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Middle Grades Students as Teacher Educators: Consulting with Students in Professional Development

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MIDDLE GRADES STUDENTS AS TEACHER EDUCATORS:
CONSULTING WITH STUDENTS IN PROFESSIONAL DEVELOPMENT

A Dissertation Presented

by

John M. Downes

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Dissertation Examination Committee:
Cynthia Gerstl-Pepin, Ph.D., Advisor
Robert R. Snapp, Ph.D., Chairperson
Judith A. Aiken, Ed.D.
Penny A. Bishop, Ed.D.
Cynthia J. Forehand, Ph.D., Dean of the Graduate College

ABSTRACT

Many teachers of young adolescents face compelling pressures to dramatically change their practice. The rapid adoption of 1:1 computing, whereby each student has nearly constant access to an Internet-connected laptop, netbook or tablet, poses unique challenges to established practices in curriculum, instruction and classroom management. A growing number of teachers also confront a movement to provide students more personalized and flexible pathways to high school graduation, including experiential, blended and online learning, and allow students to apply knowledge and skills to tasks of personal interest. How teachers cope in this dynamic period may hinge on their ongoing professional development.

In recent decades, a general consensus has emerged that promotes teaching as a learning profession in which teachers work together in learning communities and seek expertise not just from outside experts, but also from colleagues attuned to local circumstances. At the same time, the student voice movement encouraged schools to empower students as key collaborators in school improvement. In spite of common themes in the narratives on teacher learning and student voice—collaboration, empowerment and effective change—they seldom intersect in traditional professional development settings or in teachers' collegial learning. This dissertation proposes student consultation as a link between students and teachers in collaborative school improvement and suggests next steps toward more sustainable efforts to involve students in the preparation and ongoing learning of teachers. Three studies are presented.

The first study described a weeklong summer professional development institute in which students have played a central role for more than two decades. It outlined the conditions conducive to the collaborative culture among teachers and consulting students and summarizes participants' perspectives on student consultation. The second study applied a qualitative case study design involving observations, interviews, focus groups and surveys with 72 teachers and 20 students to delve more deeply into consultations at the summer institute. Most teachers and students perceived the consultations as enjoyable and beneficial, willingly embraced shifts in authority during consultations, and noted the benefits of strategies employed to support the culture and practices of student consultations. The third study explored how teachers engaged with students as consultants in classroom action research projects initiated at the summer institute and in professional development contexts. The multi-site, collective case study examined six projects involving twelve teachers and 241 students. Interviews and focus groups with nine teachers and 22 students were coded by stages of the action research cycle and characteristics of student involvement in order to examine at which stages in the action research and in what capacities teachers involved their students. The study confirmed teachers' and students' general appreciation of consultation and suggests that parsing the subtleties of when and how students are consulted can contribute to deeper understand of student involvement and better facilitation of action research in teacher professional development. Together, this collection of studies has implications for the design and evaluation of student consultation in teacher professional development.

CITATIONS

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CHAPTER ONE: INTRODUCTION

Many teachers of young adolescents face compelling pressures to dramatically change their practice. The rapid adoption of 1:1 computing, whereby each student has nearly constant access to an Internet-connected laptop, netbook or tablet, poses unique challenges to established practices in curriculum, instruction and classroom management. Within and beyond the school walls, networked technologies link growing numbers of students to nearly unlimited online learning resources. Students can use social media tools to tap learning communities engaged with almost any topic of interest. Ubiquitous access to technology is empowering students at a time when ubiquitous learning permeates society.

At the same time teachers contend with ubiquitous computing in schools, many also confront a growing movement to provide students more personalized and flexible pathways to high school graduation. Legislation passed in Vermont mandates that all students in grades 7 through 12 maintain a learning plan that charts a personalized pathway to high school completion (Vermont State General Assembly, 2013). The pathway may be flexible and include "any combination of high-quality academic and experiential components"—including blended and online learning—and "allow the student to apply his or her knowledge and skills to tasks that are of interest to that student" (p. 5). Similar legislation has been passed across much of New England (Great Schools Partnership). Ubiquitous and personalized learning gives students more control over their learning and drives teachers to address the unique needs, abilities and interests of each student. Both trends contrast with the personal histories and professional

preparation most teachers experienced. How teachers cope in this dynamic period may hinge on how they learn.

Teacher professional development plays a vital role in the success or failure of 1:1 computing initiatives and is likely to be crucial in efforts toward more personalized and flexible learning. Practitioners and researchers have exerted considerable effort in recent decades to determine practices that support effective and ongoing teacher learning. As a result, a general consensus has emerged that promotes teaching as a learning profession in which teachers work together in learning communities, examine teacher and student work, and seek expertise not just from outside experts, but also from colleagues attuned to local circumstances (Wei, Darling-Hammond, Andree, Richardson & Orphanos, 2009). Studies indicated that under these circumstances, students were more likely to benefit from deeper and more sustained school improvement while teachers enjoyed a more rewarding and supportive professional climate.

As professional development practices endorsed teacher collaboration in school change, the student voice movement encouraged schools to empower students as key collaborators in school improvement. Advocates drew upon the principles of democratic schooling, cited the critical perspectives only students can provide, and emphasized the practical and relational benefits to teachers when they partner with students to improve classroom practice. In spite of common themes in the narratives on teacher learning and student voice—collaboration, empowerment and effective change—they seldom intersect in practice. Teacher educators and professional development providers rarely incorporate students into teacher learning activities. Teachers rarely engage students in their ongoing collegial learning.

This oversight is particularly puzzling in middle grades education. The middle grades concept has urged educators to honor young adolescents as legitimate stakeholders in the design of what, how and where they learn. Proponents recommend negotiated curriculum, democratic classroom management, and other practices that help teachers design engaging learning opportunities and environments. Nonetheless, students are largely absent from professional development activities.

The work that follows represents the culmination of a research program I have undertaken in recent years. It explores how consulting with students can help teachers address daunting contemporary challenges in middle grades education. It examines designs for teacher learning that embrace the potential of students as collaborators in teacher growth and school improvement. It proposes student consultation as a link between students and teachers as they engaged in collaborative learning and suggests next steps toward more sustainable efforts to involve students in the preparation and ongoing learning of teachers.

This dissertation ties together two book chapters, a paper presented at the annual conference of the American Educational Research Association, and two journal articles. These works explored contemporary challenges confronting middle grades teachers, described how students can act as consultants at a summer professional development institute, and examined the experience of teachers and students during that institute and in classrooms during the months that followed. The works are introduced in each chapter and reprinted in their entirety. Taken as a whole, this dissertation makes the case that summer institutes can become sites for student involvement in teacher learning and promote the many benefits associated with student involvement more generally.

Some of the works have been undertaken collaboratively. Colleagues on co-authored manuscripts made invaluable contributions to data collection, analysis, and writing. My lead authorship on collaborative works, however, reflects my unique, in-depth interest in and knowledge about the literature, research, and practices of student voice and involvement in school change generally, and teacher learning in particular.

Chapter 2, "Literature Review," explores the body of literature about student involvement in teacher learning. It sets the context for the research that follows and positions student consultation at the summer institute in a broader body of literature. The chapter further informs the research chapters that follow by introducing schema for implementing and evaluating student involvement in school improvement.

Chapter 3, "Contemporary Context for Teacher Learning," describes the dramatic cultural shifts driven by technological innovations and the opportunity to re-envisioning responsive education for young adolescents. It describes ways in which technology can contribute to effective middle schooling and paints a vivid picture of technology-rich and responsive learning environments for young adolescents.

