

Turning Points 2000 Recommendations and
Student Achievement
A Preliminary Report of a Comprehensive,
State-wide Study

Preliminary Findings as of March 13, 2006

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The Issue

- Whether or not middle schools are value-adding, in other words,
 - “Are middle school programs and practices influencing student success academically?”

Focus Through the Decades

- 1960s: Foundation with Alexander & Eichhorn
- 1970s: Emergence and establishing a foundation
- 1980s: Defining the differences between junior highs and middle schools
- 1990s: Refining and challenging the basic concepts
 - The best decade in the history of the movement (Kasak, 2004)
- 2000s: Focus on academic excellence and social justice
 - Challenges to the legitimacy of the structure

Contemporary Challenges

- As the middle school movement was undergoing its best decade, calls were going out to illustrate its ineffectiveness.
- It was thought that the middle school concept and philosophy were to blame for the poor performance of adolescents on standard measures of accountability.
- Middle schools were characterized and referred to negatively
 - Muddle in the Middle (Bradley, 1998)
 - Education's Weak Link (SREB, 1998)
 - Mayhem in the Middle: How Middle Schools have Failed America—And How to Make them Work (Yecke, 2005)
- Concomitantly there have been calls for a return to K-8 schooling (Tucker & Coddling, 1998; Juvonen, Le, Kaganoff, Augustine, and Constant, 2004).
- MS Education is approaching a cross-road where documentation must soon prove it effective or it will begin to lose its identity just as the JH did in the seventies.

