

Research Supporting the Draft Regents Policy Statement on Middle-Level Education

Introduction

Young adolescents, typically ages 10 to 14, are undergoing profound personal transformations – physically, emotionally, socially, morally, psychologically, and intellectually. They are leaving childhood and entering adolescence. They are also undergoing another transition, the transition from the self-contained classroom of the elementary school to the departmentalized structure of the high school. This is not to imply that there are not commonalities and similarities among the three levels of schooling. Instead, it means that, rather than imposing an elementary or high school orientation and structure on middle-level students, districts must look carefully at the needs of middle-level students and the organization of their middle-level education program.

The challenge to middle-level education is to make the transition from childhood to adolescence and from the elementary grades to the high school a positive period of intellectual and personal development for young adolescents, one from which they emerge with high hopes and the will to achieve to the best of their abilities.

The following research, in support of the draft Regents Policy Statement on Middle-Level Education, is organized consistently with the order of the draft Policy Statement.

The “Face” of Today’s Young Adolescent

The 1989 Regents Policy Statement on Middle-Level Education and Schools with Middle-Level Grades described the young adolescent as follows:

- All students experience the transition from child to adolescent as a natural and predictable life phase. What makes the transformation unique for each individual is the diversity in the onset of changes, the rate of changes, and the ability to cope with changes. No two people experience the transition in exactly the same way. The changes that emerging adolescents experience and the resulting behaviors include:
- Accelerated physical growth marked by the development of secondary sex characteristics, by hormonal changes, and by increases in weight, height, and muscular strength.
- Increasing importance of the peer group.
- Need for frequent affirmation and heightened sensitivity to comments about personal attributes.
- Desire and need for direction and regulation as well as for independence and autonomy, exemplified by testing limits of acceptable behavior.
- Array of intellectual skills and abilities ranging from concrete through to more complex and abstract thinking processes.
- Preference for active in contrast to passive learning activities.

- Inconsistency in behavior.
- Desire to explore, to try new things, to experiment, to learn, to grow.

...Middle-level educators need to realize that these natural changes are inevitable and are often influenced by societal factors, and they need to provide educational experiences consistent with the needs and characteristics of the student in transition.

Key characteristics further help to define the task of serving young adolescents by more specifically describing who and what they are:

- In the area of ***intellectual development***, young adolescents are transitioning from concrete to abstract thinking; prefer active over passive learning experiences; prefer interaction with peers during learning activities; respond positively to real life situations; have a strong need for approval and may be easily discouraged.
- In the area of ***physical development***, young adolescents undergo bodily changes that may cause awkward, uncoordinated movements; may be at a disadvantage because of varied rates of maturity that may require the understanding of caring adults; experience restlessness and fatigue due to hormonal changes; are concerned with bodily changes that accompany sexual maturation; and are physically vulnerable because of poor health habits or risky experimentation with drugs and sex.
- In the area of ***emotional/psychological development***, young adolescents experience mood swings often with peaks of intensity and unpredictability; are increasingly concerned about peer acceptance; tend to be self-conscious, lacking in self-esteem, and highly sensitive to personal criticism; and believe that personal problems, feelings, and experiences are unique to themselves.
- In the area of ***social development***, young adolescents have a strong need to belong to a group, with peer approval becoming more important as adult approval decreases in importance. In their search for self, they model behavior after older, esteemed students or non-parent adults; may exhibit immature behavior because their social skills frequently lag behind their mental and physical maturity; are dependent on parental beliefs and values but seek to make their own decisions; desire recognition for their efforts and achievements; and often overreact to ridicule, embarrassment, and rejection.

The Carnegie Council on Adolescent Development came to similar conclusions about the needs and characteristics of young adolescents:

Early adolescence is characterized by significant growth and change. For most, the period is initiated by puberty, a period of development more rapid than in any other phase of life except infancy. Cognitive growth is equally dramatic for many youth, bringing the new capacity to think in more abstract and complex ways than they could as children...The conditions of adolescence have changed dramatically from previous generations...In these changed times, when young people face unprecedented choices

and pressures, all too often the guidance they needed as children and need no less as adults is withdrawn....