Chapter 4, "A Practical Vision For Student Involvement," focuses greater attention on the predicament of middle grades teachers in the United States today. It explores how technological innovations present challenges but also opportunities for teachers struggling to adapt to the rapid advance of technology in schools. In particular, it explores how teachers and students can use technology to collaboratively plan learning experiences, co-create the novel pedagogy called for in our technology-rich society, and close the frequently yawning gap between students' in- and out-of-school technology lives.

The first four chapters establish the challenges confronting educators as schools work to close the gap between the technology-rich lives of today's young adolescents and the schooling experience they often face. The chapters suggest that students can be key collaborators in the design of schooling. But there is scant evidence of student involvement in the most common forms of teacher professional development, such as workshops, institutes, and in-service days. Chapter 5, "An Example of Consultation in Professional Development," describes a week-long summer professional development institute in which students have played a central role for more than two decades. The experiences of teachers and students at the Middle Grades Institute are the basis of subsequent research chapters.

Having established the challenges and opportunities middle grades teachers are faced with today, and having provided an example of how students can play an important role as consultants in summer professional development, Chapter 6, "Examining Student Consultation at the Institute," begins a more rigorous examination of the role of student consultation at the Middle Grades Institute and it's potential in teacher learning and classroom change. Teachers and consulting students describe their experiences with teacher-student consultations at the Middle Grades Institute. The study suggests that consultations at the Institute generate important benefits consistent with the literature on student consultations, including shifts in voice and authority, expanded appreciation of students by teachers and teachers by students. The study also offers insights into productive consultative practices.

Chapter 7, "Collaborative Action Research for Middle Grades Improvement," examines teacher-student consultations in classrooms as teachers implemented action

research projects initiated in conjunction with Institute week. The study applied an established, evaluative framework to parse different qualities of student consultation throughout the process of developing, implementing and evaluating classroom innovations. As such, it provides an example of how teachers and researchers can critically examine the quality of student consultation at various stages of action research specifically and phases of classroom innovation more generally. The study also bolsters the case for integrating student consultations into formal professional development as an engaging, rewarding, and effective way to inform changes in teaching and learning.

Chapter 8, "Summary and Implications" concludes the dissertation by synthesizes and expanding upon the implications of student consultation in teacher learning for the design and evaluation of teacher professional development.

CHAPTER TWO: LITERATURE REVIEW

This chapter explores the body of literature about student involvement in teacher learning in an effort to build a conceptual bridge between established understandings of student involvement and the implementations explored in the chapters that follow. Further, schema for implementing and evaluating students involvement in teacher learning introduced in this chapter are applied in future chapters.

Introduction

The concept of the democratic classroom has long been promoted in the middle grades, as proponents urge that student questions and concerns become the basis for curriculum (e.g. Beane, 1993). Although the middle school concept emphasizes the importance of student voice in learning, middle grades teacher educators have yet to capitalize on the potential of student consultation in both teacher preparation and ongoing teacher learning. In this paper I explore the theoretical and research underpinnings of student participation in teacher learning. I begin by setting the context for this inquiry, examining existing research and literature on student voice and student consultation, and finally exploring the challenges of critically evaluating efforts to incorporate student participation in teacher learning. The goal of this review is to inform the design of teacher learning opportunities, to understand how student consultation serves as a link between students and teachers engaged in collaborative learning, and to suggest next steps toward more sustainable efforts to involve students in the preparation and ongoing learning of teachers.

This review of the literature is inspired by the nearly 20 years of work with colleagues of the Middle Grades Collaborative. The Collaborative is a unique alliance of

Vermont colleges and universities that has, for almost two decades, provided ongoing

professional development for aspiring and practicing teachers of 10-15 year olds. During

this time, the Collaborative annually has offered the Middle Grades Institute, a statewide,

week-long, residential learning community aimed at providing this support while also

helping educators earn their Vermont Middle Grades Teaching Endorsement. The

Institute faculty consists of fifteen facilitators, who represent both university teacher

educators and veteran middle school teachers. These professors and practitioners team-

teach throughout the Institute. Beyond the week-long summer experience, follow-up

activities occur during the fall semester in participating teachers' schools, on an online

forum, and at a culminating meeting of all participants.

The Institute places student voice at the center of professional development to

change the attitudes and practices of middle grade teachers. To that end, the

Collaborative invites students to join the teacher participants for the majority of the

Institute. Some students come from local schools; some are brought by participating

teachers; still others are recruited from a team well versed in student-directed pedagogy.

The invited students are culturally, linguistically and economically diverse representing

all students from Vermont. Throughout the week, middle grades students act as

consultants and collaborators, experts and panelists, offering their voice and expertise on

issues such as young adolescent needs, classroom and school organization, curriculum

development, and assessment. Most students also partake in their own student strand

during the week designed to strengthen their leadership capacities and expose them to

post-secondary possibilities. We have just begun a research agenda to capture the

dynamics of consultation at the Institute and the impact the Institute has on the

consultative practices of teachers when they return to their own classrooms. We hope that these efforts, including this review, will inform improvements to our Institute design, hone our personal practices as teacher educators, and contribute to the broader discourse on student participation in teacher learning.

Our work with student consultation parallels the increasing attention to student consultation in school improvement generated by researchers and policymakers in recent years, particularly in the United States and England (Rudduck, 2007; Rudduck & McIntyre, 2007; Thiessen & Cook-Sather, 2007). Yet despite finding that more than 90% of teachers participate in formal professional development activities each year, a recent "status report" on teacher professional development, as well as Standards for Staff Development – both issued by the National Staff Development Council – make no mention of involving students in teacher professional development (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). Many researchers argue for teachers to understand the students whom they teach (e.g., Cochran-Smith & Zeichner, 2005; Darling-Hammond & Sykes, 1999) yet these same researchers largely fail to consider opportunities for young adolescents' involvement in teachers' development. The following discussion breaks down the dominant discourse on teacher professional development by exploring in greater depth concepts critical to imagining student participation in teacher learning: teacher learning, joint work, student consultation, and democratic schooling.

Teacher Learning

I use the term teacher learning to capture the full range of ways that teachers engage in their own professional growth, including initial teacher preparation, ongoing

facilitated professional development through graduate coursework, conference attendance, inservice training, and self-directed activities such as action research and self-study. Within these various contexts, and there is substantial overlap among them, I apply a set of assumptions drawn from constructivism about how teachers learn, summarized well by Cook-Sather and Youens (2007):

[C]onstructivist approaches have in common the belief that learners actively construe and construct their own understandings in relationship and context and adapt their behavior based on the sense they make. The learning process that unfolds when understanding is constructed neither occurs nor is completed in a single event. Rather, learning and understanding of that learning take place over time, and "learning changes not just what the learner knows ... but also who the learner is" (Wortham, 2004, p. 716). And although constructivism is not a theory about how to teach, it "reminds us that the learner must be at the center as we think about our subject matter, our curriculum, and our pedagogy" (Kroll, 2005, p. 58)" (Cook-Sather & Youens, 2007, p. 65).

