

David Hough, Ph.D., Editor  
Missouri State University  
Springfield, Missouri

---

2004 • Volume 28 • Number 1

ISSN 1084-8959

---

## **Young Adolescent Voices: Students' Perceptions of Interdisciplinary Teaming**

Susan J. Boyer  
Montpelier Public Schools  
Montpelier, Vermont

Penny A. Bishop  
University of Vermont  
Burlington, Vermont

Citation: Boyer, S. J., & Bishop, P. A. (2004). Young adolescent voices: Students' perceptions of interdisciplinary teaming. *Research in Middle Level Education Online*, 28(1). Retrieved [date], from <http://www.nmsa.org/Publications/RMLEOnline/tabid/101/Default.aspx>

### **Abstract**

Interdisciplinary teaming in middle schools has increased dramatically over the past few decades (McEwin, Dickinsen & Jensen, 2003); nevertheless, students have rarely been consulted as important sources of insight into this practice (Dickinsen & Erb, 1997) of two or more teachers sharing the responsibility for instruction, curriculum, and assessment of a common group of students (NMSA, 1995). The purpose of this study was to describe and analyze young adolescents' perceptions of effective interdisciplinary teaming. Qualitative methods were employed to describe, analyze, and interpret the perceptions of 77 middle level students from three middle schools. A multi-genre approach was used to represent the findings, including analytic writing, student-produced photographs, narrative vignette, and poetic transcription. Findings indicated that students felt like trusted members of a community, viewing themselves as self-disciplined and self-directed learners. Students perceived themselves to be growing in confidence, independence, and tolerance, gaining leadership and collaborative skills, and belonging to a family. Data indicate that when schools are organized to support multi-year teams, and when students are invited to collaborate in team governance and learning, many students report positive personal growth.

---

### **Introduction**

The team is a powerful organization for performance, change, and learning in today's dynamic and highly complex world (Katzenbach & Smith, 1999). Sports teams, leadership teams, school teams, quality teams, and design teams each have their own distinct pattern of coordination, collaboration, and interdependence; each has its own social architecture (Bolman & Deal, 1997). When teams work well, major gains in quality, productivity, and performance occur (Senge, Kleiner, Roberts, Ross, & Smith, 1994). Yet merely organizing people into teams will not automatically produce positive outcomes, and the desire to be a team is not by itself effective (Arnold & Stevenson, 1998). While some teams successfully enhance businesses, schools, or sports, many more fail to achieve their full potential. Created in name only, these teams know the rhetoric but may lack the discipline, the will, and the vision to become effective (Katzenbach & Smith, 1999).

According to decades of research, successful teams in middle schools must be focused directly on the unique needs of young adolescents (Dickinson & Erb, 1997; George, 1984; Jackson & Davis, 2000). These needs arise from the profound personal changes that 10- to 15-year-olds experience—changes in patterns of thinking, changes in physical growth, hormonal changes, and changes of emotions, morals, and friends (Knowles & Brown, 2000; Stevenson, 2002). The failure of many middle level schools to meet these unique needs is reflected in the poor motivation, low performance, and negative behavior typical of many young adolescents, and is explained by a lack of fit between the student and the school environment (Eccles & Wigfield, 1997). While there is increasing awareness of the need for this fit, relatively little research has considered students' perceptions of school organization (Dickinson & Erb, 1997). Rarely have students been invited as experts or knowers to contribute to the knowledge base regarding the fit between learner and environment. Yet, “because of who they are, what they know, and how they are positioned, students must be recognized as having knowledge essential to the development of sound educational policies and practices,” (Cook-Sather, 2002, p.10).

## Review of Literature

### *Evolution of Schooling for Young Adolescents*

For nearly a hundred years, both educators and researchers concerned with the lack of quality education have periodically called attention to the serious mismatch between the needs of young adolescents and the educational organization and social environment of schools (Briggs, 1920; Jackson & Davis, 2000; James, 1972). As early as 1904, Stanley Hall warned that “the future of humankind was, in large measure, determined by the quality of education received at the crucial age of adolescence” (p. xv).

In 1888, efforts were made to provide appropriate educational programming for young adolescents. Junior high schools were introduced in 1910 specifically to meet students' varying needs and individual differences (Lounsbury, 1992). Yet, without explicit guidelines or policies, junior high schools slipped into being mere junior versions of the high school (Gatewood & Dilg, 1975). In the early 1960s, middle schools emerged. Like the junior high school, middle school philosophy was based on designing education to be relevant to the interests and needs of young adolescents. Unlike the junior high years, state and national policy statements helped to invigorate what was becoming a middle school movement.

Concerned about the lack of fit between the nature of young adolescence and schools for that age group, the Carnegie Council on Adolescent Development (Carnegie) published the groundbreaking position paper, *Turning Points: Preparing American Youth for the 21st Century* (1989). *Turning Points* not only brought attention to the middle school movement, but it provided action steps for schools, communities, and government to reform and improve education at the middle level (Jackson & Davis, 2000). Among the eight educational recommendations, Carnegie advocated for teaming as the appropriate middle school organization. The National Middle School Association (NMSA) followed suit with *This We Believe* (1995), calling for “interdisciplinary teams that build a sense of community and promote curriculum integration” (p. 29). Interdisciplinary teaming became the key organizational structure in the design of developmentally responsive education for young adolescents (Dickinson & Erb, 1997).

### *Interdisciplinary Teaming*

Interdisciplinary teaming has its historical roots in the *core* curriculum of the 1930s, when advocates attempted curriculum integration through block scheduling and joint teacher planning time (Arhar, 1992). During the 1960s, the *Pontoon Transitional Design* became the model for interdisciplinary teaming in middle grade schools (Clark & Clark, 1992). Designed to bridge the gap between mass education and a more individualized education, the model emphasized team teaching, flexible scheduling, and an integrated curriculum. Unfortunately, much of the research from the *pontoon decade* took the form of doctoral dissertations and therefore is not easily accessible (Clark & Clark). Early systematic inquiry into interdisciplinary teaming is both sparse and difficult to interpret (Strahan, Bowles, Richardson & Hanawald, 1997). Results from studies indicate that researchers may have confused *team teaching* or *co-teaching* with the organizational construct of teaming. Teaming, like most school initiatives, was often implemented along with several other practices, rendering it difficult to study in isolation.

