

Conversations

TURNING POINTS TRANSFORMING MIDDLE SCHOOLS

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All Students Learning

by Anne Wheelock

Learning explodes in early adolescence. Excluding the period between birth and three, our students change more between the ages of 10 and 14 than during any other comparable period in their life span. Whether smooth or halting, the pace of young adolescents' intellectual, emotional, and physical development means that students who enter the middle grades will be very different individuals when they leave.

"All students learning" is a call to connect what we do with what we know about students' development during this period. Teachers must help students develop an "academic identity" and sense of themselves as energetic learners and competent thinkers. And schools must nurture strong "habits of mind and heart" so young people can negotiate the array of choices they face, academically and socially, with optimism and purpose.

What middle grades students say about learning

Students' own perspectives on their learning reflect a long-standing theme in middle grades education: Meaningful learning requires caring, engagement, and support.

When Alison Saelee talks about her middle school, she says, "I love it here." As the south Sacramento, California, student, explains, "They load you up with a lot of work but they do prepare you for high school. There's no late work allowed. Everything has to be there and finished or else it's a zero. It makes you work extra hard."

Off on a field trip on a Narragansett Bay research ship, 14-year old Nicole DeJesus gets her hands dirty trawling for marine organisms and analyzing their habitat. Back in her classroom, she and her classmates test their hypotheses about the best way to respond to oil spills by exploring the interaction of water, vegetable oil, and detergent. "We're learning," she says. "[The teacher] tells us things we don't know yet... She's funny, too."

Turning Points schools aim to infuse high expectations, engagement, and support into the day-to-day experiences of all learners in every classroom. But an honest assessment suggests that this goal is still a scattershot proposition. In the late 1980s, John Lounsbury and Donald Clark's shadow study of eighth graders observed a widespread lack of ownership in their assignments.

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Although students accepted assignments that required little more than note-taking at their desks, many appeared bored and disengaged. Lounsbury and Clark argued that all students, not just some, would benefit from the challenge of discussing, probing, and analyzing themes common to different subject areas.

A decade later, researchers Bruce Wilson and Dick Corbett spent three years following Philadelphia sixth graders through their eighth grade. Like Lounsbury and Clark before them, Wilson and Corbett heard many students they interviewed say their teachers often let them “get by” with less effort than is necessary to learn well. The Philadelphia students also described a handful of classrooms where “good teachers” cared about students, established a “press for achievement” that brought out their best effort, and assigned work that made content meaningful to their lives.

“Hard work does not turn students away, but busy work destroys them.”

Students also say that certain learning assignments are more likely than others to remain with them long after the end-of-unit test. When educator Paulette Wasserstein asked seventh and eighth graders in the Campus School in Englewood, Colorado, to describe their most memorable learning, students pointed less to work that had received high grades and more to hands-on science projects or independent research that required them to reach beyond their usual levels of effort. One student reported, “I never worked so

hard, but it was worth it.” Another said, “I spent 12 hours on it, but it was the most fun project I ever did.” Wasserstein concluded, “Students of different abilities and backgrounds crave doing important work.” She added, “Hard work does not turn students away, but busy work destroys them.”

Conversations

TURNING POINTS TRANSFORMING MIDDLE SCHOOLS

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Turning Points is a design for comprehensive middle school reform, coordinated by the Center for Collaborative Education (CCE) in Boston Massachusetts, with regional centers across the country. Turning Points seeks to create high-performing schools, especially those serving high percentages of low-income students and students of color. The design is driven by one over-arching goal – ensuring success for every student.

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Still, young adolescents need more than “hard work” to become successful learners. They also need sustained support from their teachers. As part of shadow studies in several Turning Points schools in Peoria, Illinois, coach Matt Jacobson interviewed students who explicitly valued teachers who were caring and fair. One student explained, “[The teacher] is really upfront, and she stays with me. She doesn’t get too far ahead of me.” Another said, “There are very nice teachers here who really care about us. I feel free to tell personal things to them. Everyone is treated equally here.” Philadelphia seventh graders interviewed by Wilson and Corbett appreciated teachers who explained material clearly in a variety of ways, “stayed on them” to complete their work, and provided extra help to succeed. With this back-up, students said they resisted the temptation to give up when assignments initially seemed too difficult. As one said, “If they know I can do it better, I want someone who will push me.”

