are linked. Good health promotes effective learning, and good education promotes good health. Young adolescents are experiencing the most intense changes in their physical development since infancy, and they cope daily with the effect of these changes on their hygiene, health practices, and behavior. At the same time that parents expect young adolescents to begin to manage their own physical care, many such youngsters may not completely understand their own growth and may fail to give sufficient attention to their personal health and hygiene. In addition, youth and their parents pay less attention to eating and sleeping habits during early adolescence than in earlier years, yet both of those factors contribute significantly to adolescent health and academic achievement. Further, some health problems do not appear until the middle grades and are often misdiagnosed as behavior related. For example, vision or hearing problems may occur in early adolescence. Similarly, mental health concerns and learning disabilities may appear, or become more acute, during this time. There is also an increase in behavior problems related to the rapid growth experienced by youth between ages 10 and 15.

Young adolescents tend to present health challenges involving a combination of physical, emotional, and social concerns requiring a complex system of care. While many issues related to growth and physical changes could be addressed by the family physician, or through health classes at school, a substantial number (approximately 25 percent) of middle-grades youth in Michigan have no regular health care provider. Furthermore, Michigan teachers report that they rarely integrate health topics into classroom content. Many young adolescents lack health insurance and, with or without coverage, young people report that they are often reluctant to obtain medical or mental health attention for potentially embarrassing or personal health needs.

Rapid and varied physical changes affect the self-image of young adolescents, as well as their relationships with peers and adults. Physical changes often result in increased physical energy that is rarely accommodated in the typical, highly sedentary, school setting. When heightened energy is coupled with increasing moodiness, young adolescents may become more aggressive or depressed than younger or older children. Schools in Michigan tend to react to these behaviors with more frequent discipline, particularly between grades six and seven. Michigan administrators in middle-grades schools report that approximately one-half of all middle-grades students are sent to the principal’s office at least once each year, and more than 10 percent are so dispatched at least once every two months. Nearly one in four middle-
The most important predictor of youth behavior is the behavior of the adults around them.

The use of peer mediation techniques, where students are trained to intervene in and prevent potentially violent situations at school, provides one effective alternative to dealing with volatile behavior and averting explosive incidents among students. Despite the demonstrated effectiveness of this type of intervention, only one-quarter of the middle-level schools surveyed in Michigan use peer mediation approaches.

In addition to experiencing tremendous physical changes, young adolescents are also beginning a healthy developmental period of trial and error in behavior and attitudes. Although opportunities for exploration and risk taking within appropriate boundaries are critical to their development, these youngsters are living in a social environment that presents more threats than their counterparts in earlier generations faced. Today's youth face threats of HIV and AIDS, extensive drug availability, and firearm hazards that were all but unknown just 10 years ago. Since 1960, adolescent health care needs have shifted from those associated with disease and periodic illness to behavior-related problems flowing from violence and motor-vehicle accidents.

Young adolescents are more often the victims than the perpetrators of violence in their homes and neighborhoods. Nationally in 1992, 12- to 15-year-olds were often victims of crime and were assaulted more than any other age group. Feeling unsafe on the way to and from school is a problem for many Michigan middle graders: one in five has been threatened with robbery while making the trip. Contrary to common perceptions, this problem is slightly more prevalent for youngsters in rural areas than in urban areas, for those who are younger and just starting this growth period, and for males. Additionally, the incidence of child abuse increases between ages 10 and 14, particularly for girls. Approximately 6,400 of the state's middle graders are substantiated victims of child abuse or neglect.
Opportunities exist for experimentation with smoking, drinking, and illegal drug use in all geographic areas in Michigan, and often within the school site. Yet, student surveys indicate that the majority of middle graders do not engage in these risky behaviors. However, the surveys also show that the availability of and experimentation with tobacco, alcohol, and drugs is prevalent enough to warrant the concern of parents, educators, and the community:

- Early adolescent alcohol and cigarette use is found across all income levels and geographic areas.
- Approximately one-quarter of all Michigan middle graders have experimented with smoking, and one in six indicate more extensive use. By the eighth grade, 8 percent of all students smoke more than five packs of cigarettes a month.
- Fully one-third of all middle graders report drinking alcohol at least once in the previous month. In the eighth grade, nearly 40 percent of students report drinking at least once in the previous month, with nearly one in five eighth-grade youngsters drinking five or more times during this period.
- More than one-fifth of all middle graders surveyed report having been offered illegal drugs at school. By the ninth grade, over one-third of all students report having used drugs in the last month, with 15 percent reporting using drugs more than five times in the same time period.

Opportunities for Involvement with Positive Activities

Involvement in extracurricular activities appears to be a predictor of other healthy behaviors. Unfortunately, many Michigan middle graders are not significantly involved in school or community activities that encourage healthy risk-taking and lessen their exposure to, and time available for, experimentation with more dangerous pursuits. Research suggests that school and community activities available to young adolescents are often fragmented, uncoordinated, and underfinanced, and often only available to youth from higher-income families. This situation has resulted, at least in part, from the significant decline in city, county, and state support of recreation programs for young people during the last 20 years. For example, according to a report of the Skillman Foundation Youth Sports Initiative, many areas in the city of Detroit with the greatest density of youth had no programs sponsored by the schools, or the community.

Intramural, interscholastic, and community sports and recreation programs are the activities most

The Family Income of Michigan Middle Graders Influences Their Participation in Sports Programs

<table>
<thead>
<tr>
<th></th>
<th>Higher Income Students</th>
<th>Lower Income Students</th>
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<tbody>
<tr>
<td>School Programs</td>
<td>31%</td>
<td>31%</td>
</tr>
<tr>
<td>Community Programs</td>
<td>48%</td>
<td>28%</td>
</tr>
</tbody>
</table>

Source: Center for Prevention Research and Development, University of Illinois, 1995.
Opportunities for Involvement with Positive Activities (continued)

widely available to young adolescents, yet few participate. Family income appears to make a significant difference in the availability of opportunities for the state's youth to participate in these activities. School government, another extracurricular activity, builds self-esteem and develops budding leadership skills, but a relatively small number of middle graders are able to participate, and few engage in other creative outlets for healthy development, such as drama, music, or art-related activities.

A majority (52 percent) of young people report being involved with a religious institution; one in four takes part in academic, career, or cultural enrichment activities at school or in the community; and one in seven participates in community volunteer activities. More than one-half of young adolescents surveyed report paid employment through work in areas such as babysitting or yard care. Although limited employment helps to build self-esteem, identity, and competencies in young adolescents, research suggests that high levels of work may adversely affect students' academic achievement in the middle grades and beyond.

Technological advancements have had positive and negative effects on children of all ages. Television, video games, music and computer-generated activities are now a major part of early adolescent life. But technological advances often expose youngsters to a barrage of violence, sex, dangerous behaviors, and intense visual stimulation. For the middle-graders age group, the large amount of time spent alone contributes to extensive TV watching. This activity tapers off somewhat through the adolescent years. Twenty percent of fifth graders report watching television more than four hours a day, while only 14 percent of eighth graders report the same viewing level.