Over the course of the last two decades professional development for teachers has moved from isolated, de-contextualized, externally driven training sessions for teachers toward a more integrated, collaborative process of on-going teacher learning anchored in teacher practice. In a review of research on teacher professional development for the National Staff Development Council, Wei and colleagues suggested that a 'new paradigm' for professional development has emerged that clarifies the content, context, and process of effective professional development (Wei et al., 2009). They note that the

content of professional development is multifaceted and most useful when it focuses on "concrete tasks of teaching, assessment, observation and reflection;" specific pedagogical skills and how to teach specific content to learners; and student learning (Wei et al., 2009, pp. 3-4). In essence, Wei and colleagues reiterate the call that Ball and Cohen sounded a decade earlier when they stated that teachers would need to have an understanding of their subject, an appreciation of cultural backgrounds different from their own, an expansion of their ideas about learning, a grasp of pedagogy, and a knowledge of children (Ball & Cohen, 1999).

Ball and Cohen suggested a framework of "learning in and from practice" (p. 10) grounded in Little's (1990) emphasis on joint work, that teachers' professional development engages teachers in a new kind of understanding of teaching, one that is inquiry-based and collaborative work. Little defined joint work as the shared responsibility for the work of teaching involving collective conceptions of autonomy, support for teachers' leadership in professional practice, and group affiliations grounded in professional work. Similarly, learning in and from practice relies on two implicit assumptions: (1) teacher professional development engages teachers in the pursuit of in-depth understanding of professional knowledge – pedagogy, content, and context issues; and (2) teacher development builds learning communities that promote collaborative interactions among teachers. The joint work of learning in and from practice requires teachers to collaborate with each other as professionals and investigate their teaching in an honest manner (Putnam & Borko, 2000, p. 6).

There are now a variety of professional development pedagogies that focus on inquiry into teacher practice, including microteaching and laboratory experience;

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computer simulations; uses of video technology and hypermedia; case methods; portfolios in teacher education; and practitioner research (Grossman, 2005, pp. 7-9). These professional development programs mark a shift toward "viewing teaching itself as a form of inquiry and experimentation" (Tabachnick & Zeichner, 1999, p. 311).

At the middle school level organizational structures and cultural norms have pulled teachers together to work jointly. Teachers are frequently grouped on grade level or multi-age teams. Wei and colleagues devote considerable space in their report to exploring research into these new structures and norms such as professional learning communities; peer observation of teacher practice; analyzing student work and student data; developing study groups; professional communities that operate beyond the school; and school-based coaching and mentoring. While professional development has moved a considerable distance to include collaboration and inquiry of teacher practice, scant attention has been paid to student involvement in teacher learning even though these same researchers argue for teachers to understand the students whom they teach (e.g., Cochran-Smith & Zeichner, 2005; Darling-Hammond & Sykes, 1999). Ball and Cohen's emphasis on knowing students is particularly salient to this discussion. They note that a teacher would need to know,

> …what children are like, what they are likely to find interesting and to have
> trouble with, in particular domains. They would need to become insightful in
> listening to and interpreting children's ideas about academic subjects. They would
> need to expand the interpretive frames they are likely to bring to their
> observations of students so that they could see more possibilities in what students
> could do. And they would need to come to see children as more capable of

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thinking and reasoning, and less blank slates who lack knowledge. Some of this knowledge is general—about children of certain ages, for instance. Some of it is particular—what this child believes, how she works, what she means by what she has drawn or written or said. Learning to attend to one's students with insight requires expertise beyond what one gathers from one's own experience. What one enjoyed, thought, or felt as a child may afford helpful speculation about one's students, but is insufficient as a professional resource for knowing learners (pp. 8-9).

Student Consultation

Rudduck (2007) notes that consultation in the research on student voice usually involves students' participating on school committees that "focus on real issues, events, problems, and opportunities, and involving them through a wider range of roles and responsibilities. At the classroom level participation is about opportunities for decision-making and having choices and about understanding and managing your own learning priorities" (p. 590). Teachers who have opened themselves to these experiences appreciate students' insights into the effectiveness of various teaching methods, how teachers might address the needs groups of students may have in classrooms, and teachers' underestimation of students' ability to handle challenge and responsibility (pp. 595-596). Rudduck (2007) describes student consultation as follows:

Consultation may involve: conversations about teaching and learning and

the conditions of learning; seeking advice from students about possible

new initiatives; inviting comment on ways of solving problems,

particularly about behaviours that affect the teacher's right to teach and the

student's right to learn; and inviting evaluative comment on school policy

or classroom practice. Consultation is a way of hearing what young people

think within a framework of collaborative commitment to school reform

(p. 590).

Rudduck presents the schematic in Figure 1 to capture the process and outcomes

of student consultation.

Student consultation

*yields a practical
agenda*

*strengthens student
self-esteem*

which leads to

**enhanced commitment to learning
and to school**

which is sustained by

transformation of teachers' knowledge of students
(greater awareness of students' insight and capacity for constructive analysis)

which in turn leads to positive changes in

pedagogy

**teacher-student
relationships**

Figure 1. Rudduck's (2007) schematic of student consultation (p. 599).

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A number of researchers (MacBeath, Demetriou, Rudduck, & Myers, 2003;

Rudduck & McIntyre, 2007) have identified several broad categories for how teachers

can consult with students about teaching and learning.

- *"Direct consultation,* where pupils are asked directly about their

   experiences or views, through questionnaires, interviews, discussions,

   logs, or posting views in boxes;

- *Prompted consultation,* where pupils are 'prompted' to express their

   views through the use of a stimulus, such as a particular very recent

   lesson, data from completed questionnaires or video replay of extracts

   from a lesson;

- *Mediated consultation,* where pupils who are unaccustomed to being

   consulted, or to reflecting on what helps their learning, are helped to

   formulate and express their views through, for example, drawings,

   posters or making a video, and then to talk about what they wanted to

   communicate" (Rudduck & McIntyre, 2007, p. 39).

Rudduck points out that "consultation implies participation," and that student

participation does not necessarily indicate that students' voices are being heard or

honored.

Drawing on data from a number of projects, Rudduck found that when

thoughtfully implemented, student consultation offered a range of benefits to students and

teachers. Students said they valued,

- "being able to talk about things that matter to you in school;

- being listened to and knowing that what you say is taken seriously;

- feeling that you belong and that you can make a difference to how things are done; and

- feeling that by talking about things and taking part in things you understand more and have more control over your learning" (Rudduck, 2007, p. 598).

Rudduck observed that students "felt more included in the school's purposes… felt positive about themselves as a result of being asked to respond… and valued being able to do something for the school" (Rudduck, 2007, p. 598). Rudduck noted benefits to teachers as well. After hearing from students in their role as consultants, teachers spoke of

- "a more open perception of young people's capabilities,

- the capacity to see the familiar from a different angle,

- a readiness to change thinking and practice in the light of these perceptions,

- a renewed sense of excitement in teaching,

- a practical agenda for improvement, and

- confidence in the possibility of developing a more partnership-oriented relationship with their students" (Rudduck, 2007, pp. 599-600).

Rudduck also suggested that there is a difference between "work on student perspectives and work on student voice," observing that, "[e]liciting and using student perspectives can provide a practical agenda for change, but it does not guarantee change

in the status of student within the school" (p. 591). The tension Rudduck observed points to a fundamental and challenging democratic impulse that runs through much of the literature on student voice and involvement.