Engaging all learners

What students say “works” for them in school is not so different from what middle grades teachers report helps engage all learners. Caring relationships based on clear expectations for good work help strengthen students’ commitment to learning. Challenging assignments, backed by the encouragement of teachers who “stay on” them, offer specific feedback, and provide extra help, further increase student success.

Knowing students as learners

Engaging all learners means knowing

every student well, and increasingly, middle grades schools are consciously organizing their schedules and routines in ways that reflect this principle. At Boston’s Taft Middle School and Chicago’s Thurgood Marshall School, for example, teachers stay with their students from one grade to the next, a practice known as “looping.” At Thurgood Marshall, instructor Cary Goldenberg meets his 100 students for the first time in seventh grade, then moves with them into the eighth, allowing him to more easily personalize his teaching. “Two years gives me a lot more time to know each student on an individual basis,” he says. “I can find out what students’ learning styles are, and once I know how they learn best, I can teach to their strengths.” Gerardo Martinez, English Language Arts teacher at Turning Points’ Taft Middle School in Brighton, Massachusetts, agrees. He explains, “We can start the second year off quickly. The kids are familiar with my style, and I don’t have to spend the first month of school getting them used to my expectations.”

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Some schools facilitate teachers’ getting to know students better as learners by rearranging schedules so that teachers work with fewer students for extended blocks of time. Ellen Berg, sixth-grade teacher at Turner Middle School, St.

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Classrooms that engage all students also use positive relationships, goal-setting strategies, and meaningful assignments to motivate students.

Louis, Missouri, says that having 78 students in three 80-minute time blocks every day helps her build positive relationships and capture the attention of students for longer-term projects. “There’s more continuity,” she says. “Now I don’t mention the book we’re reading and get the blank looks I got when I saw the children every other day.” Likewise, Martinez has been able to assess and respond to each student’s strengths and weaknesses even more accurately since the Taft introduced double periods for English Language Arts, making Martinez responsible for 60 instead of 120 students. “This gives me time to create individual learning plans that challenge each student,” he says.

Teachers who do not have the chance to stay with their students over several years or a long time block can still pursue ways to understand them as learners. Brenda Dyck, sixth grade teacher at Masters Academy and College in Calgary, Alberta, gains an “inside glimpse” into her students as math learners by inviting them to write a “math biography” called “This is My Life... In Math Class” during the first few days of the school year. “Students always say, ‘This is math, Mrs. Dyck. We’re not supposed to write!’ But of course they do,” she says. Self-reported information about “best and worst moments in math class” provides Dyck with background on students’ “mathematical past,” views of themselves as math learners, and anything that excites or worries them about the year ahead. Student descriptions of two ways they understand math best give Dyck an excuse for discussing different approaches to solving problems. “I get

to meet the ‘mathematically abused’ and the ‘mathematically bored’ student immediately,” she says. “Without this assignment I may eventually figure out some of this, but it might not be until December.”

Motivating students

Classrooms that engage all students also use positive relationships, goal-setting strategies, and meaningful assignments to motivate students. Ellen Berg explains, “Relationships are the basis of trust. My students trust me. They believe me when I say ‘If I take time to teach something to you, it’s because you need it for your life.’” In turn, students who believe teachers are acting in their best interest are more likely to respond to whatever “push” they need to succeed in classes like Berg’s where “failure is not an option.” As Berg reports, “If you get a ‘D’ or ‘F’ in my class, you have to do it until you get a ‘C’ or better. At first my kids complained. I said, ‘This isn’t busy work. You’re redoing it because you haven’t learned it. This is an opportunity.’ Now, students don’t stop with a ‘C.’ What I’ve found is that most kids will push to get an ‘A.’”