School Expectations, Achievement, and Support

When asked, 80 percent of the state's young people say they have high academic expectations of themselves: among urban children, this share is even higher. Middle graders actually have higher expectations of themselves than they perceive their teachers have of them. They do know that their parents expect them to perform well and "go a long way," and two-thirds of respondent young adolescents report that their parents talk to them about their future. Low-income youth show more uncertainty about their academic expectations as do adolescent boys surveyed. However, all the young adolescents in the survey report daily concern about their grades and class work. Additionally, nine of 10 middle graders think it is important or very important to complete high school and go to college; only 3 percent believe that completing high school or college has no bearing on their future success.

Despite their high hopes, many Michigan middle-grades students lack the skills to complete high school, much less compete for college. According to national assessment measures, fewer than one-third of eighth graders have more than a superficial understanding of what they read. The experience of Michigan students with the Michigan Educational Assessment Program (MEAP) indicates similar weaknesses among middle graders. Fewer than one-half of all Michigan seventh graders exhibit a satisfactory level of math skills, and only one-third received a satisfactory score on the reading portion of the tests in 1995.

The share of students scoring adequately on MEAP math and reading tests varies most dramatically by school district in the middle-level years. This, added to the fact that achievement gaps between the highest and lowest scorers nationally are wider in the eighth grade than in the fourth grade, suggests that disparities in
individual achievement increase between the elementary and secondary school years. As Michigan dropout rates rise, and average test scores in later years fail to improve, it appears that large numbers of low-scoring middle graders do not improve their achievement in high school. In addition, by the end of the middle grades, students' academic expectations and personal aspirations are also diminished, particularly among female adolescents.21

Declines in MEAP scores in the middle grades are experienced by many children, with significant decline linked to risk factors such as family poverty and other obstacles to success. This finding indicates a need for increased attentiveness to middle-grades students to avoid the dangerous and costly outcomes that result from low achievement. Research has documented the societal costs of involvement in dangerous or unhealthy behaviors by youth who drop out of school prior to high school graduation. Yet, the support available to schools to address the educational barriers associated with poverty and other disadvantages, declines during the middle grades. Approximately one in three middle graders receives nutritional support at school through free and reduced-priced school meal programs. However, this essential support declines over the middle-grades years, with 35 percent of all surveyed sixth graders receiving nutritional support, but with only 25 percent of eighth graders reporting that they participate in the program. This decline is not driven by increases in family income but, instead, by the perceived stigma attached to receiving the support, about which younger children show less awareness or concern.

Despite low test scores, not enough disadvantaged young adolescents receive remedial educational support to bring them to grade level in basic skill areas. The U.S. Department of Education reports that twice as many fourth graders as eighth graders are served by federally funded remedial programs, and that most of the funds are targeted to the first six grades.22 Similarly, promising school-based health clinics, recognized for improving access to basic and preventive health services for young adolescents, are rarely available in Michigan's middle-grades schools.

### School-Based Support

Of every 100 young adolescents in Michigan:

- **35** receive nutritional support through school meals programs
- **10** receive special education services
- **6** receive remedial education services

![The Percentage of Michigan Students Receiving Free and Reduced-Priced School Lunches Declines Over the Middle Grades](chart.png)

**Source:** Center for Prevention Research and Development, University of Illinois, 1995.
Fewer Michigan ninth-grade students than fifth and sixth graders surveyed through the Middle Start Initiative believe that their schools provide the challenges and support they need. Underlining the need for such support, ninth graders report higher levels of stress related to school, peers, and personal safety than their sixth-grade counterparts, across all income and geographic lines.

Endnotes


4 Ibid.


6 This We Believe: Developmentally Responsive Middle Level Schools. Columbus, Ohio: National Middle School Association. 1995. p. 7.

7 op. cit. (Endnote No.3)


9 op. cit. (Endnote No. 6)

10 op. cit. (Endnote No. 8)


12 op.cit. (Endnote No. 3)


16 op.cit. (Endnote No. 3)


18 op.cit. (Endnote No. 3)


21 op.cit. (Endnote No. 3)

ADEOLESCENT LEARNING AND DEVELOPMENT -

The School's Role

Part TWO
There can be little hope of addressing the increasing levels of social inequality and social problems that confront us daily unless all students receive the quality of education necessary for participation, opportunity and success in today's world.

Adolescent Learning and Development: The School's Role

Michigan schools exist to educate children. Further, there is wide recognition that they play a key role in preparing the state's children to function successfully in their communities. Not so widely recognized is the pivotal nature of the middle grades, the last phase of life in which a single community institution has ready access to nearly the entire population in one age group. Because of attendance requirements, most youth cannot drop out of school prior to high school, but research shows that the decision to leave school is made prior to that, during the middle grades. The final chance to provide opportunities and protections to virtually every child exists within the state's middle-grades classrooms.

For children with less than adequate family or community support, the importance of effective middle-grades schools is compounded. Large numbers of Michigan young adolescents and their families live near or below the poverty level in communities that also have limited resources. And, despite a universal belief that education helps to establish a level playing field for all young people regardless of their home or community background, economically disadvantaged children continue to fare more poorly in Michigan's schools than their more advantaged counterparts, perhaps because their community's schools are also lacking in resources. For these children, the existence of a learning environment that can contribute to their success is acutely important.

Many studies have documented the key components of a school environment particularly suited to the needs of young adolescents. The description that follows of these components and the school building, staff, and community resources necessary for success is followed by an examination of how Michigan middle-grades schools compare.

What Young Adolescents Need from Schools

There is a solid, national consensus among educators, researchers, and youth advocates regarding the key features of effective middle-grades schools. Undergirding this consensus is the knowledge that all young adolescents require high academic and social expectations supported and modeled at school, at home, and within the community. Further, young adolescents need a strong academic setting with teaching tailored to developmental needs. These settings include curricula that integrate learning opportunities across subjects, and provide enhanced attention to reading and mathematics. At the core of this ideal learning environment is the positive impact of caring adult and student relationships. The following discussion will examine these features in more depth.
Expectations and Opportunities

Because they are changing so rapidly, young adolescents are vulnerable to insecurity, self-doubt, and self-criticism. As they learn to regulate their behavior, young people need to know what teachers, parents, and other adults expect from them. In fact, adult conviction that young adolescents can learn helps to motivate student achievements. While middle graders rely on adults for assistance, they also need support and encouragement to learn to set their own limits, within reasonable boundaries.

Young adolescents also need opportunities to explore their interests, identify and develop their talents, and make personal decisions. Excellent schools provide learning experiences in which young people can make choices that help them test their capacities and generate individual initiative and responsibility. At the same time that these youngsters are offered broader opportunities, limits and structure help to prevent them from harming themselves, and let them know adults are paying attention and care. As young adolescents develop new abilities, they need to be able to measure their progress in many different ways. Thus, they require school settings that recognize not only their academic and sports-related competencies, but also other talents, such as civic participation or artistic exploration.