Involving Student Consultation as Part of Joint Work

The literature on teacher learning has evolved as educational research generally has steadily shifted toward critically examining student's individual and collective experiences as they grapple with schooling environments (Erickson & Shultz, 1992; Thiessen, 2007). Drawing on progressive and humanistic images of students, researchers increasingly view students as protagonists (Delamont, 1983), active and knowing (Fine & Sandstrom, 1988) actors in constructing knowledge and their schooling environment. These new views of students generated new pedagogies as well, departing from a transmission model of learning to include constructivist (Cook-Sather, 2002; Duckworth, 1987), and critical (hooks, 1994; Nieto, 2004; Shor, 1992) pedagogies, each of which placed students closer to the center – sometimes in the lead – of designing classrooms, curriculum, instruction, and assessment. Accordingly, student voice has become a popular term to capture a common goal and key strategy for involving students in the design of schooling.

Cook-Sather (2006) provides a useful review of the history and complexity of the term "student voice," exploring its potentially positive and negative connotations, and teasing out central themes underlying much of the discourse on student voice, in particular the terms "rights," "respect," and "listening." In a comprehensive review of research into student voice, Thiessen (2007) describes three bodies of work that have emerged in recent decades: students participating in and making sense of life in

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classrooms and schools; understanding students and their development in school; and how students are actively involved in shaping their own learning opportunities and in the improvement of what happens in schools (p. 8). The first strand examines students' thoughts and feelings (Davies, 1982; Phelan, Davidson, & Yu, 1998), their relations with teachers (Apple & Beane, 1995; Cothran & Ennis, 1997; Lampert, 2001), and how they contribute to a social world and academic success (McCadden, 1998; Woods, 1990). The second strand focuses on how the dynamics of classrooms and schools influence students' identities (Diaz-Greenberg, 2003; Nagle, 2001) and how students adapt to different classroom and schooling structures, expectations, and work (McLaren, 1999; Nieto, 1994; Willis, 1977). Cultivating and listening to student's voices, particularly marginalized voices, helps teachers to understand the "various ways in which student perceptions and identities are constructed" (McLaren, 2003, p. 242). The third strand examines how teacher consultation with students shape classroom management and curriculum design (Boomer, 1982; Brodhagen, 1995; Lee, 1999) and school rules, leadership, and governance (Kaba, 2000; SooHoo, 1993). Such student "engagement" appears to have benefits beyond informing reforms, but also in the development of students themselves, including their sense of agency, belonging, and competence (Jackson & Davis, 2000; Mitra, 2004; Stevenson, 2001).

This last thrust of research into how students can be involved in improving schools provides an overarching frame for exploring how students can participate in teacher learning, but clearly the prior two strands of research provide teachers critical insights into possible paths inquiry – and practical strategies – once they embark on

intentional learning. The research builds on insights into how teachers can benefit from consulting with their students, and how students benefit from being consulted.

Contexts for Consultation

In practice, student participation in teacher learning takes place in several, frequently overlapping contexts: initial teacher preparation, ongoing professional development (or guided teacher learning), and independent (self-directed) teacher learning. For instance, Cook-Sather (2007, 2010, 2011) examined the role high school and college students can play in the development of preservice teachers and college faculty, and with Alter (Cook-Sather & Alter, 2011) described the resulting changes in student-teacher relationships during and after their collaboration. Fielding (2001b) worked with teacher trainees to establish "dialogic encounters with students about the quality of teaching and learning" (p. 130), explaining that in such a setting, "teachers learn not only with and from each other, from parents and from their community, but also, and more particularly, from their students" (p. 130).

Downes, Nagle and Bishop (2010) examined the role of student consultation embedded in a summer institute designed for middle grades teachers' continuing professional development, seeing it as a natural extension of joint work associated with effective teacher professional development. Through the use of student panels, small group collaborations among students and participating teachers, and co-experimentation in which students and teachers together "tested" new pedagogies in the safety of the Institute setting, we observed benefits to students and teachers during and beyond the Institute. Moreover, I have observed continuing consultation in teachers' classrooms after attending the Institute (Downes, 2010).

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A third context, targeting how teachers can independently inquire into their own practice, often takes the form of action research (Oldfather, 1995). Fielding (2001b) illustrates how educators can involve students as data sources, active respondents, co-researchers, and researchers in the course of grappling with students' learning needs, engagement and roles, as well as conditions in classrooms, teams, and schools (2001a).

These contexts frequently overlap or unfold sequentially. For instance, Rodriquez (2011) engaged ninth grade urban youth as researchers, as experts, and as participants in open dialogue with preservice teachers, challenging the teachers' and inspiring some of them to stand up and pursue meaningful change in schools. Although the contexts mentioned here are not always clearly defined, distinguishing them as we consider the potential of student involvement may serve to focus attention on the varied ways teacher educators can cultivate the skills and dispositions associated with student consultation.

Democratic Purposes for Student Involvement in Teacher Learning

A number of authors have situated student participation within the context of democratic classrooms and critical pedagogy (Apple & Beane, 1995; Beane, 1993, 1997; Cook-Sather, 2002, 2006; Flutter, 2007; Schultz & Banks, 2011; Whitehead & Clough, 2004). Echoing Rudduck's concern for students' status within the school, Cook-Sather (2006) notes that the concepts of "rights," "respect," and "listening" integral to literature on student voice "raise questions and concerns as well as signal possible productive shifts in power dynamics and practices that might, in turn, lead to a significant cultural shift" (p. 381). Cook-Sather and Youens (2007) posit this shift as "repositioning" students from merely "beneficiaries--or victims--of whatever pedagogical commitments and approaches prospective teachers develop" to "stakeholders who have a right to play an active role in

the co-construction of their learning, the development of pedagogical commitments and approaches, and the critical revision of educational and social structures" (p. 62). Therefore, teacher education institutions committed to helping teachers know their students, and particularly those institutions which espouse a social justice mission, must extend their focus beyond "social commitments, institutional structures, course content, and pedagogical processes" to "ensure that students are not only made visible but also repositioned as active participants in the process of learning to teach for social justice" (p. 63). To do so, central goals for teacher learning and preparation should include:

- preparing teachers to listen to their students and to develop a stance toward students in which they are viewed as being knowledgeable and in which their backgrounds and experiences are seen as enabling and disabling

- striving to see from and value the student perspective

- working to develop accessible and effective teaching approaches by listening closely to what students have to say about their learning and responding to that input

- learning how to build teaching approaches around themes that are relevant to and that emerge from students' own lives and that can thus be transformative for students personally and politically

- well-informed strategies for countering discriminatory and exclusionary tendencies in education by genuinely listening to students and by respecting and responding to what they say

- and creating situations within which students feel empowered and motivated to participate constructively in their education (Cook-Sather & Youens, 2007, p. 64)

Citing the rich history of curriculum theory that attends to the importance of engaging learners in the construction of learning and schooling, including the work of John Dewey, L. Thomas Hopkins, and Joseph Schwab, Schultz and Banks (2011) ask, "Why is it that with such theoretical guidance over the century in curriculum history and the history of public education in the United States, we cannot find it in ourselves to leverage the insights, imaginations, and creativity of our students" (p. 46)?