Berg facilitates stronger learning for all students by designing clear scoring guidelines that make explicit her expectations for student work. But she’s also learned that guidelines or rubrics alone do not adequately empower students to respond to those expectations. She explains, “Even after I’d given students a scoring guide, when I asked them to use their reading journals to respond to a question like, Which character did you like best in [Gary Palsen’s] *Hatchet*, and why?, they were still writing one word

or one line answers. That told me I hadn't done my job yet." Students succeeded, though, when Berg took the next step of showing them concrete examples that illustrated the kind of work she expected from them. "I copied students' 'A-work' and showed these pieces anonymously to everyone," Berg says. "I did it very deliberately so they could see what other students could do, explaining how more detail helped me better understand what they meant. Overwhelmingly now, I'm seeing them talking about their answers, showing their answers to each other. It was more authentic than anything else I could show them."

"My goal is to help students do good work when I'm not there."

If scoring guidelines and examples of high quality work help student envision how they can execute the immediate assignment before them, then working with students to set their own learning goals establishes a foundation for more independent learning in the future. Like Berg, Ruth Fulwider, seventh-grade teacher at the Robinson Middle School in Lowell, Massachusetts, shows students exemplary work to engage their effort. She is also teaching her students to become self-directed learners who respond not only to teachers' expectations but also to their own. "My goal is to help students do good work when I'm not there," Fulwider says. Fulwider's students, many learning English as their second language, now set their own literacy goals on a regular basis.

Every Monday, students take time to write down three specific literacy goals

for the week along with steps they will take to achieve those goals.

During the week, any time students have evidence—whether written work from their science class, or notes from reading done in social studies—demonstrating progress toward a goal, it goes into a personal folder. Over time, given regular sessions of self-assessment, developed in tandem with the self-monitoring encouraged by Accelerated Reader, a computer-based approach to fostering sustained student reading, Fulwider says students are realizing that they are in charge of their learning. She says, "I want to give students the tools to learn how to change themselves. Students need to learn to check up on what they're learning. Having to report on their progress without any input or chastising from me makes some see that their failure is the result of their inactivity in school, not on isolated events they can blame on someone else." Fulwider reflects that it has become common for students to run up to her, portfolios in hand, to show her their accomplishments. "Students are more motivated to complete an assignment when it bothers *them* that they haven't completed it, not when it bothers *me*," she says.

Motivating every student to do better work also requires addressing the pace of learning of each student. But how can we do this without separating students into "slow" and "fast" groups? When Brenda Dyck reflected on this question, she decided that she would "teach until they get it" by offering extra help to any student who needed it to succeed in her math classes. Instead of sending struggling students out of class for special

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services, she would invite every student scoring lower than 70% on a unit test to participate in a “rework process.” She says, “What this amounted to was meeting with me for several lunchtime tutorials, taking home an accompanying drill for a couple of nights, and subsequent retesting.” She explains, “I would take the best score of the tests, rather than averaging the two. If the student didn’t score over 70%, we went back and did it again.”

“We can explain something over and over, but if we don’t vary the way we explain it, only a few kids will ever understand what they need to know.”

Over time, students begin to realize that asking for help is “normal,” Dyck says. “It became a natural part of our math class, and most kids welcomed getting their mark up to speed. I didn’t stop my regular program; we continued to motor,” she notes. And in a classroom culture where help-seeking is encouraged, students who may come to Dyck’s class believing “I’ll never do well in math” leave as more confident learners. “It’s thrilling to see their determination and observe their feeling of accomplishment,” says Dyck.

Interactive classrooms

For many teachers, engaging all students begins with accepting that the diversity of young adolescent learners inevitably means diversifying instruction through more interactive lessons. “We can explain something over and over,” says Cary Goldenberg. “But if we don’t vary the way we explain it, only a few

kids will ever understand what they need to know.” Gerardo Martinez establishes an interactive classroom climate through involving students in sustained questioning and dialogue about the work at hand. To get students to think more critically about their written work, for example, he models his own writing process in “real time,” beginning by showing students a sample of his own writing. Then, he says, “I might stop and say, ‘This is a draft. How can I make it better?’ As students advise him, he responds by thinking out loud, making explicit the consideration he is giving to organization, tone, sentence structure, and choice of vocabulary. “Kids need to see an expert at work,” Martinez explains. At the same time, Martinez uses this occasion to give students a mini-lesson on a particular point of grammar or syntax, drawing on examples from students’ work as well his own. He adds, “Teachers sometimes assume that students have to do everything by themselves, but everyone needs to discuss what they’re doing.”