Although most young adolescents have high academic expectations of themselves, many adults mistakenly view a lack of interest in school and low achievement in the middle grades as inevitable characteristics of early adolescence. School structures and practices that accommodate varying rates of student development, and use methods of teaching and learning that attend to these differences, are more likely to result in higher interest and achievement of middle graders.

Attention to Each Student’s Development and Integration Across Subject Areas

Although young adolescents experience rapid cognitive development during the middle grades, intellectual growth varies among individuals as dramatically as the more obvious changes in physical development. Due to the rapid individual change and the cognitive variance among these youth, middle graders need individualized learning environments tailored to their development. Similarly, competition is inherently unfair at this stage, because individual cognitive and emotional development are so varied. Middle-grades learning should occur

We try to establish a program around the idea that these kids are competent and capable. As staff, we too need to be all the things that we are asking each child to be.

Principal, Caledonia, MI
In one five-year period, young people can go from being sure of everything, to being sure of nothing and all points in between. A Portrait of Young Adolescents

Attention to Each Student’s Development ... (continued)

in cooperative, reassuring settings more congruent with wide developmental variation.

In early adolescence, young people begin to develop the ability to think in the abstract, and to understand multiple and conflicting details, solutions, and perspectives. As a result, they pay increased attention to the attitudes and behaviors of others, and they may challenge adult behaviors and rules. Youth test their capacity for moral reasoning, critical thinking, and problem solving while learning the skills necessary to communicate more complex thoughts and feelings. These connections can more easily be made at school through meaningful integration of subject matter.

The ability to teach a classroom of children with varied physical, intellectual, and emotional needs requires a high level of professional training, flexibility, and skill. The increasing physical activity and intense peer interactions of young adolescents are different from those of younger or older students. Maintaining a learning environment that adequately challenges and supports all students requires an educator’s understanding of early adolescent development, as well as attention to high academic standards.

Teaching and planning by teams of educators, who together take responsibility for the achievement and personal development of a group of young people, draws strong national support as a means of addressing the instructional challenges and developmental needs of early adolescents. Effective team planning allows teachers to know students better, and to review and adjust classroom strategies to fit individual student’s needs. Teams are more able to integrate and coordinate curriculum across subjects, and to provide adequate time for in-depth student learning, support, and encouragement.

Teaching teams usually include a group of teachers who instruct the same group of students in the core subjects of mathematics, science, language arts, and social studies. Some teams share the same space and teach together; others meet daily to plan lessons together. With appropriate professional development and time for planning and interaction, teacher teams can coordinate and integrate lesson plans, share reports of student progress, communicate effectively with parents, and address emerging problems before they become acute.

Teachers who integrate learning opportunities, by coordinating lesson plans for different subjects around central themes or issues important to young adolescents, can help students at a critical stage of their development connect what they are learning to necessary life skills. This interdisciplinary approach carries the best potential to harness the curiosity and emerging reasoning abilities of 10- to 15-year-olds. To facilitate this integration and coordination, teachers need structured time to plan together.
Particular Attention to Literacy and Mathematics

Early adolescents' enthusiasm for learning and for new experiences can be channeled to enhance important skills critical to their lifelong success. Basic skills of literacy and mathematics are considered essential for productive functioning as adolescents and adults. In the middle grades, young adolescents employ their reading and writing skills as a tool for learning about a variety of subjects. Similarly, middle-grades math instruction helps students observe patterns and relationships. These skills are essential for further learning and exploration in math, science, and other areas. Historically, poor performance in reading and mathematics has served as a gatekeeper, preventing young people from successfully functioning in the middle grades and beyond.

Particular attention to building skills in critical subject areas is essential to the middle-grades learning environment. Integration of the use of language and mathematics into the entire middle-level curriculum encourages young adolescents’ mastery of these important subjects, and helps them understand the importance of these areas to their personal and vocational success.

Instructional resources are essential, particularly those that support the instruction of reading and math in the middle grades. Books, and other materials that make learning more concrete for young adolescents, must be available to students and teachers in Michigan schools. Middle graders are facing a growing need for competence in the use of technology, making the school infrastructure and staff expertise even more critical. Similarly, middle-grades schools need to invest in adequately stocked and staffed library and media facilities, serving young adolescents by supporting their need for diligent exploration of the world and themselves.

Supportive Adult and Student Relationships

Trusting relationships with adults are particularly critical in the middle grades, as young adolescents undergo many developmental changes. Young teens pay attention to the actions of adults and peers in the family, community, school, and the media. What they observe affects how they make choices and decisions. As they consider the person they will become, contacts with positive role models are important. Further, because these youngsters are grappling with contradictory feelings of ambivalence toward, but dependence on, parents, close relationships with other dependable adults provide complementary guidance and support. Youth routinely seek these relationships outside of their immediate family, often at school.

When schools provide opportunities for friendly, supportive, teacher-student interaction, they report fewer disciplinary actions. To this end, some schools provide daily, small-group advisory programs. These programs enable staff to provide support and nurturing, and to monitor student development. Making time for teachers and other staff to be available for this type of interaction is critical to the development of supportive relationships within the school setting.

Consistent adult-student communication at school can also help staff work more effectively with families. When parents have a primary contact person at their children’s schools, they are more likely to know how to support their youngsters’ academic growth. In addition, schools can offer families opportunities to support learning at home through attention to homework or other activities, or at school through volunteerism. By providing parents with tools to deal with the challenges of early adolescence, and offering them a role in school improvement efforts, parental interaction increases.
Findings from the Middle Start survey reveal the following facts regarding middle-grades teachers:

- Most have been educators for more than 15 years;
- More than 1/3 have taught middle-level students for more than 15 years, and three-quarters work under administrators who have had prior classroom experience with young adolescents;
- Most teachers prefer to teach at this level and report a high level of job satisfaction;
- Certification of teachers is split between elementary and secondary education, with both certificates having state approval for teaching seventh and eighth graders;
- More than 1/2 hold a master’s degree;
- Only 14 percent have any middle-grades-specific certification or endorsement, a logical consequence of the lack of a state requirement in this area;
- More than 1/2 did not complete their student teaching in a middle-grades classroom.

Michigan Implementation: The Current Learning Environment

A learning environment that encompasses the above key elements builds upon the unique characteristics of young adolescents and continually responds to their varied needs. The Middle Start survey of more than 6,500 middle-grades teachers and administrators in 224 Michigan schools shows strong support for this ideal and its key elements. Michigan educators across all geographic regions of the state also believe that implementation of these elements is essential to the effective academic and social development of this age group.