Creating Conditions for Democratic Student Consultation

Rudduck and McIntyre (2007), drawing on the extensive student involvement research of the Teaching and Learning Research Programme, identified a number of guiding principles for consulting with students, noting that these may help educators grapple with the "complex ongoing work together of teachers and their pupils" (p. 35) of which consultation must be a part:

- Teachers should embark on pupil consultation only if they have a genuine desire to hear what pupils have to say and a firm commitment to try to use what pupils say to improve teaching and learning in their classrooms
- Teachers should explain clearly to pupils the purpose and focus of their consultation, making clear how, and why if appropriate, they were selected for consultation and what will happen to what they say, including the teachers' own willingness to be influenced by what pupils say as well as by other necessary considerations

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- For the consultation process to be productive, we need to create conditions of dialogue in which we listen to and learn from each other in new ways

- The methods of consultation used should be chosen to deepen teachers' understanding of pupils' experiences of teaching and learning in their classrooms

- After consultation, pupils need feedback on how what they have said has been understood and on how it will influence or has influenced teacher planning and actions

- Pupil consultation needs to be planned realistically from the beginning, with particular attention to the time and energy needed for all phases of it (pp. 35-38).

Establishing the Culture. Colleagues from the Middle Grades Institute and I have described how a culture conducive to student consultation can be cultivated even in the midst of brief, week-long summer institute (Downes, Nagle and Bishop, 2010). The Institute staff has developed an elaborate and embedded repertoire of strategies proven to prepare participants for consultation with middle grades students during the Institute. These reflect shared beliefs about honoring young adolescents in general, and they contribute to more successful first-time student-teacher consultations. The strategies include the following. Instructors identify opportunities for meaningful consultation as they plan their curriculum and coordinate schedules. Institute organizers arrange for teachers to consult with students whom they did not previously know and are unlikely to have as students in the future. Institute planners arrange for ample recreational time for students to address their need for exercise, fun, and relaxation amid the demands of

consultation sessions. Staff emphasizes throughout the Institute week – including opening

remarks, morning meetings, evening activities, and strand sessions – how rare and

important student consultation can be, often in the presence of the consulting students.

Instructors include in evaluation rubrics expectations that teachers will incorporate

students' ideas and interests in the planning and implementation of their final Institute

projects. The staff seeks out opportunities for students to take on and portray roles and

abilities that stretch teachers' expectations for what young adolescents can know and do,

such as participating alongside adults in literature circles and games, lead morning

meetings, and present projects in which they reveal their hopes for the future.

Managing the Consultation. Strand instructors typically prepare teachers for

consultations, and intervene during consultations when necessary. They emphasize that

they will have only a relatively short period of time to take full advantage of this rare

opportunity to consult with students about how to improve teaching and learning. They

counsel teachers that they are entering a different kind of student-teacher conversation

than they may be used to, one in which students are the experts. They encourage open-

ended questions that prompt students to share ideas we haven't imagined before. And

they instruct teachers to listen patiently and let the insights emerge naturally.

Honoring and Sustaining the Work. Staff and teachers at the institute openly

express their gratitude for students' service as consultants. Instructors are careful to save

time at the end of consultation sessions for teachers to thank the students personally and

reinforce the strands' appreciation of their time and honest effort. Students generally

depart the Institute a day before other participants, which provides a chance for a whole-

group meeting at which students share some of their own work and thoughts from the

week, which often include how much they enjoyed working with the teachers and how much they appreciate teachers' clearly evident commitment to improving schooling for students. Teachers then are offered a chance to share their own appreciations. Participants who return to the Institute help to enrich and sustain the consultative culture. Up to 30% of the Institute's participants each year are returnees and help convey the value and significance of working with students during the week.

The complex process of establishing, managing, and honoring student participation in the work of teacher learning is a persistent theme in the literature on student voice and school reform. Cook-Sather and colleagues in particular (2002; Cook-Sather & Alter, 2011; Cook-Sather & Youens, 2007) have explored in depth the conceptual and practical challenges of re-envisioning and repositioning students in relationship to others who participate in teacher learning and school reform. Cook-Sather and Alter (2011) suggested that paths to meaningful and democratic student involvement in teacher learning should actively pursue a "liminal position" for student consultants "because this classical anthropological concept foregrounds 'inbetweenness,' a quality of experience with unique potential to challenge deep-seated assumptions about how a community or society works." Freed from traditional roles of teacher and student, "student consultants develop perspectives and capacities that, they suggest, transform their educational experiences and that could transform deep-seated societal understandings of education based on traditional hierarchies and teacher–student distinctions" (p. 37).

Evaluating Student Consultation in Teacher Learning

As much progress as I have observed in my work with colleagues on student consultation, I nonetheless wonder how we, along with our teacher and student collaborators, can maintain a critical stance toward the practices of student consultation. Students, teachers, and teacher educators committed to democratic schooling have interests in constantly gauging the quality and quantity of student involvement in teacher learning. To seriously pursue the systematic integration of student consultation in teacher learning presupposes a willingness and capacity to gauge effectiveness. The faculty of the Middle Grades Institute, for instance, expects that, once introduced to student consultations during the summer week, participants will return to their classrooms and implement consultations during the fall as they implement their Institute projects. We hope as well that teachers will pursue democratic goals and dispositions in and from their consultations with students. We also hope that these practices will continue to develop over time, beyond the timeframe of the Institute graduate work, and become embedded in the daily work of teaching and learning. As student consultation becomes more integral to teacher preparation and ongoing learning – as a tool and a goal – it becomes an appropriate focus for evaluation.

Guskey (2000) warned that evaluating the effectiveness of professional development is fraught with challenges. He suggests that "measures of the use of newly acquired knowledge and skills must be made after participants have had sufficient time to reflect on what they learned and to adapt the ideas to their particular setting." He continues, "because implementing new practices is usually a progressive and ongoing process, measures of use may need to be gathered at several points in time" (p. 178). It is

nonetheless important to "identify accurate, appropriate, and sufficient indicators of use" (2000, p. 179).

Previous evaluations of student consultation at the Middle Grades Institute (Downes, Nagle & Bishop, 2010; 2014) and of participating teachers' implementation of consultations in their classrooms (Downes, Bishop, Swallow, Olofson & Hennessey, 2015) have used a variety data sources, including surveys of teachers and students, teacher interviews, student focus groups, teachers' survey instruments used with students, transcribed student responses, student work samples, teacher goal statements and reflections, and teachers' culminating course poster projects, which together provide rich data capable of sustaining initial inquiry into the purposes, methods, extent, and underlying dispositions of teachers' use of student consultation. These data could also feed into ongoing participant portfolios, an assessment strategy particularly well suited to capturing the effects of professional development activities (Guskey, 2000, p. 200).

However, whereas the Institute faculty embraces constructivist approaches to teacher learning, it nonetheless lacks a viable framework for critically reflecting upon consultation-related experiences, one that captures our hopes for transformative and democratic outcomes from student consultations. We are wary of, as Fielding (2001b) cautions, "developing increasingly sophisticated ways of involving students that, often unwittingly, end up betraying their interests, accommodating them to the status quo, and in a whole variety of ways reinforcing assumptions and approaches that are destructive of anything that could be considered remotely empowering" (p. 124). Cook-Sather (2006) adds that "enacting the most radical, transformative versions of [rights, respect, and listening] takes more than awareness and commitment; it takes understanding and hard

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work, consideration and reconsideration, calling into question, and, most important, changing" (p. 381). As Cook-Sather and Youens (2007) note, "In combination, constructivism and critical reflection, like social justice and repositioning of students…, keep the focus of learning and teaching on learners as complex, social beings enmeshed in relationships of power and ongoing processes of self-construction" (p. 65).