Interdisciplinary teaming, or *teaming*, is the organization in which two or more teachers share the responsibility for instruction, curriculum, and evaluation of a common group of students for one or more years. It is further characterized by adjacent classrooms or shared team space, common planning time and common blocks of time (Knowles & Brown, 2000; Arnold & Stevenson, 1998). Although teaming in middle level schools has increased significantly in the past 30 years, from 8 percent in 1968, to 33 percent in 1988, to 59 percent in 1993 (McEwin, 1997), to 77 percent in 2001 (McEwin, Dickinson, & Jenkins, 2003), it is often poorly organized and implemented (Dickinson & Erb, 1997). Even when the structures and supports for teaming are in place, it is teacher determination and strong vision that are critical to sustaining and building effective teams (Arnold & Stevenson, 1998).

Various voices, including researchers, psychologists, and educators, assert that teaming is an effective organization to meet young adolescent needs. Their voices are corroborated by a number of studies, completed in the past ten years, which reveal positive outcomes for teachers and students who are members of middle level teams (Arhar & Kromrey, 1995; Powell, 1993; Strahan, Bowles, Richardson, & Hanawald, 1997). Teachers who team tend to view school climate more positively (Flowers, Mertens, & Mulhall, 1999); have an enhanced sense of professionalism (Gatewood, Cline, Green, & Harris, 1992); and are more collegial in their work (Mills, Powell, & Pollack, 1992). Students on teams develop a sense of bonding with teachers (Arhar & Kromrey, 1995); present fewer behavior issues (Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997); and increase their academic achievement (Flowers et al., 1999).

### ***Student Voice in Research***

Although the above mentioned outcomes are compelling, student attitude and perception in these studies is typically inferred through teacher or principal interview and survey (Powell, 1997). Very little knowledge exists about students' perceptions of teaming or middle level schools. Researchers have most often relied on adult informants, such as parents, teachers, and administrators, as data sources. Less often has student voice been solicited and honored as a valuable perspective on schooling. While there are of course important recent exceptions, (e.g. Mee, 1997; Powell, 1997; Shultz and Cook-Sather, 2001), student voice is largely missing from this important discussion.

Young adolescents are thoughtful enough to provide valuable insight into existing school conditions for practitioners and policymakers alike (Jackson & Davis, 2000; Oldfather & McLaughlin, 1993). As Linda Darling-Hammond asserted, "If deep understanding of what's needed and what works for adolescents were shared by every policy maker and educator, we would indeed see a major transformation in the education of our young" (cited in Jackson & Davis, p. 268). This study addresses the gap in the research literature by including students' voices and examining what students perceive they experience as members of effective middle level teams.

## **Methodology**

Qualitative methods were used in this study to explore students' perceptions of effective middle level teams. "Understanding the meaning, for participants in the study, of the events, situations, and actions they are involved with and of the accounts that they give of their lives and experiences" (Maxwell, 1996, p. 17) is one of five purposes compatible with qualitative research.

### ***Sample Selection***

This study was situated in three middle schools in New England during the 2001-2002 school year. Purposeful sampling was employed to select both sites and participants. A list of attributes of effective middle level teams was compiled from the literature (Arnold & Stevenson, 1998; Dickinson & Erb, 1997; Felner et al., 1997; Jackson & Davis, 2000) (Appendix A). An expert panel, comprised of *six* middle level researchers who have published in the field, nominated teams that met many of the standards of excellence as profiled by the literature. The three teams studied were nominated by at least two members of the expert panel. One of the teams was a two-teacher partner team where students and teachers in the sixth grade remained together during the next school year, looping up to the seventh grade. This was a relatively new team, only in its second year. The second team had three teachers and was a three-year multiage team of sixth, seventh, and eighth grade stu-

dents. This team had been in existence for 10 years. The third team had four teachers and was a four-year multiage team of students from fifth through eighth grades. This last team had a 31-year history. All 77, final year, middle level students from the three teams participated. Students who were in their final year were selected due to their extensive experience and ability to reflect retrospectively on the teams.

As part of a class assignment, all final year students wrote a journal *free-write* on their perceptions of teaming. From those 77, four graduating students from each of the three teams comprised the 12 students who participated in the focus group and individual interviews (see Table 1). Students on Individual Educational Plans (IEPs), and behavior plans, as well as students whose academic achievements were average and above average, were selected by team teachers to capture variations of students' perceptions on teaming and to identify a common core (Patton, 2002). A lay summary was given to students and their parents and informed consent was obtained.

**TABLE 1.** Team Participants

	Free Write	Focus Group	Photography	Individual Interviews & Metaphor
Three Teams	All 77 final year students	12 Students, stratified for gender, SES, behavior, and academic achievement	12 Focus Group Students	12 Focus Group Students

**Data Collection**

The study was grounded in postmodern phenomenology where purposeful sampling is used as a design strategy to gather data from information-rich teams about the phenomenon (Patton, 2002). Multiple data collection methods were used in this qualitative study: participant observation, document review, journal writing, focus groups, and photo-elicitation interviews.

*Participant observation.* To build a relationship with the teams under study and to become informed about appropriate investigative areas, a minimum of two consecutive days of participant observation was spent on each of the teams prior to subsequent data collection (Adler & Adler, 1998; Glesne, 1999). Two days were adequate for describing the setting, for meeting study needs, and for helping to confirm research questions (Patton, 2002). Ongoing narrative field notes were scribed from the time students entered school in the morning until the end of the school day. One of the students on each team was shadowed to better understand the details and events of the day. On the second day of observation, researcher participation with students and teachers was increased, as was a continual alert to researcher bias and subjectivity towards each unique site (Lincoln & Guba, 1985). As Glesne (1999) states, “(e)ven though you were once ‘there,’ you cannot safely assume that you know what the people are like in your research site. All schools are not the same” (p. 47).