In spite of this broad support, practices key to this type of learning environment are not routine in most Michigan middle-grades schools. The support indicated in the survey is nonetheless significant, since the study suggests that the higher the belief in the importance of the key practices, the more likely that they can be implemented when barriers can be removed from the local school setting.

The survey also indicates that the school facilities, staffing levels, and community resources necessary to facilitate the ideal learning environment are often not available to Michigan’s middle grades. Teachers and administrators face obstacles such as a lack of professional development specific to the middle grades, as well as building structures and schedules that do not allow for interaction with colleagues and common planning time.

The ideal cannot be achieved in a vacuum. Necessary environmental factors include:

- A teaching staff prepared and encouraged to create a learning environment that provides adequate challenges and support for students;
- School facilities and instructional resources to support the learning environment;
- Frequent and consistent parental and community support.

A Teaching Staff Prepared and Encouraged to Create the Learning Environment

Michigan teachers, while experienced, lack access to professional development. The major emphasis of teacher education programs is related to elementary-aged children, and to high school-aged students. The preparation of middle-grades teachers in Michigan. With few pre-service or
in-service opportunities for exposure to new research and training in middle-grades instruction, many middle-grades teachers currently employ instructional practices that do little to promote learning that is individually tailored and connected across subjects, encompasses significant adult and student relationships, or promotes the important subjects of reading and math.

The Experience, Interests, and Training of Michigan’s Teachers

The educational experience of young adolescents in Michigan is shaped by professionals with little pre-service or in-service preparation specific to the developmental or educational needs of middle-grades youngsters. Despite this fact, Michigan teachers do have extensive experience and preference for teaching in the middle grades.

Although national and Michigan assessment scores demonstrate low achievement by middle graders in reading and math, only a small number of the state’s middle-grades schools have teachers who are prepared to teach reading skills.26 Similarly, due to more stringent national math standards developed after most Michigan teachers completed their college training, and a lack of ongoing professional development, mathematics classes are often taught by individuals whose math preparation may not equip them to adequately meet the challenging new standards.

Michigan teachers recognize their need for additional professional development in many of the critical practice areas essential for the effective teaching of young adolescents. There is a wide gap in Michigan, however, between the professional development teachers want and need, and actual opportunities for continued learning.27 Few of the more than 30 teacher-training institutions in Michigan offer courses to prepare middle-level teachers.28 Michigan teachers feel that they need additional professional development to integrate computer use into instruction, to address a broad range of ability levels in a classroom, to provide hands-on learning, to work with at-risk students, to use alternative assessment strategies, and to tailor instruction to student learning styles. Yet, few Michigan middle-grades schools provide in-service opportunities on an ongoing basis.

### Teachers in Many Middle-Grades Schools Have Not Implemented Collegial Teaching and Planning

![Teachers in Many Middle-Grades Schools Have Not Implemented Collegial Teaching and Planning](chart.png)

Source: Center for Prevention Research and Development, University of Illinois, 1995.

**Teaching Practices**

Despite its pivotal role in improving student behavior and achievement, collegial planning time is available to few teachers in Michigan's middle-grades schools. Michigan middle-grades teachers report few contacts with other teachers or resource staff. Their most frequent contact is with their building administrator, rather than teaching colleagues. And while more than three-quarters of the respondent administrators report implementing an interdisciplinary teaming structure, teachers in four of 10 schools report not using this approach. Another one-third of the teachers report utilizing teaming activities, but have not implemented the activity school-wide, or do not have the time to work and plan individually and in teams, the most essential component of effective team teaching.
Based on the findings of the Middle Start survey, when Michigan middle-grades teachers have the time and instruction to plan and teach together, students, parents, and teachers benefit in the following ways:

- Students are more committed and creative, achieve better grades, have higher expectations, and a keener appreciation for the applicability of their school efforts to other parts of their lives.
- Student behavior is improved. Young adolescents report less dangerous experimentation and experience fewer disciplinary problems.
- Students and teachers rate the school environment more positively.
- Teachers are mutually supportive and more committed to students.
- Teachers are more innovative and use more effective classroom practices to promote personalized learning environments.
- Teachers have more contact with the parents of their students.

**Teaching Practices continued**

The ability of Michigan teachers to integrate subjects creatively across the middle-grades curriculum is improved by the presence of teams, but hampered in all schools by the narrow objectives dictated by the MEAP tests. New state requirements tie school financing to improvement in MEAP scores, as well as to other school improvement activities. Due to these requirements, there is real pressure to "teach to the tests" in an attempt to ensure funding. Although the MEAP tests are widely recognized tools for measuring student achievement in math, reading, and science, the tests do not attempt to integrate the three topics nor do they cover the entire range of skills that researchers and educators consider important, such as social studies, health, art, or music. Michigan teachers must concentrate on the essential objectives measured by the MEAP tests. Without adequate time to plan together, connecting the MEAP objectives with other important topics becomes difficult.

For those schools in Michigan, as well as in other states that have overcome the barriers to effective middle-grades practices, the benefits of implementing the approach are ample. Based on the findings of the Middle Start survey, when Michigan middle-grades teachers have the time and instruction to plan and teach together, students, parents, and teachers benefit.

**Other Staffing Roles**

At a time when supportive relationships with adults are essential, many Michigan middle graders report little opportunity to talk to an adult at school about academic or personal problems. Traditional guidance efforts are not available in their schools because counselors are more involved in scheduling and discipline than guidance. Fewer than one-half of Michigan's young adolescents ever meet with school guidance counselors.

Middle-grades education in Michigan takes place in schools of different sizes and ages, with a wide variety of grade configurations. Effective education of young adolescents can take place within a variety of physical settings, but there are important conditions associated with these learning situations that should be considered. School attributes such as building structures, classroom size, and available resources for maintenance, operations, or instruction can impede or promote individualized and integrated learning opportunities critical to young adolescents.
School Buildings

The size, age, and configuration of Michigan's middle-grades schools are often a function of geographic location, available resources, and shifting child populations within districts, rather than a reflection of what is necessary to provide the appropriate physical and learning environment for young adolescents. Only one-half of the middle-level schools in Michigan were built specifically to educate middle-grades children. The grouping and placement of grades 5, 6, 7, 8, and sometimes 9, are most often determined by school populations and available buildings. Most school districts understandably use existing buildings to meet shifting space demands, particularly in the state's urban and rural districts where the population has stagnated or declined. These arrangements only coincidentally address the academic and social challenges of the middle grades.

While the building itself does not preclude successful teaching and learning, the age of a school building can play an important role in shaping the educational experience of students. This is particularly true at the middle-grades level where innovative spatial organization can enhance instructional techniques such as team teaching, increase student access to technology, and promote cooperative learning among middle graders. The majority of Michigan's middle-level schools report adapting their building structures to meet the needs of their students to the best of their ability, even as they acknowledge that many schools are not structured for the population they serve.

Enrollment and Classroom Size

The building enrollments of Michigan's middle-grades schools range from less than 100 students to more than 900.