Several critical frameworks have emerged from the literature on student involvement and consultation that may contribute to critical reflection upon ongoing practice. In Table 1, to evaluate the conditions for student voice, Fielding (2001b, pp. 134-135) posed a series of pointed questions about speaking, listening, skills, attitudes and dispositions, systems, organizational culture, spaces, action, and the future. Hart provides a graphical "ladder of student involvement" (Figure 2), adapted by Fletcher (Figure 3), which delineates degrees of participation and non-participation against which instances of student consultation may be compared. Through my own work with examples of consultation at and beyond the Middle Grades Institute, I'm drawn to the matrix presented in Figure 4 as a framework for reflecting upon instances of consultation simultaneously through Hart's strategic lens and a continuum of democratic purpose.

Table 1	
Fielding's (2001b) "Evaluating the conditions for student voice" (pp. 134-135)	
Speaking	*To whom* are they allowed to speak? *Who* is allowed to speak? *What* are they allowed to speak about? What *language* is encouraged / allowed? *Who decides* the answer to these questions? *How* are those decisions made? *How, when, where, to whom and how often* are those decisions communicated?

Listening	*Who* is listening? *Why* are they listening? *How* are they listening?
Skills	Are the skills of dialogue *encouraged and supported* through training or other appropriate means? Are those skills understood, developed and practised within the *context of democratic values and dispositions*? Are those skills themselves *transformed* by those values and dispositions?
Attitudes & Dispositions	How do those involved *regard each other*? To what degree are the *principle of equal value* and the *dispositions of care* felt reciprocally and demonstrated through the reality of daily encounter?
Systems	*How often* does dialogue and encounter in which student voice is centrally important occur? Who *decides*? How do the systems enshrining the value and necessity of student voice mesh with or *relate to other organizational arrangements* (particularly those involving adults)?
Organizational Culture	Do the *cultural norms and values* of the school proclaim the centrality of student voice within the context of education as a shared responsibility and shared achievement? Do the *practices, traditions and routine daily encounters* demonstrate values supportive of student voice?
Spaces	*Where* are the public spaces (physical and metaphorical) in which these encounters might take place? Who *controls* them? What *values* shape their being and their use?
Action	What *action* is taken? Who feels *responsible*? *What happens* if aspirations and good intentions are not realized?
The Future	Do we need *new structures*? Do we need *new ways of relating to each other*?

8. Child-initiated, shared decisions with adults

7. Child-initiated and directed

6. Adult-initiated, shared decisions with children

5. Consulted and informed

4. Assigned but informed

3. Tokenism

2. Decoration

1. Manipulation

Degrees of participation

Non-participation

Eight levels of young people's participation in projects. (The ladder metaphor is borrowed from the well-known essay on adult participation by Sherry Arnstein (1969); the categories are new).

Figure 2. Hart's (1992) Ladder of Student Involvement (p. 8).

The Ladder of Student Involvement in School

8. Student-led decision-making shared with adults *"Student-Adult Partnerships"*

7. Student-led, student-directed, student-centered decision-making

6. Adult-led decision-making shared with students

5. Adult-led decision-making informed by student voice

4. Adult-led decision-making with students assigned to respond

3. Adults *tokenize* students in their decision-making

2. Adults use students to decorate their decision-making

1. Adults manipulate students in decision-making

Increasing Amount of Involvement

Degrees of Non-involvement

Adapted by Adam Fletcher from Hart, R. (1994). *Children's Participation: From Tokenism to Citizenship*. New York: UNICEF.

Figure 3. Fletcher's (2010) adaptation of Hart's (1992) Ladder of Student Involvement.

A Reflective Framework for
Student Involvement in Teacher Learning

Strategies for Student Involvement

Shared Decision Making

Adult-Initiated Consultation

Manipulation

Pragmatic   Democratic

Purpose for Student Involvement
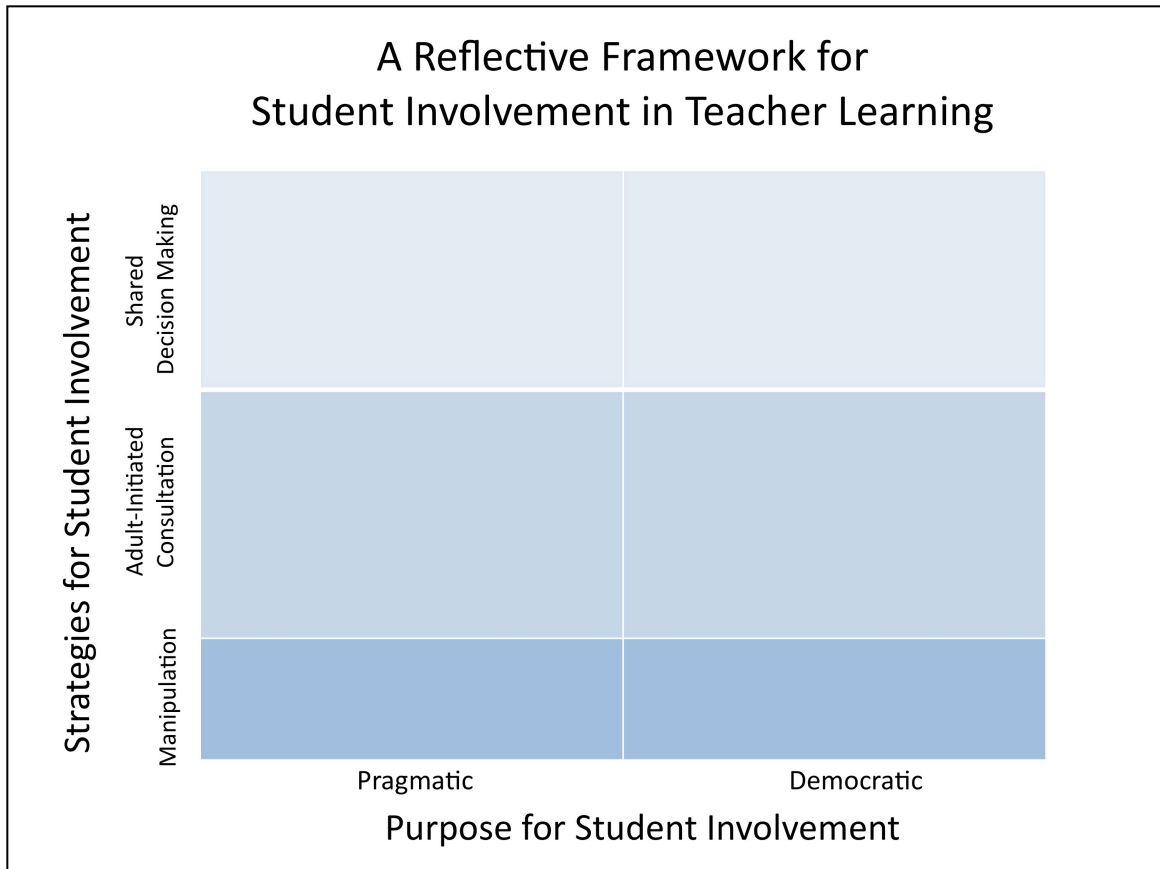
Figure 4. A reflective framework for student involvement in teacher learning

Reflecting in a manner consistent with the principals of student voice raises additional challenges not ordinarily associated with teacher learning. Teachers and teacher educators should invite all participants, including students, into the ongoing process of critically reflecting upon collaborative learning, including the design of tools to support reflective dialogue. The several frameworks presented here, therefore, are at best starting points toward tools appropriate for any particular collaborative learning community.