*Document review.* Documents in the form of school and team handbooks, team schedules, team mission statements, a school Frisbee, and standard-based progress reports were collected. These artifacts served to support observations, add to interview probes, and supply demographic and background information (Glesne, 1999). Team assessment pieces, such as essential skills lists, individual learning plan forms, and student/teacher conferencing sheets, were particularly helpful in clarifying what students had described in their interviews.

*Journal entry.* Students in their final year on the team were asked to reflect upon and write a journal entry on the prompt: *What is special about your team?* This particular journal entry was called a ‘free write’ because students were to write without concern for spelling, grammar, or mechanics. Students wrote in a stream of consciousness, point form, or brainstorming format. A time limit of seven minutes was set to encourage stu-

dents to begin writing immediately. To promote student frankness and candor, students were told that they did not have to sign their names and that their free writes would remain anonymous. These journal writes were completed before the interviewing began, as a means for participants to begin to reflect on their past years spent with their team. The free writes were used to corroborate interviews and observations, to serve as interview probes, and to broaden the nature of responses.

*Focus groups.* To establish comfort and rapport, the four students from each team were interviewed as a focus group. Teachers selected two boys and two girls in their final year on the team who represented the spectrum of academic abilities. Gender, achievement, and behavior were the primary stratifications used, as the literature review indicated differences among these groups (Arhar & Kromrey, 1995; Felner, 1997). The focus group “not only discloses what is important to individual respondents, but it attempts to provide a situation where the synergy of the group adds to the depth and insight” (Anderson, 1990, p. 241). A structured protocol of open-ended questions (Patton, 2002) guided the interview (See Appendix B). Possible interview anxiety was reduced by reassuring students that there were no incorrect answers (Glesne, 1999). Focus group interviews lasted between 45 to 60 minutes in length and took place in the team room or library within the individual schools during the school day. The interviews were audio-taped and abbreviated notes were taken. Students seemed to enjoy the focus groups and this served to make the subsequent individual interviews comfortable for both student and researcher.

*Photo-elicitation interviews.* The camera was used in this study as a research tool in the hands of students to gain insight into how they perceive their world (Bogdan & Biklen, 1998). Photo-elicitation is a collaborative research model similar to an open-ended interview (Harper, 1998). As the student “interprets the image, a dialogue is created in which the typical research roles are reversed. The researcher becomes the listener and the one who encourages the dialogue to continue” (Harper, p. 145). Thus, the protocols were emergent and individualized, based on each student's images. Each student was invited to take photographs that captured important team artifacts and activities. Subsequent individual photo-elicitation interviews of participants followed the development of the photos. Photos were used to build rapport, to portray team culture, and formed the basis for each individual interview. The photos offered important information about the teams, as did understanding the motives for taking the photos and listening to the photographers' stories (Harper, 1998).

### ***Data Analysis and Representation***

Consistent with the qualitative approach to data collection, data analysis was ongoing in nature. Preliminary coding schemes developed initially in a pilot study evolved over time to become more specific and manageable (Glesne, 1999). The data were sorted, defined, and organized using inductive analysis as themes and patterns emerged. Primary criteria used for analysis were themes that repeatedly emerged on and across teams from respondent's interviews, journal free-writes, and participant observation notes. The data were then incorporated into various forms of data representation, as evidenced in the multi-genre approach.

*Interviews and journal free writes.* All focus group and individual interviews were transcribed verbatim in their entirety and coded by theme. The initial development of a coding scheme was continuously refined and expanded. The method of cross-interview analysis was useful because each of the focus groups responded to the same set of interview questions (Patton, 2002), highlighting students' differing perspectives on teaming. Further student descriptions and analyses of their experiences with teaming were gathered from the free-writes and integrated into this coding process.

*Participant observation.* Detailed field notes informed, verified, and at times called into questions the emergent themes. These extensive observation notes were also used to tell the story of a “day-in-the-life” of a student on an effective middle school team, which takes the form of narrative vignettes (See Appendix C for example).

*Poetic transcription.* The interview transcripts, field notes, and journal free writes played an additional role in analysis, in the formation of “poetic transcription,” or the “creation of poem-like compositions from the words of interviewees” (Glesne, 1997). In contrast to analytical writing, which “breaks up interview transcripts and observation field notes into component parts, imposing a researcher-perceived order on things... poetic

transcription is also filtered through the researcher, but involves word reduction while illuminating the wholeness and interconnections of thoughts” (Glesne, p.23). In this study, poetic transcription was used in an attempt to capture students' voices, their emotions, and rhythms of speech (see Appendix D for example). Poem-like pieces were created using students' words and phrases to both honor student voice and to represent the salience of the student perspective, as Glesne suggests that readers may “learn through emotion as well as analytical thought” (p.23).

*Photo-elicitation.* Photographs, taken by the students, were analyzed and explained in individual interviews, supporting and further informing the emergent themes. Four photographs are included here within the text as raw data, to represent the young adolescents' perspectives on teaming.

### ***Triangulation and Crystallization***

Multiple data-collection sources provide intersecting lines that corroborate and validate evidence (Gall et al., 1996). To ensure triangulation in this study, data collection methods included participant observation, document review, journal writing, focus groups, and photoelicitation interviews. Emerging themes are drawn into question or strengthened through triangulation. For example, the theme of a sense of belonging and community emerged very strongly in student journal free-writes. This theme was later confirmed in student focus group and individual interviews. Consistent with the postmodern perspective, creative alternative forms to presenting the research were employed. Photographs taken by the students themselves provide a “thinking display. . . [of] visual facts” (Wolcott, 1994, p. 31) of team life presented without interpretation. Thick description, in the form of verbatim quotes from research participants also assists in underscoring the dependability and trustworthiness of the findings. Poetic transcriptions of student voices link the traditional forms and are woven throughout. The crystal or prism represents the new image for validity with its variety of shapes and colors symbolic of ways of knowing (Richardson 1998).