Jackson and Davis, in TURNING POINTS 2000, make the following observations:

[E]arly adolescence [i]s a fascinating period of rapid physical, intellectual, and social change. It is a time, too, of emotional peaks and valleys... Yet within the trials and tribulations of early adolescence are the opportunities to forge one's own identity, to learn new social roles, and to develop a personal code of ethics to guide one's own behavior.

Early adolescence is a time of discovery, when young people have significantly greater capacity for complex thinking. They are more able to be out in the world, to participate in a wider universe of activities. They are better equipped to make important decisions affecting themselves and others, but their lack of experience leaves them vulnerable. They are better able to fend for themselves, yet they are caught up almost daily in a vortex of new risks...

Amid the stresses of early adolescence, entry into middle level school can itself be troubling. For many young adolescents, the transition from elementary school to a less supportive middle level school environment is associated with a decline in self-esteem... These changes and other shifts in attitudes about school subjects that can dampen students' motivation to learn reflect a poor "fit" between the learning environment of a typical middle grades school and the intellectual and social needs of young adolescents.

Clearly, early adolescence is a period of both enormous opportunity and enormous risks. Although many young people reach late adolescence healthy and ready for the challenges of high school and adult life, early adolescence for many others is the beginning of a downward spiral... The trajectory of a young adolescent's life is not wholly determined by social and economic circumstances. The soundness of choices he or she makes and the guidance available to make good decisions are critically important. But many young people have few viable choices because the social institutions that are supposed to provide real and equal opportunities to them are woefully inadequate.

The Board on Children, Youth and Families at the National Research Council has identified a range of "assets" that help promote the physical, intellectual, emotional, and social development of young adolescents (positive youth development).

The needs and characteristics of young adolescents today and those in 1989 are strikingly similar. What has changed are the short- and long-term consequences for young adolescents if their educational and personal needs are not met in the middle grades. Sometimes referred to as the "last best chance," middle-level schools have the challenge and opportunity to provide positive direction and support for their students, long into the future. Students who do not experience success in the middle grades are much more likely not to graduate from high school. And, without a high school diploma, their life choices, job opportunities, and career paths are severely and often irrevocably restricted.

The need exists for educators to recognize and assume responsibility not only for each student's intellectual and educational development, but also for every student's personal and social

development. The entire school community must share ownership and responsibility for all students and provide the education, support, and guidance required by each student. The need is pressing to assure high-quality appropriate instruction, relevant course content, and support and other services in the middle-level grades.

Characteristics of a School Responsive to the Needs and Characteristics of Young Adolescents

Philosophy, Mission, and Vision

The research and literature on middle-level education articulate a clear philosophy, mission, and vision for the middle grades: schools charged with educating young adolescents need to pursue a dual-function agenda that is responsive both to the emotional and social needs of young adolescents (developmentally responsive) and to their intellectual development (academically excellent). The participants in the middle-level forums conducted by the Department last spring echoed this message. The priority “lesson learned” was that “there must be a clear recognition and balance in the middle-level program between strong academics and youth development.”

Neither aspect of this agenda can have primacy over the other. “To primarily emphasize students’ emotional and interpersonal concerns is to make a strategic mistake, lending ammunition to those who see the middle grades as a wasteland of good intentions but low standards.” On the other hand, focusing solely on academics, at the expense of individual social and personal needs, leaves young adolescents with limited supports as they navigate the fundamental changes associated with this crucial developmental period. What is best for young adolescents is a school that values and supports both their intellectual and personal growth. It is imperative that the philosophy and mission of schools with middle-level grades explicitly reflect this dual-function agenda.

Educational Program

Young adolescents need and can function in an educational program that has academic challenge.

To date, the preponderance of evidence shows that a demanding curriculum has intellectual and practical benefits for students of all backgrounds, races, and ethnicities. A substantial amount of research supports the importance of a rigorous curricula and quality teachers for all students as the means to improving students’ academic achievement.

Middle-level schools must deliver challenging curricula aligned with State standards and focused on clear, measurable expectations for all students. However, for maximum benefit, the educational program needs to have not only academic challenge but also a strong personal support component.

[Researchers], in what to date is the most extensive study of the middle grades climate, reported that academic press and social support predict student achievement, regardless of students’ backgrounds and their schools’ demographics... The authors concluded that in order to succeed in schools that demand academic rigor, students need strong

personal support as well. Conversely, no matter how strongly a school caters to students affective and social needs, achievement depends on academic expectations and demands.