Average middle-grades enrollment in Michigan schools varies substantially by grade, but more than doubles between the fifth and ninth grade. Despite this increase in average grade-level enrollment within a school building, the number of students in each classroom remains essentially the same throughout the middle grades. In schools with high proportions of low-income students, classrooms tend to be more crowded. This fact is important because achievement gaps are widening between these vulnerable youth and their more economically
Schools Serving a Larger Percentage of Low-Income Students Tend to Have Larger Class Sizes

Source: Center for Prevention Research and Development, University of Illinois, 1995.

<table>
<thead>
<tr>
<th>MI 0-39 Percent Low-Income Students</th>
<th>More than 30 students</th>
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<tbody>
<tr>
<td>30 students or Less</td>
<td>19%</td>
</tr>
<tr>
<td>More than 30 students</td>
<td>28%</td>
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Enrollment and Class Size (continued)

advantaged counterparts. It has been suggested by many sources that fewer students per teacher in a classroom significantly affects learning and achievement.

The overall number of students in a school building, in each grade level, in each classroom, and served by each teacher team, can influence instructional programs available to young adolescents. These factors can also affect the transition of a younger from the self-contained classroom of the elementary school to the generally larger, and more complex, learning environment in the middle grades.

Although the number of students in a school does not determine individual student success or failure, opportunities for students to form adult and peer relationships, and for teachers to foster individualized and integrated learning, are often more feasible with a smaller number of students. Even in larger school districts and facilities, learning areas can be subdivided for more flexible use. The development of smaller groups of students and teachers operating as schools-within-schools is such a practice. These smaller settings can achieve more personalized teaching and learning situations for young adolescents.

Instructional Resources

Declining reading scores in the middle grades indicate the need for reading instruction and materials. Yet, most Michigan middle-grades schools have neither well-equipped nor well-staffed library facilities. While nearly all surveyed schools have a library, one-fifth of the schools also use this room as classroom space, and one-fourth of the schools do not employ a professional librarian. Many have outdated materials and some do not allow students to check out books. Only one-half of the schools allow student or teacher access to library facilities anytime other than during the school day, and virtually none give students access on the weekends or during vacation periods when access to reading materials is essential to maintaining reading skills.

Although integrated instruction depends on resources for student research, adequate classroom libraries are rare. At a time when library materials grow ever more costly, Michigan schools serving all grade levels spend less than one-half the national average on library materials per pupil. While most Michigan middle-grades schools have computers and report regular access by students, many have high student/computer...
Three-quarters report more than 100 students for each computer, and in one of 20 Michigan schools, the ratio is more than 400 students for each computer. This severely limits meaningful access by students to these important resources.

Parental and Community Support

Michigan schools do not exist in isolation. They are affected in many ways by their communities. As a result, each school district has differing needs for parental and community support that can enrich the experiences of young adolescents.

A cornerstone of successful education, at any level, is the meaningful involvement of parents. Early adolescence is also a time when young people's world views are becoming more expansive, and they identify more closely with their communities. Hence, it is an opportune time to involve young people in their communities, and to involve communities with young people. Schools also benefit from effective use of community resources on behalf of their middle-grades youth.

Parental Interaction
at School and at Home

With an increasing number of children in families in which all parents are employed outside the home, whether both parents or the youngster's single parent, less opportunity for teacher-parent contact exists during traditional school hours. The realities of class size, limited access to phones or clerical support, and the number of students seen by middle-level teachers throughout the school day, also inhibit staff interaction with parents. While 12 percent of all Michigan middle-grades teachers report engaging in some activity, at least weekly, to communicate with parents about students' performance and problems, nearly two-thirds report doing so only a few times each school year. Parent-teacher conferences, although infrequent, afford a scheduled time for parent-teacher interaction. Yet, in the Michigan survey data, teachers report that parental attendance at conferences declines substantially in the middle years, particularly between sixth and seventh grades.

Michigan Lags Behind the Nation in Library Resources for the Middle Grades

| Spending per Student | $10 | $20
|----------------------|-----|-----
| Volumes per Student  | 16  | 20  |

Source: School and Library Studies, The University of Michigan, 1989; Center for Prevention Research and Development, University of Illinois, 1995.
Parental Interaction (continued)

Despite low parent-teacher conference attendance, one-half of Michigan's middle-grades students report that their parents go to school activities, or talk to their teachers about their progress. Additionally, the majority of students across all income levels and geographic lines report that their parents regularly help them with homework and talk to them about school.

Michigan teachers report that when they provide more opportunity for parental interaction at school, or offer strategies for involvement at home, students report a corresponding increase in parental involvement in their education. The Middle Start survey also indicates that when parents are more involved in their children's education, students experience better adjustment to the middle grades and enhanced academic, behavioral, and emotional outcomes.

Because of the increasing autonomy sought by young adolescents, and the fact that their parents are more likely to be working outside of the home, the strategies for encouraging family participation differ from those appro
Strategies for encouraging family participation must respond to working-family schedules and pressures. Currently, the contact between parents and middle-grades schools is more often about unacceptable student behavior, or lagging student achievement, than about more positive strategies to help the child succeed in school.

**Community Involvement**

Beyond the support that families provide, the Middle Start surveys showed little community support through business involvement in middle-grades schools. Currently, this involvement most often takes the form of speakers for career enhancement opportunities, resources for student field trips, or financial support of specific events or ventures. While these are helpful interactions, ongoing, continuous involvement of employers or employees that brings with it the potential to help young adolescents develop job skills and understand the world of work, is lacking in the schools surveyed. In a few communities, businesses provide mentors and other volunteers at schools, but rarely are these individuals a significant part of a middle grader’s workforce preparation.

Schools can help mitigate young adolescents’ self-absorption and self-consciousness by broadening their experiences. Often, for the first time, these youth identify themselves as members of a religious group, gender, race, neighborhood, or community. Opportunities for students to serve others in their schools or communities are appropriate for this developmental stage. By helping others, young adolescents find constructive ways to fit into the social fabric of their communities. They also learn better when their education is tied to real world experiences.

Despite its potential, youth service is integrated into the curriculum of less than one-half of Michigan’s middle-grades schools. Of those schools offering service-learning programs, only 14 percent allow all students to participate in these activities.

Adults in the community can be valuable resources to support middle-grades schools. Public libraries, youth-serving agencies, religious organizations, and other community institutions can support the academic and social needs of young adolescents by providing experiences that augment those created by home or school. These resources can also provide before- or after-school structured activities that contribute to positive development, while reducing the amount of unsupervised time available to the community’s young people.

Michigan State University, in a recent study of the development of healthy adolescents in Michigan, concluded that “the ability to nourish healthy children and adolescents requires the support, involvement, and cooperation of multiple youth-serving sectors. One sector alone (e.g., school or family) cannot provide all the ingredients necessary for positive youth development.” Thus, schools and communities need to build meaningful partnerships. Too often, schools and other community institutions are not ambitious enough about fostering beneficial conditions (beyond financial support) for the young adolescents in the community.