## **Findings**

This study illuminates many benefits students on effective teams perceive they experience. Specifically, the students spoke of long-term relationships and of a democratic learning environment that honored their voices and empowered them as learners. They described a tolerant environment that facilitated their growing confidence and leadership skills. Additionally, a small percentage of students reported their perceived disadvantages of teaming.

### ***Long-Term Relationships***

The students in this study expressed a sense of belonging, of community, and of knowing each other well. Older students who knew the team programs, expectations, and practices from past years modeled these for younger students and became the team leaders. The younger students were perceived to provide different perspectives and ideas to the team. Diversity of ages allowed the natural evolution of student roles from novice to expert, from follower to leader, from learner to teacher.

Our team is very unique because of the system we use. We are a six, seven, and eighth grade team which is very important because the younger students can get help from the older students and the older students—eighth-graders can take a large leadership role on the team. . . . We stick together and work together. (journal free write, eighth grader)

Further, students often reported a sense of familial affiliation and history with a team, as siblings followed one another through team membership.



***Fly Forever***

(Photo by an eighth grader)

Our motto is “Fly Forever!” This bird has been part of our team since it started. Both my siblings have been in [team name] and that goes back six to eight years or something like that, so I’m guessing that kids made it.

Students described their teachers as understanding, helpful, friendly, and easily accessible. Students reported feeling well known, supported, and respected by their teachers.

I like being on the [team name] because the teachers are wicked, wicked nice and I have some friends on this team. The reason I looped is because I liked how the teachers were. I also have a hard time going to a different room where people don’t know how smart or dumb I am or whatever. So now the teachers know me and know how well I do in school. And it makes it a lot better for me. (journal free-write, seventh grade girl)

***Democratic Learning Environment***

Reflected in many students’ voices in this study was a shift in power away from the conventional sole authority of the teacher to a more democratic learning environment with shared decision making among students and teachers. Having “a say” in what they learned was important to these students. They reported that having choices made learning both relevant and fun. Participant observation revealed that each of the three teams under study held a regularly scheduled team meeting led by students at the beginning or end of the day. These team meetings followed a specific format that team members seemed to know and expect. Announcements, news, planning for upcoming activities or curricula, readings, celebrations, and *team beefs* were common agenda items.

We have a really big say in a lot of stuff we do. Um, mostly in class meetings because we all get to talk. The teachers sit back and listen to us. I mean they talk but we really are the ones that make a lot of decisions. (eighth grade boy)

Reminiscent of New England 's Town Meetings, students participated as responsible citizens in the governance of their team. Scheduled time during the school day devoted to team meeting provided students with the forum to voice their opinions



***Team Meeting***

(Photo by an eighth grade student)

You notice that there are no teachers in here. That means that they trust us to keep everything under control. This meeting has to do with the play and so the student directors are leading the meeting. It just shows we can handle stuff, 'cause we're all responsible.

Students on all three teams spoke of participating in such governance, and in setting team expectations. Students and teachers together shared the responsibility for creating a safe and comfortable learning environment.

We are trustworthy and our teachers trust us to do the right thing. It's usually pretty rare to find a class that everyone can be trusted to the point of which they [teachers] let us pretty much pick what we want to learn about and we make the right decision without them having to nag us about it. (seventh grade boy)

In addition to participating in team governance, students on all three teams also reported they had input in planning curricula. Within a framework of standards, students and teachers designed integrated studies arising from students' own questions. Their questions became topics or themes that allowed students to inquire about real-life concerns and to respond with appropriate social action. Students became problem solvers and critical thinkers. Not only did their questions guide the study, but students also chose the learning opportunity or activity to meet the standard.

This unconventional mode of learning where subjects are integrated rather than separated caused some students to be ambivalent about their transition to a traditional high school setting.



It's hard, um, we don't really have a set like science class or social studies and so I think I'm kind of nervous, um, to go into high school because I don't really know much about that. But, um, kids in high school now that have been on [team name] in the past, they're doing really well, so I think, like, I'm nervous but I'm not. (eighth grade girl)

All three teams used portfolios as a means to collect evidence of student growth over time and as a tool for student-led conferences. Yet each team differed in terms of responsibility for the portfolio and in the extent to which students reflected. Students from the two-year-old team did not utilize nor have the same extensive portfolio system as the team in its 31st year.

Portfolios are another big part of [our team]. We put them together pretty much by ourselves. It's a work reflection of all the things we've done that trimester. There's a lot of work put into it. Each week we do an assessment. We assess in the areas of communication, functioning independently, personal development, civic and social responsibility, and homework. For the trimester, we have every category on a sheet and we have to write about our successes and challenges, and what our goals were for that area, how we accomplished our goals, what our evidence of that was. Every kid on [our team] has a goals partner, usually someone from a different grade, usually an eighth grader with a sixth grader. An eighth grader will say this is a portfolio, this is what we do. If they have any questions, they will ask their goals' partner. I bet there are some kids who don't talk to a teacher before their portfolio is done just because they are so involved with their goals' partner. (eighth grade girl)

As students became partners in the teaching-learning process, when they participated in team governance, planned curricula, set personal goals to meet standards, and assessed their own learning, they became self-sufficient, responsible learners and critical thinkers.

### ***Tolerance for Others: An Environment for Personal Growth and Leadership***

Students spoke of being individuals, as well as belonging as members of a team. They depicted learning to appreciate differences while celebrating individuality. The students perceived their team as a learning community, one in which they learned from one another and came to respect others' differences.