Socratic discussion, cooperative groupwork, and complex instruction all pave the way to more interactive classrooms in the middle grades. At Thurgood Marshall, students engage in a human chess game as part of their study on the Middle Ages, analyze and present data derived from surveys of peer attitudes, and engage in small group discussions about fiction with themes of concern to young adolescents. An elaborate simulation at the end of the year engages students in a six-week “micro-society” unit during which students rent apartments, design resumes and cover letters for “job search,” prepare a weekly

budget, take on child care responsibilities, and open a bank account. Instructor Cary Goldberger says, “When students have some choice about what they want to research and explore, they’re more motivated.”

Recent research from the Consortium on Chicago School Research confirms that both high-scoring and low-scoring students benefit from interactive classrooms where instruction is organized so that students engage with content by asking questions, developing strategies for solving problems, and communicating with one another. Examining learning assignments from different schools, Consortium researchers found that roughly half the sixth- and eighth-grade assignments did little more than require students to complete such tasks as identifying parts of speech in single, isolated sentences. But in classrooms where students received more interactive assignments, including those involving thinking skills, test scores showed marked improvement. Far from being a distraction from “basic skills,” frequent use of interactive assignments clearly boosts mastery of both mathematics and reading to higher levels of competence.

Developing thinking skills

“Learning is a consequence of thinking,” writes David Perkins of Harvard’s Project Zero in *Smart Schools: From Training Memories to Educating Minds*. “Retention, understanding, and the active use of knowledge can be brought about only by learning experiences in which learners think about and think with what they are learning.” The Turning Points goal of “all students

learning” ultimately means “all students thinking.” Assignments that engage students in posing questions, synthesizing information and ideas, drawing conclusions, and applying new learning help realize this goal.

What do such assignments look like? This year, Ellen Berg developed a month-long project that demanded essay writing, speaking and listening skills, research skills, reading comprehension, and using the text to defend an argument, culminating in performances students share with their classmates. Since the beginning of the year, Berg had taught students skills for working in small groups, so when Berg’s classes embarked on a study of fairy tales, students moved easily into jigsaw groups, each assigned to draft a story map based on a different fairy tale. Regrouped, students shared the information they had collected, identified five elements the stories had in common, used that evidence to debate the definition of a fairy tale, and created a presentation for the whole class on their definition.

That week was only the beginning of an extended “Cinderella project.” Working alone, in pairs, or at the listening center, students read the Walt Disney version of Cinderella, and conferred with Berg individually about their story maps, allowing Berg to check what students understood about plot, sequencing, and character and correct misconceptions. “I learned a lot about their thinking from this process,” Berg says.

Next, using their individual maps as the basis for discussion, the class as a whole developed a chart that served as the launching point for reading five

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other versions of Cinderella, one each from Egyptian, Korean, Persian, Irish, and Ojibwan traditions. “They were switching books,” Berg recalls. “They really wanted to know why there were all these Cinderellas.” Back in reconstituted jigsaw groups, they once again developed group story maps they would use to fill in a class story chart. Equipped with a common understanding of features of a “Cinderella story,” students finally used the information they had generated to create a scoring guide for their final project, a presentation of their own Cinderella plays, the final demonstration of their learning.

The results have been breathtaking. “Students were debating the evidence,” says Berg. “They said they really had to think.” Using the scoring guide they had devised, students wrote plays of “their” Cinderella, rehearsed in class and during lunch, consulted with the art and consumer arts teachers about sets and costumes, and met with Berg for critique and coaching during her preparation period and after school. The final performances were testimony to their learning. “I had only one group that earned a ‘2’ out of ‘4,’” says Berg. “And since we were using their own scoring guide, they could see that the difference was the effort they made.” Berg adds, “I’m constantly surprised by what sixth graders know. They have very sophisticated thinking. Being able to look across several texts, pick out a common thread... That’s a great accomplishment.”

Assignments that engage students actively in their response to content are key to helping students develop an “academic identity.” Given opportunities to think about a literary genre for over a

month, Berg’s students, for example, began to “look at themselves as ‘students.’” Now, Berg says, “When new students come into the classroom, and they misbehave, it’s the students who turn to them and say, ‘In here we do work.’ They volunteer to help. They say, ‘In here we talk this way.’”