**The ability to nourish healthy children and adolescents requires the support, involvement, and cooperation of multiple youth-serving sectors. One sector alone cannot provide all the ingredients necessary for positive youth development.**

*Michigan State University*
ENDNOTES

23 Reading An Indispensable Subject for All Middle Grades Students. Evansville, Indiana: Middle Grades Reading Network. 1995 p.15.


26 op.cit (Endnote No.3)

27 op.cit (Endnote No.3)

28 op.cit (Endnote No.25) pp.11-12.


31 op.cit (Endnote No.3)

32 op. cit. (Endnote No.17) p. 61.

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32
STARTING AGAIN IN

THE MIDDLE –

A Work in Progress

Part THREE
The Middle Start survey data illustrate that too many Michigan young adolescents lose ground during the middle grades. However, the Middle Start surveys complement other studies which demonstrate that high levels of learning occur in the presence of high expectations and a supportive academic environment. Further, these studies show that the key reforms necessary to create highly effective middle-grades schools require both human and financial resources. Unfortunately, the Middle Start findings also reveal that these resources are not uniformly available in every Michigan school and school district.

The summary review of the Middle Start findings that follows provides an overview of current conditions in the middle grades, valuable guidance as to how middle-grades learning can be improved, and insight to the obstacles that compromise the effectiveness of the majority of our schools. The recommendations that conclude the report provide further direction for activity on behalf of young adolescents and their schools.

Report Findings

Throughout Michigan, too many young adolescents lose ground during the middle grades.

The Middle Start surveys indicate that many of the state’s middle graders lose ground during this period that is so critical to their academic development. Further, this time is even more difficult for girls. Careful attention to students’ academic attitudes and progress during early adolescence is required, because it is during these years that young people make decisions about school that affect their success in high school and beyond. When students fall behind academically in the middle grades, they are more likely to drop out before completing high school. Currently, in twenty percent of all Michigan school districts, more than one-quarter of the students fail to graduate with their peers.

As indicated by the report, during early adolescence:
- Achievement gaps widen between youngsters with the highest scores and those with the lowest scores on national and state achievement tests;
- School-based supports to address barriers associated with poverty and other disabling conditions decline; and
- While the self-expectations of all middle graders decline from 6th to 8th grade, those of girls decline more significantly.
Additionally, more intense experimentation with a variety of behaviors and attitudes results in potential risks that can lead to negative outcomes. The Middle Start surveys document several warning signs:

- Almost half of the state's middle graders report significant unsupervised time after school. Unsupervised time is tied to academic and behavior problems, substance use, and lost opportunities for academic and social-skill enhancements;
- Use of cigarettes, alcohol, and other drugs is found across all income levels and geographic areas of the state; and
- Middle graders from lower-income families have significantly fewer opportunities to participate in school- and community-based sports and recreation programs that can provide an alternative to risky behavior.

When middle-grades schools are given the appropriate human and financial resources to effect key reforms, more students are likely to achieve at higher levels.

In order to produce a new generation of well-educated, responsible, and productive young people, high academic and social expectations must be communicated, adequately supported, and modeled in school, at home, and within the community. At school, young adolescents need a strong academic setting where teaching is tailored to developmental needs. These settings include curricula that integrate learning opportunities across subjects and provide enhanced attention to literacy and mathematics. At the core of this ideal learning environment is the positive impact of caring adult and student relationships.

Based on the findings of the Middle Start survey and other comparable research, when Michigan middle-grades teachers and administrators are given the resources necessary to implement key reforms of increased professional development and time to teach and plan together, they can establish a more challenging and supportive learning environment:

- Students are more committed and creative, achieve better grades, have higher expectations and a keener appreciation for the applicability of their school efforts to other parts of their lives;
- Student behavior is improved — young adolescents exhibit less dangerous experimentation and fewer disciplinary problems;
- Teachers are more innovative and use more effective classroom practices to promote personalized learning environments; and
- Teachers have more contact with the parents of their middle-grades students.
Report Findings (continued)

The necessary human and financial resources are not uniformly available to all Michigan middle-grades schools.

Middle-grades schools in Michigan are highly vulnerable because of the lack of a public consensus about how they should be structured and what their mission, goals, and outcomes should be. Key reforms supported by sufficient resources could not only improve the learning of all middle graders, but have added benefit for the most disadvantaged students. However, the survey information suggests that the school buildings, staffing, and community resources necessary to facilitate the learning environment for young adolescents in Michigan are not always available, particularly for the most vulnerable youth:

- Most Michigan schools lack necessary resources for appropriate instruction and support;
- Low-income students often attend schools where resources are even more limited and fewer reforms are adequately supported; and
- Most Michigan middle-grades teachers and administrators have expressed a need for more substantial professional development:
  - the majority have had no access to specific pre-service instruction to guide their work with this age group;
  - while most teachers express the need for additional professional development, few in-service opportunities exist; and
  - the vast majority of school schedules provide little time for teachers and administrators to plan and work together.

Recommendations

The findings from the Middle Start survey provide a framework for increased attention to young adolescents and middle-grades schools.

Starting again in the middle, paying more attention to the developmental and academic needs of youth at this pivotal time, prevents problems that diminish students' chances of later success. The question is not whether to attend to Michigan's middle graders, but how best to do so. In light of the vulnerability of the early adolescent age group and the consequences of inattention, the public has a special responsibility to support middle-grades education and the policies and practices that will help students succeed.

Schools, like other organizations, survive, grow, and adapt in response to many factors in their environment. These factors include the interests of students, staff, and parents, as well as other community, state, and federal influences. Each factor experiences support, opposition, stress, opportunities, and demands for change in differing degrees at different times. Responding to demands for change is difficult, particularly within complex institutions that cannot change quickly or effectively without support. Further, the organizational changes discussed in this report, no matter how beneficial, are difficult to achieve in an environment where funds are limited, planning time is scarce, and pressure for immediate results is high.

Despite these limitations, many Michigan middle-grades schools are demonstrating that they can help young adolescents improve their learning, performance, and adjustment. In these schools, administra
tors, teachers, parents, and other community members work in partnership to improve teaching practices, enhance instructional resources, and develop structured opportunities for students' growth and achievement. In addition, programs for young people outside the schools—in museums, youth-serving agencies, libraries, religious institutions, recreation departments, and other settings—strengthen and support learning.

The Middle Start surveys indicate an imperative: the state, its communities, and school districts must reverse the trend of decline and improve the lives of Michigan's young people. Together, community institutions must develop the human and financial resources necessary to cultivate the strengths of middle-grades students, and to support the adults who are committed to their healthy development and achievement.