It's helped me to be a better people person I think and to communicate better. I've learned a lot from, like, different classes I've taken and I've learned about different people and how you need to communicate—like some people learn differently than others. The teachers help you and bring you up so that all the qualities you have really can shine. (eighth grade girl)

Students in the study perceived that being on their team increased their self-confidence, as they knew they were in a safe community. Feeling comfortable to “say your ideas” was fostered on these teams through the teaching of social skills and through opportunities such as team meeting, plays, and camping trips.

Once I got to know everybody a little more—like in sixth grade, I was mostly nervous because I felt like what ever I said, I'd be saying something wrong, but now that learning's great and I can say anything. (eighth grade boy)

The atmosphere of tolerance and appreciation for diversity fostered this boy's belief that “I can say anything.” It resulted in feelings of increased self-confidence, and in greater willingness to share their ideas. Self-direction created feelings of empowerment for students as they became leaders in their own learning. They fulfilled their need for responsibility and meaningful work, as they gained leadership qualities.

Well, I feel that being on the [team name] makes me feel like a leader. We get to make our own decisions about what we choose to learn about and by doing that we're getting answers to what we're interested in. [Teacher's name] and [teacher's name] are great teachers that teach in a very special way. What I mean by that is they don't run the classroom. They make it so we do. Also, when we get a question or a quiz grade or something like that wrong we have the choice of fixing it up better to

make it so we understand and that's an important thing—understanding. So it's fun and I like being here in the seventh grade, so I'm staying. (seventh grade girl)

Students in this study exerted their independence, as they learned to take responsibility for their own learning through setting goals, creating learning products, and reflecting on their learning in their portfolios and at student-led conferences. A sense of pride exuded from the students as they spoke of their many accomplishments.



### *Honor Wall*

(Photo by a seventh grader)

This is our honor wall where we hang special photos. We have a picture of *Phantom of the Opera* and other plays we've put on. We have team photos and group photos of our camping trips and our old teacher Sheryl with the president and favorite poems that describe [team name].

This pride in both their leadership and community was evident in the representation of their “Honor Wall,” a place in their team space dedicated to the celebration and commemoration of team events and people.

I've become much more independent. I don't really need someone telling me what to do now. It's more like I can plan my own schedule and I don't need someone telling me what to do. (eighth grade boy)

Students perceived they became more creative and actively involved in learning. A seventh grader expressed that he liked to learn on his team and learned more easily than in previous years.

I like this team because not only do I learn more easily but I like the way we learn and the fact that we choose what we want to learn. Also I like that we do more work that we get involved in. Like instead of reading a textbook we look for ways to find information. (seventh grade boy)

### *Disadvantages*

In the search for negative cases, four out of 77 students on effective teams reflected negatively about their team. Although few in number, these students' perceptions suggest that there are aspects of this type of schooling experience that do not necessarily support the right *fit* for every student.

You could call [Team name] special depending on what special means, sure [Team name] is different from other teams but is that all? I myself don't like the learning style structure of [Team name]. I feel that it has many loopholes. I really want to do science experiments right, since sixth grade we've done 1 experiment for about 10 minutes. I feel [Team name] should combine structured learning in general subjects such as math, writing, grammar, social studies, and science. [Team name] needs more science and social studies. I believe [Team name] has good ideas with the play, quilt, and class meeting, but enough is enough. A lot of time gets wasted in these different areas. If they combined these structured learning [Team name] would be a better team. (journal free-write, eighth grader)

In this case, we see a call for what this student calls “structured learning,” and a concern regarding “wasted” time. Such concerns invite educators to examine how all student voices might be honored and heard in democratic classrooms; and how students' perceptions of their own academic engagement might be powerful indicators for change. In the light of current middle level reform initiatives and the strong emphasis on teaming, it is particularly important information to consider.

## Implications and Recommendations

### *Organizational Options*

Although most of the students in this study felt that teaming *fit* their intellectual, social, and emotional needs (Eccles & Wigfield, 1997), some young adolescents voiced that they did not like working and learning on teams. While few in number, we must not discount their point of view as their perspectives add to the discussion of appropriate schooling for young adolescents. Teamed and traditional separate subject classrooms within a school would provide options for all learners, raising questions for all involved in the middle level reform movement about generalizing about developmentally responsive school organization. Future research into schools that offer a range of options would add greatly to this discussion.

### *Democracy: Student Voice and Choice*

“Young people have not only a right to have a say in what happens in school, but an obligation” (Beane, 1997, p. 69). Unlike the historic and dominant model of education, students in this study reported having a voice and choice in their own learning; collaborating in setting goals, designing curricula, and making decisions in team governance. Rather than teacher centered, the power on these teams shifted and became student centered. The teachers in this study shared power with their students as facilitators, collaborators, negotiators, guides, and co-learners. Individually and collectively students were invited to share the decision making in the classroom. An eighth grade boy described learning on his team in this way, “. . . things are run in a democracy format. . . all of the students get to participate and have a say in what they do.” In team observations, and student self-reports, it was evident that students were confident and interested in learning for its own sake. Students developed leadership skills and responsible citizenship by participating in the governance of their team.

Preoccupied with meeting state standards, and feeling constrained by time, middle level teachers are often reluctant to allow student input. This study is rich in information on empowered learners who were given options and choices to engage in real world inquiry. Learning for them cut across disciplines and related to more than one area of state standards, as students explored independently or in small groups. “We write questions about what we want to know . . . that have to do with the standards,” explained an eighth grade girl.

## Summary: Caring, Community and Continuity

Many of us think of ourselves as caring educators and yet school structures and policies seem actually to resist or impede caring (Knowles & Brown, 2000; Noddings, 1992). The combination of consolidated schools, separate subject areas, 45-minute class periods, and large classes can make it difficult to provide a warm climate or an opportunity to build relationships with and among students. Driven by schedules and time constraints, and preoccupied with achieving academic standards, educators may forget to address the emotional, physical, and social needs of students. Caring can provide the foundation for successful education (Knowles & Brown; Noddings) and helps build a sense of community within a learning environment.