“I think I have successfully tapped into that affective domain by honoring their interests, allowing them choices, and creating challenging tasks.”

Projects that emphasize multiple ways of solving problems also contribute to a classroom culture that values questions as much as answers. Berg says, “Students are more willing to try new things now. They are coming to me and asking more questions. They know it’s all right not to know the answers.” And the value placed on problem-solving and help-seeking together boost student motivation to learn. Berg says, “They have to figure things out. That’s so much more interesting than trying to guess the answer in the teacher’s mind. It keeps them from shutting down.” She adds, “I think I have successfully tapped into that affective domain by honoring their interests, allowing them choices, and creating challenging tasks.”

Constructive feedback for learning

Keeping students engaged in learning also depends on students’ receiving sustained feedback on their work, but not all feedback is useful for learning. According to the National Assessment of Education Progress (NAEP), for

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example, eighth graders are most likely to write effectively when teachers provide written responses to the ideas they present in their writing and suggest specific alternatives to students' mistakes or writing strategies. In contrast, when teachers comment on the way students follow directions or on the amount they write, writing does not improve. In fact, some middle schoolers themselves say that feedback on their assignments is often too thin to help them engage in more challenging learning. As Bruce Wilson and Dick Corbett learned, young adolescents experience a hunger to understand their mistakes and how to correct them, but in their three-year study, they found only a handful who routinely received specific suggestions for improving their work.

Clearly, learning suffers when teachers limit their feedback to letter grades or a cursory "Nice work" or "Good job," comments that, however well intended, offer students little guidance for improving their work. What students need instead is constructive criticism, provided in a variety of ways, so they can understand where they have gone wrong and how to redirect their effort and revise their work until it meets both teachers' expectations and the goals students set for themselves. Seventh graders from Philadelphia, for example, are explicit about the feedback they find valuable for learning: "[The teacher] gives us lots of comments and corrects any mistakes," said one interviewed by Wilson and Corbett. Another reported, "[The teacher] said I messed up my hypothesis, and she showed me how to do it better."

Recommendations for Organizing Instruction

Although no single model for instruction can encompass every element that is vital to young adolescents' learning, Tony Jackson and Gayle Davis, co-authors of *Turning Points 2000: Educating Adolescents in the 21st Century*, argue that teachers who attend to a core set of guidelines as they organize instruction can enrich learning for all students. These include:

- Meet students where they are, since people learn best by connecting new information to old.
- Center classrooms on the students, not the teachers, since people also learn best when they exercise some control over their learning.
- Provide rich learning environments, since intelligence is fluid, not fixed, and will increase, given access to a diversity of materials, opinions, and options.
- Organize content around concepts, since the brain searches for meaningful patterns, connecting parts to wholes.
- Engage students in challenging work, grounded in higher-order thinking, since people learn best when they have to stretch to succeed.
- Connect what happens in the classroom to the students, either directly or by helping them discover links to the world beyond the classroom, since people learn best when what they are learning has relevance to themselves or their society.

Jackson and Davis stress that when teachers use these recommendations to weave curriculum and assessments that allow students to show what they can do together with students' interests and skills, classrooms will be closer to the Turning Points vision of all students learning.

For more information, see: Jackson, A. W., and Davis, G. A. (2000). *Turning Points 2000: Educating Adolescents in the 21st Century*. New York: Teachers College Press.

Thinking skills for all students: Alternatives to conventional wisdom

Traditional thinking holds that students are not “ready” to engage in complex assignments until they have acquired a strong foundation of basic skills and knowledge. But this “basic skills first” approach tends to put an artificial ceiling on learning. And because many low scoring students also come from low-income, immigrant, African American or Latino families, making access to classrooms where students learn for understanding dependent on mastery of particular skills or facts further widens achievement gaps.

Assumptions about basic skills deficiencies of low-income students can mistakenly lead to learning environments devoted exclusively to addressing skill deficits. But consider the “alternative wisdom” offered by the University of Washington’s Michael Knapp:

Expectations for students

■ **Conventional wisdom:** Compared to middle-income students, low-income students are deficient in knowledge and experience. Therefore, schools should focus on providing remediation for students’ deficits, both academic and behavioral.