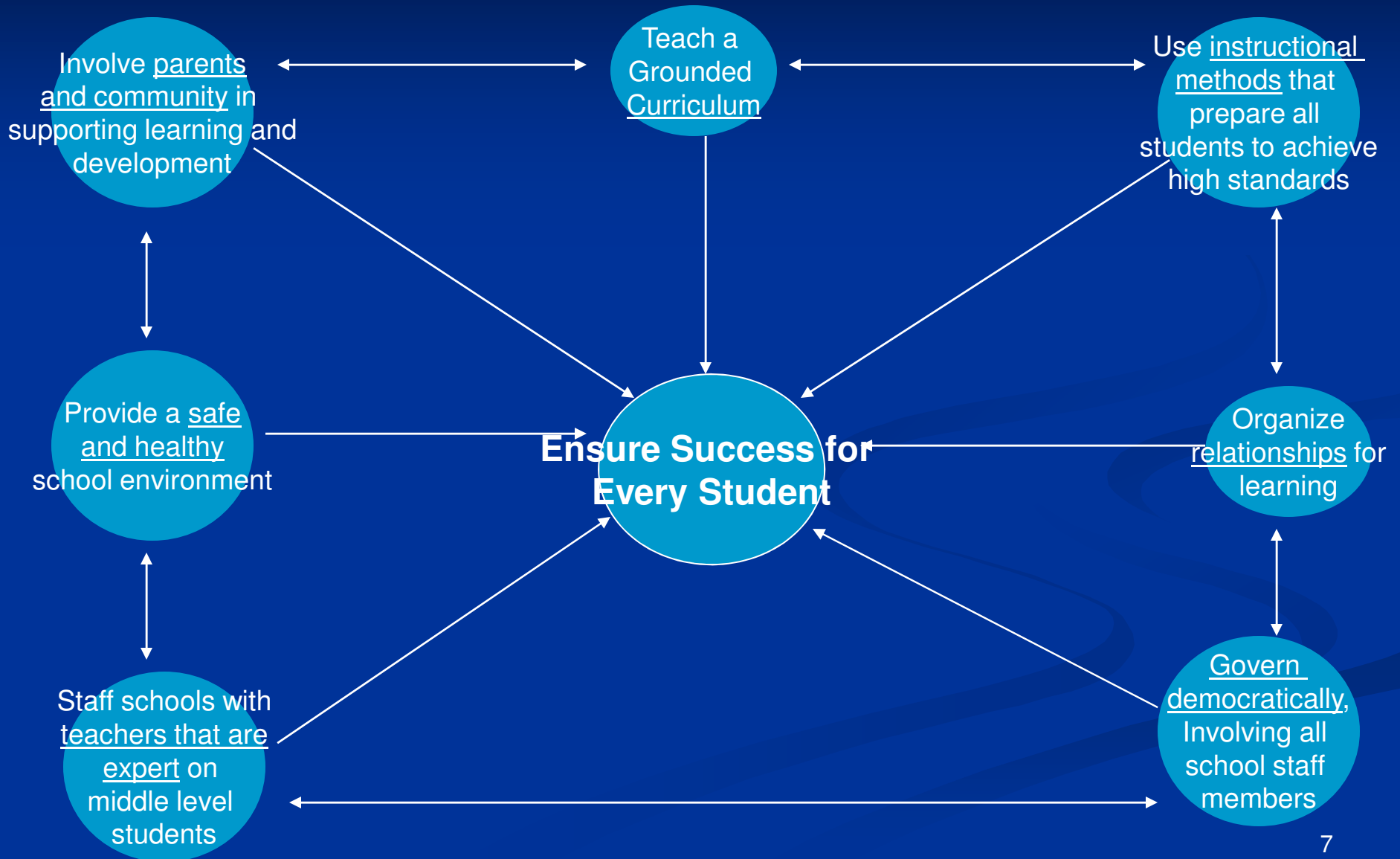
Statement of the Problem

- The problem examined in this study is student achievement at the middle level and the programs and practices that may positively influence it.
- With the exception of a small number of studies (e.g. Lee & Smith, 1993; Felner, Jackson, Kasak, Mulhall, Brand & Flowers, 1997; and Russell, 1997), there is not a clear understanding as to what influence the programs most commonly associated with middle level education have on student achievement.
- *Middle level education would be well served to be able to confidently say what the programs and practices are that influence (both positively and negatively) student achievement (NMSA, 2003).*

Critical Documents

- In today's current middle school environment three works have been influential in setting the agenda, focusing the debate, and providing direction for practitioners and policy makers.
 - *This We Believe*
 - *Turning Points* (1989)
 - *Turning Points 2000*
- These three publications have shaped and influenced what is thought of as best practice in middle schools at the start of the twenty-first century.
- *Turning Points 2000* served as the framework for this study.

Turning Points 2000 Design



TP2000: A Design System

- This is a design system: an interacting and interdependent group of practices.
 - A change in one part will/can affect other unintended parts of the system.
 - Also interacts with other systems.
 - Attending to higher points of leverage can more greatly impact the system.

Data Collection

- Initial data collection for a multi-year, longitudinal study
- Survey sent to all middle schools with at least grade 7 or grade 8 in the state of Missouri
 - Survey developed around the 7 tenants of TP2000
 - Fall 2005 Electronic/Online Version
 - Winter 2006 Mailed, Hard-Copy
 - Population: 339 Schools
 - 226 respondents at the time of analysis
- Cross-Sectional Research
 - “...provides a portrait of a group during one time period, now or in the past” (Fink, 2003, p.53).
- Student achievement and building demographic data were collected from State Department of Education’s website

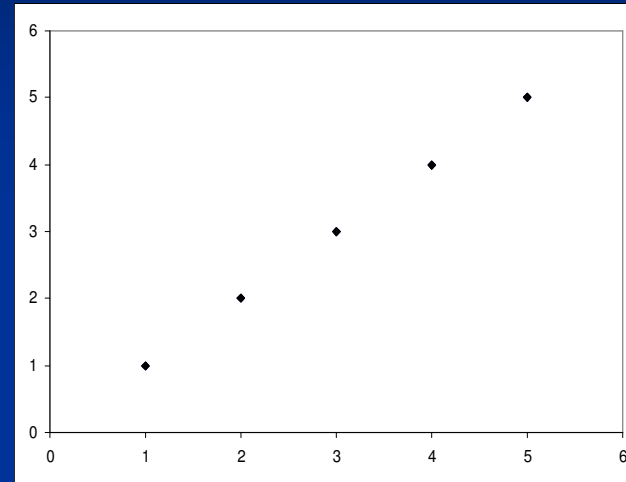
Data Analysis

- Scales developed from individual items using exploratory factor analysis.
- Partial Correlations between all items and scales with Communication Arts & Mathematics Statewide Achievement Data
- Percent of students receiving free and reduced lunch was a control variable on all tests

Statistical Concepts

- Significance levels
 - Probability of observation occurring by chance is less than 5% (.05)
- Correlations
 - Represents a linear relationship between two variables
 - Can range from -1.00 to +1.00

(Stat Soft, 2003)



$r = 1.00$

Outline for the Presentation of Findings

- The findings will be organized and presented around the *Turning Points 2000* recommendations.
- The formal recommendation and corresponding best practices will be shared, followed by the findings of this preliminary report.
- Recommendations and implications will be explored for each of the strands.