Lasting improvements and better outcomes for middle graders cannot occur without the following resources:

- All young adolescents must have a challenging academic environment with adult support and direction suited to their needs.
- Michigan's young adolescents, when supported and encouraged, will grow toward adulthood healthy and armed with the skills necessary for continued success in life and work.
- To ensure this continued success, schools and communities must:
  - set high expectations for all young adolescents;
  - develop challenging curricula for all middle-grades students;
  - pursue more adequate resources for libraries and other instructional support;
  - provide opportunities for caring, nurturing student and adult interaction within the school setting;
  - design programs that allow young adolescents to tie learning to important issues in their lives;
  - ensure that schools organize grades, students, and teachers to support student progress;
  - track student progress with a variety of assessment measures; and
  - secure access to comprehensive health education and services for young adolescents.
We believe that all children can succeed, and that we are responsible for seeing that they have the tools to do so.

State Representative William Bryant

Recommendations (continued)
All young adolescents must be educated by adults who are well-prepared professionally and motivated to challenge and support students.

Michigan's young adolescents are fortunate to have access to adults who prefer to work in the middle grades and who want to improve their schools. To help these adults get the job done, school systems and communities must:

- support professional development for educators;
- provide time for teachers and administrators to plan and work together;
- prioritize professional development to reflect the identified needs of staff; and
- enable middle-grades educators to explore, acquire, implement, and reflect on new approaches to teaching and learning.

All young adolescents must have consistent parental and community support for their learning and achievement.

Parents, schools, and community-based institutions such as libraries, religious institutions, youth-serving agencies, and recreation departments can work in partnership on behalf of young adolescents. To do this, schools and communities must:

- engage parents and other community adults in worthwhile activities to support early adolescent learning in and out of school; and
- create a network of out-of-school supports and activities that meet young adolescents' needs by:
  - providing more constructive activities that complement learning; and
  - paying particular attention to economically disadvantaged, urban and rural young people who have not historically had access to these opportunities.

Final Comments
The middle grades represent a critical time to engage, motivate, and guide young adolescents toward a successful future. The Middle Start surveys provide a better understanding of the existing teaching and learning environment in schools and classrooms, and the ability of Michigan schools to engage in exemplary practices. This knowledge charts a path toward improving middle-grades education in Michigan. Continuing down that path constitutes an important first step toward directing all Michigan young adolescents away from risk and toward a lifetime of opportunity.
Sources of Quotations


Other Sources


Acknowledgments

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The Michigan League for Human Services began in 1912 as a statewide association of citizens concerned with a broad range of human services issues, and with the viability of the agencies and organizations delivering the services. The League's activities and programs continue to have as their purpose the improvement of human services in Michigan's communities through research, information dissemination, planning and advocacy.

The W.K. Kellogg Foundation was established in 1930 "to help people help themselves through the practical application of knowledge and resources to improve their quality of life and that of future generations." Its programming activities center around the common visions of a world in which each person has a sense of worth; accepts responsibility for self, family, community, and societal well-being; and has the capacity to be productive, and to help create nurturing families, responsive institutions, and healthy communities.

To achieve the greatest impact, the Foundation targets its grants toward specific focal points or areas. These include: health; food systems and rural development; youth and education, and higher education; and philanthropy and volunteerism. When woven throughout these areas, funding also is provided for leadership; information systems/technology; efforts to capitalize on diversity; and family, neighborhood, and community development programming. Grants are concentrated in the United States, Latin America and the Caribbean, and southern Africa.
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Key Features of Effective Middle-Grades Schools

Effective middle-grades schools are characterized by:

- **Educators** committed to young adolescents;
- A shared **vision**;
- **High expectations** for all;
- An **adult advocate** for every student;
- Family and community **partnerships**;

and

- A positive school **climate**.

Therefore, effective middle-grades schools provide:

- **Curriculum** that is challenging, integrative, and exploratory;
- Varied **teaching & learning** approaches;
- **Assessment & evaluation** that promote learning;
- Flexible **organizational structures**;
- **Programs & policies** that foster health, wellness, and safety;

and

- Comprehensive **guidance & support** services.

"This We Believe: Developmentally Responsive Middle Level Schools."
The Importance of Strengthening Michigan's Middle-Grades Schools

EXECUTIVE SUMMARY

STARTING AGAIN IN THE Middle

The Importance of Strengthening Michigan's Middle-Grades Schools
Introduction

Early adolescence is a time of heightened risk and opportunity. During these years, young people explore who they are and think about who they will become. This exploration manifests itself in experimentation with new behaviors and attitudes about themselves, their peers, and their schools. The experience of taking healthy risks, within safe, secure limits, is essential to young adolescents. Without guidance and support, experimental behaviors can have life-altering consequences.

Middle graders are particularly vulnerable to school failure and other potentially dangerous influences. However, the varied behaviors and developmental issues that jeopardize this age group also provide unique opportunities for healthy growth. Young adolescents’ growing capacity for conceptual thinking, combined with their curiosity, energy, and desire to learn, makes early adolescence an ideal time to encourage healthy development and to capitalize on academic potential.

Michigan-specific information collected by the W.K. Kellogg Foundation’s Middle Start Initiative sheds light on the experiences of the state’s young adolescents, their teachers, and school administrators. This effort represents the first time such a comprehensive survey of schools serving young adolescents has been undertaken. Admirably, the fact that Michigan’s middle-grades teachers, administrators, and students are willing to recount their trials and successes demonstrates their commitment to improving their schools.

The data illustrate that too many Michigan young adolescents lose ground during the middle grades. However, the Middle Start surveys complement other studies which demonstrate that high levels of learning occur in the presence of high expectations and a supportive academic environment. Further, these studies show that the key reforms necessary to create highly effective middle-grades schools require both human and financial resources. Unfortunately, the Middle Start findings also reveal that these resources are not uniformly available in every Michigan school and school district.

The summary analysis of the Middle Start findings provides an overview of current conditions in the middle grades, valuable guidance as to how middle-grades learning can be improved, and insight into the obstacles that compromise the effectiveness of the majority of our schools.
Report Findings

Throughout Michigan, too many young adolescents lose ground during the middle grades.

The Middle Start surveys indicate that many of the state's middle graders lose ground during this critical period. Girls suffer even greater losses than boys. It is during these years that young people make decisions about school that affect their success in high school and beyond. When students fall behind academically in the middle grades, they are more likely to drop out before completing high school. Currently, in twenty percent of all Michigan school districts, more than one-quarter of the students fail to graduate with their peers. During early adolescence:

- Achievement gaps widen between youngsters with the highest scores and those with the lowest scores on national and state achievement tests.
- School-based support to address barriers associated with poverty and other disabling conditions decline; and
- While the self-expectations of all middle graders decline from 6th to 8th grade, those of girls decline more significantly.