■ **Alternative wisdom:** Students bring strengths to school regardless of their cultural background. Their academic experiences should help them build bridges between what they know and what they need to know in the wider world. Teachers should spell out key assumptions about learning so that students see and understand what thinking is about.

Curriculum

■ **Conventional wisdom:** Students must master basic skills in a linear and sequential fashion until they are “ready” for assignments that require them to develop thinking skills. Therefore, students who work at a slower pace or struggle with particular “pieces” of learning should be grouped specifically to address the skills they need before they have the opportunity to develop skills in posing questions, synthesizing information, connecting ideas, and drawing conclusions.

At the Robinson Middle School, Ruth Fulwider uses a combination of teacher and peer feedback to engage all students in reading and writing. Whether students are reading Tolstoy’s “A Just Judge” or a chapter book, Fulwider routinely asks them to write responses to their reading in journals, then focuses on correcting mistakes in particular skill areas: capital letters, end marks, or run-on sentences. “The key is to tell them ahead of time what you’re giving them feedback on,” says Fulwider. “Then, when I pair up kids to talk about their work, whenever they run into errors in the mechanics of their piece, they fix them.” Equally important to Fulwider, however, is that her students, many of whom speak Vietnamese or Spanish at home, receive feedback on their work as a whole and develop an “ear” for written language. To this end, Fulwider first asks students to read their own work aloud to themselves. Then, students trade papers with a partner, and one student will read aloud to another, so that each hears her own paper read aloud. Fulwider explains, “Hearing someone reading your writing aloud really helps students look at their work through someone else’s eyes.”

Teaching students to use one another for feedback does not let Fulwider off the hook as far as grading or critiquing student work. Instead, the combination of focused correction and peer feedback means that Fulwider’s students know how to help one another learn, a lesson that results in greater confidence as learners. “Kids aren’t afraid of writing

any more,” Fulwider observes. “When I ask students to hand in their writing, they say, ‘Wait, I have to reread it.’”

Building on strengths

As we assess our work, Turning Points schools, like middle schools around the country, are acknowledging that schools’ record of engaging all students in meaningful learning is mixed. The good news is that both professional experience and research consistently demonstrate that good practice exists in every school. In every school, during part of each school day, some students are developing their thinking skills and applying new knowledge in interactive classrooms where they receive the support they need to do good work. The challenge of every school is to build schoolwide learning communities around the practices in these classrooms so that teachers can build on strengths, their own and those of their students, to provide young adolescents with meaningful opportunities to learn every day in every school. ■

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Thinking skills for all students: Alternatives to conventional wisdom (continued)

■ **Alternative wisdom:** Students need a curriculum that engages students in complex assignments that engage students in deeper understanding of key concepts in content areas through Socratic discussion, inquiry into concepts underlying math facts, and exploration of “What if....?” questions. Teachers help students develop positive attitudes and beliefs about what “using your mind well” in the context of specific academic disciplines. Schools should avoid duplicating and repeating curriculum content from one grade to the next.

Expectations for teachers

■ **Conventional wisdom:** Teachers should follow principles of direct instruction, introducing new material in small, manageable steps.

■ **Alternative wisdom:** While direct instruction can improve particular skills, students need teachers to structure instruction so they learn to think for themselves, learn from mistakes, and take risks while organizing information and exploring solutions to complex problems. Teachers explicitly teach the thinking skills involved in an assignment; then over the year, they may turn over greater responsibility for learning to students. Teachers also show students how to use each other as learning resources, help them form study groups, and structure classrooms so they provide feedback to one another.

Low-income students, like all young adolescents, learn best in a curriculum that rejects a “basics first” approach in favor of one that, while including attention to skills, emphasizes developing students’ thinking and communicating for understanding content. Recent research linking test score gains to interactive classrooms provides further support and guidance for realizing the Turning Points vision of “engaging all students.”

For more information, see: Knapp, Michael S., ed. (1995). *Teaching for Meaning in High-Poverty Schools*. New York: Teachers College Press.

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