Conclusion

The field of middle level education is well known for emphasizing student voice, student choice, and integrative curriculum in its reform recommendations (Jackson & Davis, 2000; NMSA, 2002). While students' perspectives are increasingly sought in some classrooms on curriculum and climate matters, middle schooling rhetoric has paid less attention to the role students might play in teacher professional development. The distance between the literature on teacher professional development and the literature on student consultation for educational improvement represents a missed opportunity for the enrichment of student and teacher learning. Student consultation presents important opportunities for professional development designs that focus on knowing students better and acknowledge students' right to be included in the design of their own learning. Formal professional development in particular, including initial teacher preparation and ongoing professional development, are untapped sites for teachers and students to benefit from consultation.

Research into the nature and impact of student consultation suggests that teacher learning opportunities, when infused with student consultation as a central and highly valued component, may play an important role in helping teachers learn about students and their practice, student consultation itself, and incorporate it into their regular practice. Yet much more can be done to promote student consultations in teacher learning. As introduced above, we need tools to support ongoing and critical reflection on the instances of consultation offered during and stemming from the consultations built into teacher learning. A model process for critically examining instances of consultation may signal to participating students, teachers, and teacher educators that the practical and

democratic purposes for consulting students valued among the other goals and purposes for teacher learning. It may also make it that much easier for others to chart a path toward genuine and democratic student participation in schooling.

This review of the broader literature on student participation in teacher learning can inform the design of professional development activities and the middle grades reform agendas of other regions and states, including efforts to evaluate the effects of professional development activities on classroom- and school-based student consultation.

CHAPTER THREE: CONTEMPORARY CONTEXT FOR

TEACHER LEARNING

Teacher learning takes place in a broader context of societal and school change. The rapid advance on technology in contemporary society presents important challenges to middle grades education. Observers of education and society note an increasing emphasis on digital media literacy; radically new models of learning driven by economic and commercial pressures; and expanding calls for personalized learning opportunities that extend beyond the school walls. Students vividly portray the widening gap between their in-school and out-of-school technology lives, at once decrying the gap and seizing exciting opportunities to close it.

Our technological society poses a common challenge to nearly every stakeholder in today's school systems: How should technology be leveraged for the purposes of education? Increasingly, classroom access to laptops, netbooks and tablets has triggered broad-based conversations about technology's role in purposeful and relevant curriculum, supportive learning cultures for students in and out of school, and professional development commensurate with the challenges of rapid and continuous changes in day-to-day teaching.

The published piece to follow describes a contemporary schooling context that is dynamic and requires constant innovation on the part of teachers and educational leaders. It imagines technology for learning rather than for instruction. Most important, this chapter begins to identify the unique and essential roles students can play in helping teachers grapple with the daunting scope and pace of technology integration.

RESPONSIVE TECHNOLOGIES FOR YOUNG ADOLESCENTS

John M. Downes and Penny A. Bishop

Abstract

Dramatic cultural shifts driven by technological innovations beg for a re-envisioning of responsive education for young adolescents. Through the voices of theorists, educators and students, the authors initiate a dialogue about technology's role in purposeful learning and relevant curriculum; a supportive learning culture for students, family and community; and bold and innovative school leadership. The analysis yields practical ways in which technology can contribute to effective middle schooling and paints a vivid picture of technology-rich and responsive learning environments for young adolescents.

Introduction

Advocates of the middle school concept have long espoused the importance of responding to the nature and needs of young adolescents. For more than twenty years, they have articulated essential attributes that promote young adolescent learning and guided schools in developing responsive curriculum, instruction and assessment; culture and community; and leadership (Association for Middle Level Education, 2012; Carnegie Council on Adolescent Development, 1989; National Middle School Association, 2003, 2010). Schools' efforts to adopt these principles, however, are frequently buffeted by powerful internal pressures that frustrate reforms such as the entrenched expectations of

faculty, students and parents, and external pressures, including No Child Left Behind mandates, and more recently, the Common Core State Standards Initiative.

In this chapter, we observe a new set of pressures—and opportunities—that may have more organic and systemic roots, and more lasting and pervasive impact on the responsiveness of middle schooling. Dramatic cultural shifts driven by technological innovations beg for re-envisioning responsive education for young adolescents. Our nearly two decades of experience integrating technology into middle schools and teacher education help us to 'imagine forward' considerable implications for middle grades practices. Through our most recent work as researchers and professional developers in a coalition of partner middle schools over the past seven years we observe emerging trends in educational technology and their implications for the design of effective young adolescent learning environments. In this conceptual piece, we interpret these trends— and the pressures for change they engender—through the voices of theorists, teachers, and students, and describe an exciting and daunting future for middle schooling.

A Convergence of Technology and Culture

The challenge of engaging adolescents in classroom learning these days is considerable. Youth of this "net generation" (Tapscott, 1998, 2008) find 21st century technologies compelling and their use of these tools is pervasive. 80% of middle schoolers own an iPod or MP3 player; 69% have their own cell phones; 69% possess handheld video game players; and 27% own personal laptops (Rideout, Foehr & Roberts, 2010). 65% of students in grades six through twelve, and fully half of all sixth graders, are estimated to email or instant message (Simpson & Clem, 2008). These students have grown accustomed to high definition graphics, constant multi tasking, and the excitement

of gaming. They learn best through trial and error, expect relevance in their learning, and tend to connect with graphics before text (Deubel, 2006; Prensky, 2010). With their shifting learning styles and the increasing availability of these devices, today's digital natives (Prensky, 2001) expect more from their teachers than in decades past.

Although the middle school concept promotes developmental responsiveness (AMLE, 2012), too many schools have not kept pace with the growing technological needs of students (Bushweller, 2006). Middle schoolers often find technology appealing because it meets young adolescent needs. Facebook, for example, responds to students' need for affiliation. The immediate and autonomous access to information available on the Web responds to their desire for both competence and awareness. Opportunities for social activism through Web 2.0 tools offer many ways to meet middle schoolers' need for an ethical sense of self and to contribute to the world around them. And the trust required of them to interact with a worldwide authentic audience and to oversee expensive hardware responds directly to their desire for responsibility.

Societal and Systemic Pressures for Technology Integration

A number of social and technological trends raise exciting opportunities and challenges for educators today. As Johnson, Adams, & Haywood (2011) observed, the perceived value of innovation and creativity is increasing rapidly across our economy. Similarly, digital media literacy is now viewed as a key skill in most every discipline and profession. The Internet "continues to profoundly affect the way we work, collaborate, communicate, and succeed" (p. 4), yielding easy access to previously unimaginable resources and relationships. Adults and youth alike expect to "work, learn, and study whenever and wherever they want to" (p. 4), including well beyond traditional school

walls. These and other trends are driving demands for more personalized learning and proficiencly-based graduation requirements (Tung, 2010), just as economic pressures fuel new models of education, including onlne and virtual schooling (Johnson, et al., 2011).

The convergence of these external pressures of a technological society, emerging technologies, and the foundational principles of effective middle schooling has yielded exciting work in our partner schools. Our ongoing efforts with students, teachers, and school leaders invites us to envision middle schooling that seizes on technology integration in a way that pursues the underlying elements of responsive pedagogy; healthy learning cultures and communities; and effective leadership, while unfettered by more traditional designs.