This sense of community was regularly identified by students, as the middle schoolers repeatedly described their teams as “unique,” and expressed clear affiliation with team-as-community.



***The Bathtub***

(Photo by an eighth grader)

The bathtub is not used for much of anything except that occasionally a student will do some work in it. . . It shows our team is unique.

Indeed, research indicates that this sense of community and continuity is provided, nurtured, and sustained through an ethic of caring (Thayer-Bacon & Bacon, 1996; Dempsey & Noblit, 1996).

Findings from this study concur. A seventh grade boy with special needs described his team in this way: “You know everyone on the team and everybody is your friend even if you don’t have a good past with them, you warm up.” Students felt cared for and part of a family. These teams were rich in information on how schedules and academic standards may be met and supported through an ethic of caring. Students on the multi-year teams felt a strong sense of belonging and kinship with both teachers and peers within the comfortable team environment. The elements of a supportive team environment created conditions for continued student progress and growth. Students learned to appreciate differences and to take responsibility for their learning and behavior. They perceived growth in self-confidence, independence, and leadership (See Data Display in Appendix C).

Exploring students' perceptions of effective middle level teams provides valuable insight into existing effective team conditions. The findings from this study suggest that when schools are designed to support multi-year teams; when schedules allow students and teachers to remain together for most of the school day; and when teachers invite student collaboration in setting goals, designing curricula, and governing their team; many students perceive positive personal changes and growth. Educators, researchers, and students alike would be well served by considering, “there is something fundamentally remiss about building and rebuilding an entire system without consulting at any point those it is ostensibly designed to serve” (Cook-Sather, 2002, p.3). Students' perceptions provide essential insights into school reform.

## Acknowledgments

The authors wish to acknowledge trailblazer Richard R. Powell and his research into student voice for which he will be remembered well.

## References

- Arhar, J. (1992). Interdisciplinary teaming and the social bonding of middle level students. In J. Irvin (Ed.), *Transforming middle level education: Perspectives and possibilities* (pp. 139-161). Boston, MA: Allyn & Bacon.
- Arhar, J., & Kromrey, J. (1995). Interdisciplinary teaming and the demographics of membership: A comparison of student belonging in high S.E.S. and low S.E.S. middle-level schools. *Research in Middle Level Education*, 18(2), 71-88.
- Arnold, J., & Stevenson, C. (1998). *Teachers' teaming handbook: A middle level planning guide*. Toronto: Harcourt Brace College Publishers.
- Beane, J. (1997). *Curriculum integration: Designing the core of democratic education*. New York: Teachers College Press.
- Bolman, L., & Deal, T. (1997). *Reframing organizations: Artistry, choice and leadership* (2nd ed.). San Francisco: Jossey-Bass.
- Bogdan, R., & Biklen, S. (1998). *Qualitative research in education: An introduction to theory and methods*. Needham Heights, MA: Allyn & Bacon.
- Briggs, T. H. (1920). *The junior high school*. Boston: Houghton Mifflin Co.
- Carnegie Corporation. (1989). *Turning points: Preparing American youth for the 21st century*. Waldorf, MD: Carnegie.
- Clark, S., & Clark, D. (1992). The pontoon transitional design: A missing link in the research on interdisciplinary teaming. *Research in Middle Level Education*, 15(2), 57-81.
- Cook-Sather, A. (2001). Authorizing students' perspectives: Toward trust, dialogue, and change in education. *Educational Researcher*, 31(4), pp.3-14.
- Dewey, J. (1944). *Democracy and education*. New York: The Free Press.
- Dickinson, T., & Erb, T. (Eds.). (1997). *We gain more than we give: Teaming in middle schools*. Columbus, OH: National Middle School Association.
- Eccles, J., & Wigfield, A. (1997). Young adolescent development. In J. L. Irvin (Ed.), *What current research says to the middle level practitioner* (pp. 15-29). Columbus, OH: National Middle School Association.
- Felner, R., Jackson, A., Kasak, D., Mulhall, P., Brand, S., & Flowers, N. (1997). The impact of school reform for the middle years: A longitudinal study of a network engaged in Turning Points-based comprehensive school transformation. *Phi Delta Kappan*, 78(7), 528-550.
- Flowers, N., Mertens, S., & Mulhall, P. (1999). The impact of teaming: Five research-based outcomes. *Middle School Journal*, 31(2), 57-60.

- Gall, M., Borg, W., & Gall, J. (1996). *Educational research: An introduction* (6th ed.). White Plains, NY: Longman.
- Gatewood, T., & Dilg, C. (1975). *The middle school we need*. Washington: Association for Supervision & Curriculum Development.
- Gatewood, T., Cline, G., Green, G., & Harris, S. (1992). Middle school interdisciplinary team organization and its relationship to teacher stress. *Middle School Journal*, 30(2), 27-41.
- George, P. (1984). Middle school instructional organization: An emerging consensus. In John H. Lounsbury (Ed.), *Perspectives: Middle school education* (pp. 52- 67). Columbus, OH: National Middle School Association.
- Glesne, C. (1997). That rare feeling: (Re)Presenting research through poetic transcription. *Qualitative Inquiry* 3(2): 202-221.
- Glesne, C. (1999). *Becoming qualitative researchers: An introduction* (2nd ed.). New York: Addison Wesley Longman Inc.
- Hall, G. S. (1904). *Adolescence: Its psychology and its relation to physiology, anthropology, sociology, sex, crime, religion & education*. New York: D. Appleton & Co.
- Harper, D. (1998). On the authority of the image: Visual methods at the crossroads. In N. Denzin & Y. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 130-149). Thousand Oaks, CA: Sage.
- Jackson, W., & Davis, G. (2000). *Turning points 2000: Educating adolescents in the 21st century*. New York: Teachers College Press.
- James, C. (1972). *Young lives at stake: The education of adolescents*. New York: Agathon.
- Katzenbach, J., & Smith, D. (1999). *The wisdom of teams: Creating high performance organization*. New York: Harper Collins.
- Knowles, T., & Brown, D. (2000). *What every middle school teacher should know*. Portsmouth, NH: Heinemann.
- Kolanowski, K. (1993). *Use of portfolios in assessment of literature learners*. Albany, NY: Center for the Study of Literature.
- Lounsbury, J. H. (1992). Perspectives on the middle school movement. In J. Irvin (Ed.), *Transforming middle level education: Perspectives and possibilities* (pp. 3-15). Boston, MA: Allyn and Bacon.
- Maxwell, J. A. (1996). *Qualitative research design: An interactive approach*. London: Sage Publications.
- McEwin, C. K. (1997). Trends in the utilization of interdisciplinary team organization in middle schools. In T.S. Dickinson and T.O. Erb (Eds.), *We gain more than we give: Teaming in middle schools* (pp. 313 - 324). Columbus, OH: National Middle School Association.
- McEwin, C., Dickinson T., & Jenkins, D. (2003). *America 's middle schools in the new century: Status and progress*. Westerville, OH: National Middle School Association.
- Mills, R., Powell, R., & Pollak, J. (1992). The influence of middle level interdisciplinary teaming on teacher isolation. *Research in Middle Level Education*, 15(2), 9-27.