Young adolescents also need an educational program that has personal relevance and connections. In cases where students' own interests were reflected in the school program, academic achievement was influenced positively as were other desirable personal attributes.

When students reach the middle grades, they are more likely to question the value of what they are expected to learn. By connecting learning to the world outside of school, reformers believe that students can find meaning and motivation to do well in school ...[M]iddle school students who engaged in quality service-learning programs showed increases in measures of personal and social responsibility, communication, sense of educational competence, and improved problem-solving skills, as well as increased interest in academics. [Researchers] found that middle and high school students who participated in service-learning tutoring programs were not only less likely to drop out of school, but also increased their grade point average.

Students in the middle grades need opportunities in their educational program to explore career, educational and personal options. In fact, research suggests that the middle grades are a good time for students to learn to play a musical instrument or to speak a foreign language because of the changes occurring in the brain. Such activity has the added benefit of promoting a sense of competence, belonging, and self-esteem.

Career exploration activities designed to build self-knowledge relating to career interests and aptitudes complement a strong academic program. This exposure is particularly important in the eighth grade, when students are planning their high school course of study, but the planning should build upon and reinforce prior experiences in the sixth and seventh grades.

Young adolescents need an educational experience that is more than just an academic curriculum. They need, as they refine their abilities to think abstractly and visualize possible alternative futures, opportunities to pursue their talents, to explore their interests, to investigate their career options, to develop their personal strengths, and to grow as individuals.

Organization and Structure

Organization and structure are important considerations in the education of young adolescents. These help create the conditions for academic learning and personal development. Some researchers contend that smaller schools “tend to have better instructional practices, more parent involvement, more common planning time for teachers and other features that seem to predict higher achievement.” Others contend that the overall effectiveness of schools with middle-level grades is based less on the size of the school or its grade configuration and more on whether or not the organization and structure of a school create the sense of smallness with all of its perceived attendant benefits – academic and personal – for both students and staff. In short, “the overall effectiveness of middle grades schools has far more to do with the nature of their instructional programs, teachers, leadership, *organizational patterns and grouping practices* (italics added)” than with the actual size of the school in and of itself.

The organization and structure of schools with middle-level grades can also have a significant impact on the transition of students from middle level school to high school. In a 1999 study, researchers found that in districts that had established an extensive transition program for students leaving the middle grades and entering high school, there were significantly lower failure and dropout rates when compared to other districts that lacked such transitional support.

Organization and structure can also influence the type and quality of education a student in the middle grades experiences. Students assigned to higher tracks are much more likely to be exposed to a challenging and stimulating curriculum than students assigned to lower tracks. Further:

Some researchers argue that tracking has other adverse effects. For example, tracking interferes with middle grades students' personal development; has a negative effect on lower-tracked students; motivation, opportunities to learn and life chances; and perpetuates socioeconomic and racial inequities.

In the words of the Southern Regional Education Board, in one of its recent publications, “[g]iven extensive research documenting the positive effects of “detracking” and the role tracking seems to play in perpetuating achievement gaps, it seems reasonable to conclude that tracking is a disservice to students at all levels.

Classroom Instruction

Instruction matters; teachers matter. Researchers who have studied the middle grades classroom have found that a focus on higher-order thinking skills, engagement in hands-on, contextualized learning, and the use of problem-solving activities are all associated with higher student achievement. Further, instruction must be purposeful and standards-based. In 2000, researchers examined standards-based teaching practices and their effectiveness for urban African-American middle grades science students and found that a standards-based curriculum had positive effects on both achievement and attitudes, especially for males.

Teachers working with young adolescents need to be both caring and intellectually challenging if they are to meet the two purposes of middle-level education. According to one researcher, this “caring” is extremely important to young adolescents’ personal development and conducive to student learning. In a study of student motivation, perceived caring from teachers predicted motivational outcomes of grade-eight students. Students described “caring” teachers as those who focus on the student as learner (e.g., asking if the student needs help, taking time to make sure the student understands), model a desire to learn (e.g., makes class interesting, makes a special effort), and communicate in an open, democratic manner (e.g., asks questions and listens).