TP2000: Curriculum & Assessment

- “Teach a curriculum grounded in rigorous, public academic standards for what students should know and be able to do, relevant to the concerns of adolescents and based on how students learn best” (Jackson & Davis, 2000, p.23).
 - Standards
 - Curriculum Based on Standards
 - Assessment Connected to Curriculum, where a variety of methods are used

Curriculum & Assessment Items

- Curriculum, based on State Standards
 - **CA: .1954 (.019); Math: .1956 (.019)**
- Curriculum, relevant to students
 - **CA: .2068 (.003); Math: .2054 (.003)**
- Curriculum, challenging
 - **CA: .1565 (.027); Math: .1601 (.023)**
- Curriculum, integrative
 - **CA: .1774 (.012); Math: .1922 (.006)**
- Teachers have completed a curriculum audit
 - **Math: .1380 (.049)**

Basic Curriculum Scale

- Curriculum is:
 - Relevant
 - Challenging
 - Integrative
 - Exploratory
- **CA: .2091 (.014)**
- **Math: .1790 (.035)**

Curricular Expectations Scale

- Curriculum is:
 - Relevant
 - Challenging
 - Integrative
 - Exploratory
- Teams have high expectations for all students
- **CA: .1906 (.020)**
- **Math: .2557 (.002)**

TP2000: Instructional Practices

- “Use instructional methods designed to prepare all students to achieve higher standards and become lifelong learners” (Jackson & Davis, 2000, p.23).
 - Connected to standards/curriculum/assessment
 - Equitable
 - Excellence
 - Models for Organizing
 - Technology
 - Reading

Instructional Practices Items

- Instructional practices, critical thinking skills
 - **CA: .1685 (.019)**
- Instructional practices, reading skills
 - **Math: .1590 (.027)**
- Instructional practices, writing skills
 - **Math: .1605 (.026)**

Skill-Oriented Instruction Scale

- Composite of instruction practices including:
 - Frequency of critical thinking practices
 - Frequency of practices to bolster skills in math
 - Frequency of practices to bolster skills in reading
 - Frequency of practices to bolster skills in writing
- **Math: .1828 (.010)**

TP2000: Expert Teachers'

- “Staff middle grades schools with teachers who are expert at teaching young adolescents, and engage teachers in ongoing professional development” (Jackson & Davis, 2000, p.25)
- Prepared to teach in a middle school
- Licensure/Certification
- Mentoring/Induction
- Professional Development

Expert Teachers' Items

- Educators, value working with this age group
 - **Math: .2192 (.002)**
- Educators, prepared to work with this age group
 - **CA: .1410 (.044); Math: .2355 (.001)**
- Professional development, characterized by the presence of a facilitator
 - **Math: .1721 (.044)**
- Amount of individual planning time
 - **Math: .1751 (.041)**

Middle School Disposition Scale

- Degree to which curriculum is exploratory
- Degree to which educators in our school
 - Are familiar with middle school philosophy
 - Practice middle school philosophy
 - Value working with this age group
 - Are prepared to work with this age group
- Degree to which interdisciplinary teams
 - Have a sense of cohesion and harmony
 - Have matured in a manner allowing for effective interaction
- **Math: .2077 (.011)**

TP2000: Organizing Relationships

- “Organize relationships for learning to create a climate of intellectual development and a caring community of shared educational purpose” (Jackson & Davis, 2000, p.24).
 - Creating small communities to build relationships
 - Organizing and Structuring Interdisciplinary Teams
 - Creating & Sustaining Effective Interdisciplinary Teams
 - Interdisciplinary Team Roles & Responsibilities
 - Practices of Effective Interdisciplinary Teams
 - Advisory Program