- National Middle School Association. (1995). *This we believe: Developmentally responsive middle schools*. Columbus, OH: National Middle School Association.
- Oldfather, P., & McLaughlin, H. J. (1993). Gaining and losing voice: A longitudinal study of students' continuing impulse to learn across elementary and middle level contexts. *Research in Middle Level Education*, 17(1), 1-23.
- Patton, M. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage Publications.
- Powell, R. (1993). Seventh graders' perspectives of their interdisciplinary team. *Middle School Journal*, 24(2), 49-57.
- Powell, R. (1997). Teams and the affirmation of middle level students' voices: The case of Jimmie. In T. S. Dickinson & T. O. Erb (Eds.), *We gain more than we give: Teaming in middle schools* (pp. 271- 297). Columbus, OH: National Middle School Association.
- Richardson, L. (1998). Writing: A method of inquiry. In N. Denzin & Y. Lincoln (Eds.), *Collecting and interpreting qualitative materials* (pp. 345-371). Thousand Oaks, CA: Sage.
- Senge, P., Kleiner, A., Roberts, C., Ross, R., & Smith, B. (1994). *The fifth discipline fieldbook: Strategies and tools for building a learning organization*. New York: Doubleday.
- Stevenson, C. (2002). *Teaching ten to fourteen year olds*. Boston: Allyn & Bacon.
- Strahan, D., Bowles, N., Richardson, V., & Hanawald, S. (1997). Research on teaming: Insight from selected studies. In T. S. Dickinson & T. O. Erb (Eds.), *We gain more than we give: Teaming in middle schools* (pp. 359-384) Columbus, OH: National Middle School Association.
- Strubbe, M. (1990). Are interdisciplinary units worthwhile? Ask students! *Middle School Journal*, 21(3), 36-38.
- Wolcott, H. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks: Sage Publication.

## **Appendix A: Criteria for Team Nomination**

### *Attributes of Effective Middle Level Teams*

#### ***Team Students***

- Students are team members for longer than a single school year.
- The team has a logo, rituals, and traditions.
- The team promotes a spirit of personal belonging.
- Students are encouraged and expected to participate.
- Students set personal as well as team goals.
- Students are actively involved in assessing their own progress.
- Students and teachers work together on discipline issues.
- Students are actively involved in planning and managing their learning.

- Students know and understand team vision and mission.
- Students know their teachers and teammates well.
- Teams celebrate student accomplishments.
- Students are involved in team governance.

***Team Teachers:***

- The team has a philosophical commitment to schooling based on the nature and needs of young adolescents.
- The team has and actively uses common planning time.
- The team has reasonable control over and actively uses large blocks of time.
- The team has and uses a written plan.

## **Appendix B: Interview Protocol**

***Interview Protocol for Focus Groups***

Introduction: My name is (researcher name removed for purposes of juried review). I was a middle school teacher. I taught fifth and sixth grade. Now I am a student at (institution removed for purposes of juried review) and I need help with this study I am doing on understanding what kids think of middle school teams. Anything you say will remain confidential. The information from these interviews will be used in a paper. The interview will last about 45 minutes. It's ok to say, "I don't know," or "I never thought of that before," or "I have no idea."

Interview Questions:

1. This initial question was intended to set a relaxed tone with the focus group. I will ask about their school play or school sports team. This question is context dependent. The information for this may come from participant observation or initial discussions with teachers.

2. I'd like to get a picture of what it is you do in the course of a day—the routine, the types of activities you do.

First, please take me through your typical day.

Now take a look at the schedule and rank your top three favorite classes.

What makes each a favorite?

3. I'm going to ask you about what you like and don't like about being a member of the \_\_\_\_\_ team.

Let's start with what you like about it.

What don't you like about being on the \_\_\_\_\_ team?

What makes you feel that way?

4. In some schools, students feel they have no say in what happens and in other schools they feel they have a lot of say.



In what ways do you feel you have a say in what you learn, in activities, in class meetings?

In what ways do you feel you don't have a say?

5. What are some things you've learned on this team that you will take with you to high school and beyond?

6. Pretend there is a new student coming to your team. What do you feel is important for this new student to know about your team?

7. For how many years have you been on \_\_\_\_\_ team?

How have you changed since you first came onto the team?

8. What advice would you give new teachers who want to work with students in middle school?

9. If you were to design the perfect middle school team what would it look like?

What would you definitely not want to include?

What makes you feel that way?

### **Appendix C: Sample Narrative Vignette**

#### ***A Day in the Life of Meghan Quinn***

Grey clouds hang low over January skies. Six inches of newly fallen snow blanket the rural community. Schools in the south have been cancelled and, in neighboring towns, buses are running a half hour late. Meghan struggles with her backpack as she steps down off the school bus, her New Balance runners disappearing below the snow. Flags snap in the wind and halyards clang against the poles as Meg heads in through the double doors of Welland Community School.