Educational Leadership

Recent articles on the state of middle-level schools have highlighted the need for broadly-based leadership as well as its absence:

The condition of the middle grades – lagging achievement; a lack of focus; ... a scarcity of resources compared with support for other grade levels – demonstrates a lack of leadership for middle grades education. States, districts, and schools must provide

leadership through policies and actions in the middle grades in order to accomplish the goal of proficiency for all students.

Leadership in a school with middle-level grades is a shared responsibility as it is in other school buildings. Teachers need to demonstrate leadership. Their leadership is evident when it comes to establishing a school and classroom culture that values and promotes learning, to developing curriculum, to working with colleagues and parents, and to helping students to develop intellectually and personally.

Principals must be leaders, too. They need to articulate the school's vision, promote the dual purposes of middle-level education (academic achievement and personal development), support teachers, engage parents and community, and maintain a climate conducive to teaching and learning.

The District Office, the Board of Education, parents, and community also have a leadership role. Their leadership function is manifested in support for the middle-level school and its vision and its purposes. In their own way, they need to promote the development of young adolescents, academically and personally.

Leadership also involves establishing and maintaining trust. Trust helps lubricate much of a school's routine functioning and is critical to school reform. According to researchers, "without trusting relationships among teachers, principals, parents, and students, such efforts are likely doomed to fail." This "relational" trust is based upon four principles: respect, competence, integrity, and personal regard for others. Each is an attribute of effective leadership. Schools that demonstrated high achievement were more often schools with high levels of trust; conversely, schools that demonstrated lower achievement tended to evidence lower levels of trust.

Student Academic and Personal Support

The most current information on student achievement in the middle grades for English language arts and mathematics shows that, in New York State, middle-level schools are making significant progress in addressing the educational needs of the students most at risk of not meeting the State's English language arts and mathematics learning standards (Level 1 students). However, to date, they have had limited success, especially in English language arts, in moving students from Level 2 to Level 3 and from Level 3 to Level 4. The results of the State assessments indicate that more needs to be done to help all students in the middle grades achieve at higher levels. Additional and extended academic support is needed to ensure that all middle-level students achieve proficiency.

"[H]ealthy development is essential to learning. Students thrive academically when there is support for their development as human beings." Young adolescents need an extensive and comprehensive system of academic and personal support if they are to prosper academically and personally.

Many middle-level students are also personally at risk and need additional support and assistance that is more than academic. Recent research indicates that students are likely to thrive in schools when their social and emotional needs are met.

[Researchers report that] adolescents feeling of attachment to school are related to levels of school engagement, including persistent effort in schoolwork, as well as increased academic motivation and interest. Student identification with school is related to attendance, preparedness for class, disciplined behavior, and attentiveness in class. Students perform better academically if they feel an attachment to teachers and when the curriculum is relevant to their lives, issues, and concerns.

In contrast, truancy, absenteeism, and eventual withdrawal from school have been found to be associated with lack of belonging to school and not valuing school. This is of particular concern for at-risk students, who often demonstrate behaviors that include poor attendance, a low value toward schoolwork, and a lack of participation, effort, motivation, and expectations for success. For these students, membership and sense of belonging to school are crucial to avoiding their dropping out.

Unfortunately, data collected in 2002 in three urban school districts in New York State suggest that schools with middle-level grades may not be connecting with large numbers of young adolescents. When asked the question, “How often do you feel like you can go to or talk to a teacher or other staff member in your school to help you in dealing with personal or family problems?,” more than half of the students responded either “never” or “hardly ever” (the actual percentages ranged from 60 percent in one district to 76 percent in another). When asked, “How often do you feel like you can go to or talk to a teacher or other staff member in your school to help you in dealing with academic problems or issues?,” the responses were less striking, but still significant with the percentages of students answering “never” and “hardly ever” ranging from 20 percent in one district to 54 percent in another.

The Forum for Youth Investment reassures schools that they are not alone in dealing with this responsibility for connecting youth with schools and learning:

If all young people are to be problem-free, fully prepared, and fully engaged, we need more time, more people, and more places. Schools do not have the capacity, on their own, to ensure that all young people are prepared for the transition to careers, citizenship and family and community life. They cannot and should not be the only learning organization in young people’s lives. From a time perspective, schools fill at best a quarter of young people’s annual waking hours. From a mandate perspective, schools have a primary responsibility for young people’s academic learning, not for the full range of areas in which young people need to be learning and engaged. They simply cannot go it alone.