Organizing Relationships' Items

- Teams, coordinate student assignments/assessments
 - CA: .2241 (.009)
- Teams, contact and involve parents
 - CA: .1846 (.031)
- Teams, effectively address student needs
 - CA: .1697 (.048)
- Teams, have high expectations for students
 - CA: .2134 (.013); Math: .2509 (.003)
- Teams, have a sense of cohesion and harmony
 - CA: .3407 (.000); Math: .2986 (.000)
- Teams, have matured in a manner which allows them to interact effectively with each other and parents
 - CA: .2190 (.010); Math: .1633 (.046)

Teaming Characteristics Scale

- Degree to which teams
 - Effectively address student needs
 - Have high expectations for all students
 - Have a sense of team cohesion and harmony
 - Have matured in a manner which allows them to effectively interact with others
- **CA: .1855 (.030); Math: .2181 (.010)**

TP2000: Democratic Governance

- “Govern democratically, through direct or representative participation by all school staff members, the adults who know the students best” (Jackson & Davis, 2000, p.24).
 - Leadership Teams
 - Inquiry Groups
 - Student Involvement
 - Building Principal
 - District Capacity

Democratic Governance Items

- Number of years as a middle school assistant principal
 - **Math: .2294 (.002)**

TP2000: Safe & Healthy Schools

- “Provide a safe and healthy school environment as part of improving academic performance and developing caring and ethical citizens” (Jackson & Davis, 2000, p.24).
 - Healthy Learning Environment
 - Classroom Management
 - Discipline
 - School Promotes Health
 - Health Services

Safe & Healthy Schools Items

- School has an inviting, supportive and safe environment
 - **Math: .1806 (.015)**
- School provides students access to appropriate healthcare
 - **Math: .1499 (.045)**
- School recognizes staff for contributions
 - **Math: .1542 (.039)**
- School has students who are motivated to achieve
 - **CA: .1542 (.039); Math: .2857 (.000)**
- Students in our school work well together
 - **Math: .2512 (.001)**
- Teachers/students in our school have close relationships
 - **Math: .2375 (.001)**

School Environment Scale

- Degree to which the school environment:
 - Has an inviting, supportive, and safe environment
 - Is a safe place for students and teachers
 - Provides students with access to appropriate healthcare services
 - Recognizes staff members for their contributions
 - Has students who are motivated to achieve
 - Has students who work well together and respect one another
- Teachers and students in our school have close relationships
- **Math: .2689 (.000)**

TP2000: Parent & Community Involvement

- “Involve parents and communities in supporting student learning and healthy development” (Jackson & Davis, 2000, p.24).
 - Parent involvement to improve student learning
 - Linking learning to resources in the community
 - Integrating community into the curriculum

Parent & Community Involvement: Items

- Frequency school contacts parents about student academic performance
 - Daily
 - Weekly
 - Monthly
 - Twice a year
 - Never....
- **Math: .1625 (.030)**

School to Parent Communication Scale

- Frequency with which school contacts parents about
 - Student academic performance
 - Student accomplishments
 - Information on school programs
 - Information on the development of young adolescents
 - Information on the availability of health and social service programs
- **Math: .1522 (.042)**

Synthesis of Findings: Communication Arts and Mathematics

- Student achievement in communication arts and mathematics is significantly higher in middle level schools where:
 - Teachers implement a curriculum that is relevant, challenging, integrative, and exploratory emphasizing critical thinking skills and holding high expectations for student success.
 - The learning delivery system is interdisciplinary teams who have learned to work together collaboratively to address student needs.

Synthesis of Findings: Mathematics

- In addition to the findings in the previous slide, student achievement in mathematics is significantly higher in middle level schools where:
 - Teachers know and practice middle school philosophy and they desire to work with and are well-prepared to work with young adolescents.
 - Teachers consistently utilize best instructional practices that focus on the development of literacy skills in an environment that is physically and emotionally safe and supportive.
 - The school interacts frequently with parents about issues of student academic performance, student accomplishments, adolescent development, and opportunities for participation in non-curricular programs that meet student needs.
 - Students are characterized by close and respectful relationships with their teachers and peers and possess high levels of motivation to achieve.

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