Her ponytail swings as she walks past the central office and turns right down the gray, carpeted hall chatting, laughing, and calling to friends. Meg has the tall, yet gangly stature and confident stride of an eighth grader as she turns into her team area and heads for her open classroom. In through the doors of the Quest team room come other students carrying books, backpacks, skis, hats, musical instruments, class projects, and lunch bags which they quickly stow in cubby holes in each of the four open core rooms, which surround a carpeted amphitheater used as team meeting space. Ashley, a non-speaking eighth grader with cerebral palsy, is moved from her wheel chair to a padded wooden stander by two instructional assistants. Hot lunch and attendance are taken amid the din of voices and the unstacking of chairs.

It's 8:10 on Wednesday morning. While fifth graders remain in the team space to work with teachers on writing skills, sixth, seventh, and eighth graders leave for related arts. Meghan begins her day with French, her least favorite subject. The 12 students in the class groan in unison as the teacher says: "On va commencer avec une petite quiz mais c'est facile (We will begin with a small but easy test)." Forty minutes pass before Madame Gauthier ends the class with "for tomorrow, review all the avoir expressions."

Meg quickly heads to her physical education class, changes into shorts and a tee shirt, and warms up by running five times around the gym. Her New Balance runners, still wet from the snow, squelch as she rounds the corners. When students finish the run, they pick up balls and begin to shoot baskets.

By 9:30, all 96 students are back in the Quest Team grazing on snacks and sandwiches and chatting as they prepare for math. Meg grabs her text and heads to Mr. Smith's core space. Two sixth grade boys, a seventh grade girl, and nine other eighth graders sit around a circle of tables examining their homework. Math is the only subject on the Quest Team grouped by ability. This pre-algebra class is taught by a middle-aged pre-serv-

ice teacher. Once an electrical engineer, Jim is interning to earn a teaching license. Welland Community School is a professional development school associated with a nearby University. Two other student teachers work with Quest Team. With four core teachers, three student teachers, two instructional assistants, and various parent facilitators, instructional groups within the team remain small.

Jim teaches a brief lesson on the whiteboard. Soft-spoken, he asks kids to “go ahead and get started and let me know if you have questions.” Meg begins to work on a couple of equations but then gets up and goes to the wall phone. She asks into the phone, “Are you feeling better, Katie? When will you be coming back to school?”

Meghan chose to read *The Hobbit* for literature. She and 13 other students meet with Ms. Murray in the amphitheater in the last class before lunch. A gray and white papier-mache gull swoops over top of the amphitheater. Students sit on the carpeted levels and listen to Johanna as she highlights the important events in chapter eight. Although just a fifth grader, Johanna participates with enthusiasm and confidence in the company of older students. The group then discusses the first draft of a writing piece. Meghan shares her story, which she has written from Smog’s point of view. She is not sure how to end her story.

“Part of the assignment is to use language like Tolkein,” reminds Ms. Murray.

“Try using some riddles,” suggests Neal.

Students pull on their jackets, grab their lunch bags, and head for the cafeteria. They have only 30 minutes for lunch and recess. Meg buys her lunch today because it’s chicken nuggets and fries. Her socks and runners are just beginning to dry out. She eats slowly, not wanting to go outside for recess.

When Meg returns to the Quest Team, she has vocabulary class with 18 others in her core room. Classical music plays in the background as a stuffed toucan stares out from a colorfully painted rainforest scene—a stark contrast to the snow and ice outside. This is the largest learning group of the day. Students correct their homework. “To assimilate some people is to absorb them into the group” explains Mr. Smith, who has been Meg’s core room teacher for all four years she has been on the team.

Meg asks Mr. Smith to sign off on her Individual Responsibility Sheet. This weekly sheet goes home to parents informing them of their child’s progress in assignments and goals. In the beginning of the year, students set personal learning goals with parents and teachers based on the state’s Vital Result Standards.

This evening parents will come to the school to hear student presentations. Students are busy in the last hour of school putting the final touches on their independent projects that will be assessed by at least three people at the Open House. Meghan has created a concept map, a tri-fold poster, a report, and a Power Point presentation to investigate her topic of interest—“The basis of law & how to become a lawyer.”

As the school day comes to a close, students assemble in the amphitheater for a general team meeting. A student holding a small microphone asks if there are any announcements. An instructional assistant signs for a student with hearing difficulties. Others watch mesmerized by the assistant’s exaggerated facial and hand movements. A fifth grader announces that she is selling Girl Scout cookies. Ms. Murray talks of the possibility of a snow day on Thursday. A tall boy wearing dress pants, shirt, and tie announces that the Welland basketball team will defeat Brownville in today’s after school game. The students respond with polite clapping and loud hooting.

The Quest Team doors swing open as students leave to catch their buses. Meghan’s ponytail swings as she strides down the gray, carpeted halls past the central office and out the double doors. She struggles with her backpack, hefting it onto her right shoulder as she jumps across the snowdrift onto the first step of the yellow bus in an attempt to keep her New Balance runners dry.

## Appendix D: Sample Poetic Transcription

### *The Bathtub*

Our Team

It's not desks bolted down to the floor  
and chairs and blackboards and stuff.

It's four open classrooms with a  
amphitheater in the center to join them all.

It's like a community  
where everyone is related.

Everyone is involved  
we have a say in what we do.

Choices are given.

Fifth,

sixth,

seventh,

eighth

not all of one age,

not all of one perspective.

Our voices are heard.

I've never seen our team

without the bathtub and the two easy chairs.

They have taken a lot of hits

but they are still there.

The bathtub

is not used for much of anything

except that occasionally

a student

will do some work in it.

It shows our team is unique. *(Multiple student voices from one team juxtaposed)*