Implicit in this statement is the reality that academic and personal supports work best when they are delivered in an integrated, cohesive manner.

Middle-level schools need to consider the idea of “support” in a broader sense, not just in the context of the classroom. Child Trends, a Washington think tank on issues related to child health and welfare, partnered with the John S. and James L. Knight Foundation to identify factors that can positively influence the educational achievement of youth. This research revealed that programs that focus on academic outcomes and programs that focus on youth development achieve positive results in BOTH areas, suggesting that there is a strong synergy between academic and personal support programs.

Professional Learning

The middle grades, like the elementary and high school grades, are in transition. The No Child Left Behind federal legislation can only hasten change. Teachers and administrators, if they are to maintain pace, provide leadership, and serve young adolescents well both academically and personally, will need continuous, ongoing opportunities to acquire new knowledge and to develop and refine their instructional and leadership skills.

Many middle-grade teachers lack the subject-matter expertise and the knowledge about young adolescents they need if their students are to meet the State's achievement expectations.

Concerns over whether middle-grades teachers know enough about their subjects to teach to higher standards are widespread. Nationally, only 72 percent of math teachers in grades 7 and 8 are certified to teach that subject, according to a 1999 report from the Council of Chief State School Officers.

Because many middle-grades teachers hold elementary licenses, they may not have the depth of preparation necessary to teach the increasingly complex academic content required in many states' standards...larger numbers are teaching courses for which they have no formal academic preparation than at any other level of schooling.

But, content expertise, while necessary, is not enough. Middle-level teachers also must know how to teach young adolescents using techniques and learning strategies that are matched to their developmental characteristics. The consequences of not addressing the twin competencies of content expertise and pedagogical skills are significant: "Requiring more academic content for prospective teachers will not be effective if they are not taught teaching strategies that will work with different learners."

The issues of preparation and knowledge are not limited to middle-grades teachers. Principals responsible for schools with young adolescents are often ill-prepared to assume a leadership role. In 2002, the State Education Department conducted a survey of middle-level principals. Two hundred and twenty-two school administrators responded. The results of the survey revealed a significant lack of graduate-level preparation in the area of middle-level education:

- Fifty percent of principals responding to the survey reported having no courses dealing specifically with middle-level education; and
- Only five percent reported taking more than five courses related to middle-level education.

In addition to new requirements for professional development, the No Child Left Behind legislation provides significant funding for "out-of-school-time" programs, involving families and community members and organizations. This component is critical since it acknowledges the reality that neither schools nor families can be all things to all children, that partnership will yield a synergy that achieves the best possible outcome for all. The Forum for Youth Investment, a leader in the field of youth development, has identified several themes that are evident in effective youth-centered school reform at the middle and high school levels. The following theme is of particular relevance to the conjunction of professional development and positive youth development:

“The instructional encounter – the interaction between student, teacher and content – is at the heart of all school reform efforts. If the instructional encounter does not change as a result of a reform initiative, it is hard to claim that it has been successful. If, on the other hand, the way that teachers, students and content relate to each other has shifted in a way that supports better learning, then reform has genuinely occurred. A real test of a youth-centered approach to reform is, then, the extent to which it points the way to better instruction...

... Teachers communicate and demonstrate high standards. It is through particular instructional techniques – active learning, inquiry-based teaching, project-based learning approaches, for instance – that students access challenging, relevant, engaging experiences. The actions of teachers and the mode of instruction determine whether young people’s learning experiences are personalized and rooted in relationships....

As one practitioner and advocate says, “youth development is good pedagogy.” Putting young people at the center of school reform taps into a range of effective instructional strategies and aligns them into a common picture of what young people need in order to achieve.

Conclusion

Students in the middle grades are at a critical period of their development, academically and personally. Unless the middle-level school, working closely with families and the greater school community, addresses both the intellectual and personal needs of young adolescents successfully, these students may well fail to realize their full potential. Research provides insight into the most effective practices related to the education and development of young adolescents. The task now facing educators – if all students in the middle grades are to be well served – is to identify and implement, fully and with fidelity, these practices. The implementation of middle level education reform, based on academic standards and youth development, requires shared responsibility among and between school, family, and community. The educational system cannot, indeed must not, function alone and in isolation.