The Middle Start surveys also document several warning signs:

- Almost half of the state's middle graders report significant unsupervised time after school. Unsupervised time is tied to academic and behavior problems, substance use, and lost opportunities for academic and social-skill enhancements;
- Experimentation with cigarettes, alcohol, and other drugs is found across all income levels and geographic areas of the state; and
- Middle graders from lower-income families have significantly fewer opportunities to participate in school- and community-based sports and recreation programs that can provide natives to risky behavior.

When middle-grades schools are given the appropriate human and financial resources to effect key reforms, more students are likely to achieve at higher levels.

In order to produce a new generation of well-educated, responsible, and productive young people, high academic and social expectations must be communicated, adequately supported, and modeled in school, at home, and within the community. At school, young adolescents need strong academic settings where teaching is tailored to developmental needs. These settings require curricula that integrate learning opportunities across subjects and provide enhanced attention to literacy and mathematics. At the core of this ideal learning environment is the positive impact of caring adult and student relationships.

When given the resources necessary to implement key reforms of increased professional development and time to teach and plan together, Michigan middle-grades teachers and administrators establish a more challenging and supportive learning environment:

- Students are more committed and creative, achieve better grades, have higher expectations and a keener appreciation for the applicability of their school efforts to other parts of their lives;
- Student behavior is improved — young adolescents report less dangerous experimentation and experience fewer disciplinary problems;
- Teachers are more innovative and use more effective classroom practices to promote personalized learning environments; and
- Teachers have more contact with the parents of their middle-grades students.

The necessary human and financial resources are not uniformly available to all Michigan middle-grades schools.

Middle-grades schools in Michigan are highly vulnerable because they lack public consensus about their structure, mission, goals, and desired outcomes. Key reforms, supported by sufficient resources, could not only improve the learning of all middle graders, but have added benefit for the most disadvantaged students.

The survey information suggests that the school buildings, staffing, and community resources necessary to facilitate the learning environment for young adolescents in Michigan are not always available, particularly for the most vulnerable youth:

- Most Michigan schools lack necessary resources for appropriate instruction and support;
- Low-income students often attend schools where resources are even more limited and fewer reforms are adequately supported; and
- Most Michigan middle-grades teachers and administrators have expressed a need for more substantial professional development:
  - the majority have had no access to specific pre-service instruction to guide their work with this age group;
  - while most teachers express the need for additional professional development, few in-service opportunities exist; and
  - the vast majority of school schedules provide little time for teachers and administrators to plan and work together.
Recommendations

Starting again in the middle, paying more attention to the developmental and academic needs of youth at this pivotal time, prevents problems that diminish students' chances of later success. The question is not whether to attend to Michigan's middle graders, but how best to do so. In light of the vulnerability of the early adolescent age group and the consequences of inattention, the public has a special responsibility to support middle-grades education and the policies and practices that will help students succeed.

Schools, like other organizations, survive, grow, and adapt in response to many factors in their environment. Responding to demands for change is difficult, particularly within complex institutions that cannot change quickly or effectively without support. Further, the organizational changes discussed in the report, no matter how beneficial, are difficult to achieve in an environment where funds are limited, planning time is scarce, and pressure for immediate results is high.

Despite these limitations, many Michigan middle-grades schools are demonstrating that they can help young adolescents improve their learning, performance, and adjustment. In these schools, administrators, teachers, parents, and other community members work in partnership to improve teaching practices, enhance instructional resources, and develop structured opportunities for students' growth and achievement. In addition, programs for young people outside the schools - in museums, youth-serving agencies, libraries, religious institutions, recreation departments, and other settings - strengthen and support learning.

The Middle Start surveys indicate an imperative: the state, its communities, and school districts must reverse the trend of decline and improve the lives of Michigan's young people. Together, community institutions must develop the human and financial resources necessary to cultivate the strengths of middle-grades students, and to support the adults who are committed to their healthy development and achievement.

Lasting improvements and better outcomes for middle graders cannot occur without the following resources:

All young adolescents must have a challenging academic environment with adult support and direction suited to their needs.

Michigan's young adolescents, when supported and encouraged, will grow toward adulthood healthy and armed with the skills necessary for continued success in life and work.

To ensure this continued success, schools and communities must:

- set high expectations for all young adolescents;
- develop challenging curricula for all middle-grades students;
- pursue adequate resources for libraries and other instructional support;
- provide opportunities for caring, nurturing student and adult interaction within the school setting;
- design programs that allow young adolescents to tie learning to important issues in their lives;
- ensure that schools organize grades, students and teachers to support student progress;
- track student progress with a variety of assessment measures; and
- secure access to comprehensive health education and services for young adolescents.

All young adolescents must be educated by adults who are well-prepared professionally and motivated to challenge and support students.

Michigan's young adolescents are fortunate to have access to adults who prefer to work in the middle grades and who want to improve their schools.

To help these adults get the job done, school systems and communities must:

- support professional development for educators;
- provide time for teachers and administrators to plan and work together;
- prioritize professional development to reflect the identified needs of staff; and
- enable middle-grades educators to explore, acquire, implement, and reflect on new approaches to teaching and learning.

All young adolescents must have consistent parental and community support for their learning and achievement.

Parents, schools, and community-based institutions such as libraries, religious institutions, youth-serving agencies, and recreation departments can work in partnership on behalf of young adolescents.

To do this, schools and communities must:

- engage parents and other community adults in worthwhile activities to support early adolescent learning in and out of school; and
- create a network of out-of-school supports and activities that meets young adolescents' needs by
  - providing more constructive activities that complement learning; and
  - paying particular attention to economically disadvantaged, urban and rural young people who have not historically had access to these opportunities.
Executive Summary

The Middle Start Initiative is a broad effort undertaken in 1994 by the W.K. Kellogg Foundation to demonstrate that middle-grades schools can become more effective learning environments for young adolescents. The Initiative's objective is to improve the quality of education in Michigan's middle grades, particularly in schools and school districts with high percentages of students from low-income families.

Michigan has approximately 650,000 children, ages 10-15, navigating their way through early adolescence. During the past two decades, there has been a growing awareness of the needs of the nation's children. However, less attention has been paid to early adolescence than to two other developmental periods: the "ready to learn" years (birth to school age), and the "ready to earn" years (late adolescence to adulthood). As a result, little information is available about the well-being of Michigan's — or the nation's — young adolescents during this developmental stage critical to their academic success and healthy development.

To address this need, Michigan-specific data were collected through a series of surveys of middle-grades teachers, administrators, and students. The surveys were conducted by the Center for Prevention Research and Development of the Institute of Government and Public Affairs at the University of Illinois. All Michigan schools that serve young adolescents ages 10-15 were invited to participate in an extensive survey of teaching and administrative staff, and 224 Michigan schools participated in the survey. Almost one-half of the schools (101) also conducted student surveys, reaching over 45,600 students in the fifth to ninth grades.

Starting Again in the Middle combines the responses of the large, diverse, representative sample garnered from the surveys with other available information to describe Michigan middle graders and their experiences with one of the main institutions in their lives: their schools.
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