Re-envisioning Characteristics of Effective Middle Schooling

In the pages that follow, we share our insights into how three domains of effective middle schooling, and their accompanying characteristics, can be manifested in novel ways through the use of technology. First, from the perspective of curriculum, instruction and assessment, we examine how purposeful learning and relevant curriculum can be redefined by students' use of cloud computing, networking tools, and learning management systems. Second, we re-consider notions of culture and community to explore how technology opens up greater access between stakeholders and how learning management systems (LMS) can highlight emerging opportunities for family and community involvement. And third, we examine innovative leadership possibilities by following a middle school principal's use of online and mobile collaboration tools.

Curriculum, Instruction and Assessment

Drawing on our participants at several schools we work with, we observe

important shifts in the nature of students' work, the tools they use to pursue that work, and their subsequent engagement. Students readily embrace technology in their learning and guide us toward authentic curriculum, instruction and assessment.

The Nature of Students' Work. Many young adolescents long to make a difference in the world (Stevenson, 2002) and the students in our partner schools are no exception. They described with excitement a number of projects that took them out of their classrooms and into the world of work and the community. When asked to recall a particularly engaging experience from the academic year, this seventh grader identified a task requiring them to create a public relations video in collaboration with a local non-profit agency.

> Helping United Way…I just thought it was like a great experience just being able to go out and … find out what's happening outside of, like, your own world. And, like, figure out who else is like – who's in need and just help them out.

Another concurred, "I thought it really felt great… Like we were *actually* like helping them out and we were making an ad for them to help get them noticed and that felt really good to be doing that."

Students at another school sought to tell the history of their community during World War II by audio or video recording interviews with their town's senior citizens. "We actually got to talk to them," noted one student about her conversations with senior citizens, "and we actually saw first hand what they went through so it's not all looking on the computer; we actually got to talk to them."

Students involved in community-based learning spoke passionately about the value of learning beyond the classroom but they were also quick to detect contrived or

inauthentic aspects of the work. Their comments about community work suggest some constraints and opportunities for cultivating authenticity in technology-rich curriculum. How can we capitalize on the best of 'real work' that resonates with young adolescents' desire to make a difference? We wonder if authentic engagement needs to be grounded in an understanding of young adolescence. Interviews with community senior citizens, as one team undertook, taps into the interests and capacity of 10-14-year-olds, perhaps more than the other group's creating for non-profits a video that "wasn't going to be like up to their standards." In attempting to move toward authentic learning opportunities with real audiences and uncontrived circumstances, we see potential in a number of technology tools.

The Tools. Readily available technologies make it possible for students to involve themselves in the world in new ways. Rather than trying to meet the marketing expectations of a non-profit only to end up doing tokenistic work, for example, a team could consult with non-profits in order to set up their own. Creating a website with a credit card system is fast and cheap; there is now greater potential than ever before if students come up with a compelling idea for direct service to a cause, coupled with a strong pitch. New technologies, increasingly pervasive in students' in-school and out-of-school lives, invite us to build upon strong pedagogical foundations such as service learning to respond to 21st century possibilities and expectations.

With resources, activities, and artifacts available online, many educators and systems designers are attempting to package curriculum, instruction and assessment into a manageable online format, resulting in what we now refer to as a Learning Management Systems (LMS). A LMS provides ubiquitous access to a central portal for

day-to-day learning. Through a LMS, teachers and students enjoy embedded or linked access to Web 2.0 tools and differentiated tasks. Effective LMS's integrate several emerging trends in educational technology, including cloud computing, networking tools, crowdsourcing curriculum, and personalized learning environments (Johnson, et al., 2011). Examining students' use of LMS's helps us to redefine purposeful learning and relevant curriculum.

Students at the majority of our partner schools have embraced cloud computing as a way to bring order to their learning, particularly the extension of their learning beyond the school walls and school day. They spoke of no longer losing assignments and work in overstuffed binders and backpacks or on chaotic journeys between home and school. As one student noted,

Our binder used to be like packed. Like stuff that she said to put down because we're going to use it later on in the year. Like when you have all that paper coming in and you put it in, your stuff gets shuffled back - in the back row. So you're looking at the front for it, you probably can't find it. [Now, with Google Docs] you can just type like the first letter of your project and it comes up. Like all the things comes up with the letter like "A."

Many students noted how networking tools helped them connect with peers and addressed needs for collaboration and homework help. One student explained that, even within the classroom, Google Docs can enhance collaboration:

Well, [with Google Docs] you can share it. If you're like at a table – it's a table group, and you're writing something, you can share and they can see what you're typing and they can type into it. That's usually how it goes.

Students' and teachers' collaborative use of Google Forms, Google Docs, and interactive feedback tools such as Socrative or Google Moderator invite greater teacher-student collaboration in the construction of classrooms, teams, and curriculum. Students' affinity for social networking can power their use of Twitter, Facebook, Diigo and personal blogs to create personal learning networks that extend beyond the peers and adults in their families and schools. Lowering logistical barriers to effective collaboration must now spur increased commitment to teacher-student planning as fundamental to responsive learning environments.

Purposeful learning and relevant curriculum also can be pursued through technology-rich opportunities for personalized, formative assessment. Students appreciated the immediacy of the feedback offered through online support resources, such as the Khan Academy's math site.

Because like you can do a problem and then you can click submit and it'll tell you immediately if you got it right or wrong. And like if it says that you got it wrong, you can click on – I think that that's only on IXL – you can click on an explanation button, and it'll tell you why you got it wrong. And I think that it works really well.

The Subsequent Engagement. Technology's constant presence in the school lives of the students we interviewed raises the stakes for designing engaging learning opportunities, tying the novelty of computing to authentic learning. Students noted the effects of laptops on individual and group performance. As one observed, "I think [the program's] biggest impact is like on people's work ethic and how well they work and how they see working as a good thing or something to avoid." Such comments highlight

the potential for developing students' metacognitive skills to monitor their own learning behavior as well as the importance of the personal, social and technical skills to redirect their attention and energy appropriately.

Students also noted the intense focus and effort that stems from authentic challenges, such as preparing for a presentation to community members whom they studied: students were "committed to getting it done; some of us worked over vacation on it." They referred to times when nearly all students became highly productive in spite of potential distractions when compelling structures were in place, when "it's like the day before the assignment's due and people are like rushing, going, 'Oh, my God.'" Of course, students' quest for identity and struggle for peer acceptance sometimes complicates their ability to learn, even in the best of classrooms. As one student explained honestly, "There are some days when we're really focused and other days when we are not."

Authentic and technology-rich curriculum, instruction and assessment have enormously powerful potential for student engagement. As Schlechty argued, "If educators want students to work hard and be persistent, they must find ways of designing work that students believe to be worth doing" (2001, p. 10). He added, "Engagement does not result from students' desire to learn. Engagement results from students' desire to do things they cannot do *unless* they learn" (p. 9). Indeed, the novelty of technology will not produce engagement; there was ample evidence in our interviews that the novelty of laptops, for example, can be short lived. However, the power of technology in students' learning endures, as does the challenge to help students as they come to grips with it.

In these experiences it is clear that students are willing, able, and excited to embrace systems that break through critical barriers to the kind of purposeful learning and relevant curriculum we hope for them. Cloud computing makes it possible for students to exploit and assemble nearly limitless resources specific to their learning from anywhere they have a connection to the Internet. Social networking tools provide the foundation for personalized learning networks that connect students to teachers, peers, experts, and impassioned others with an affinity to nearly any conceivable learning agenda. And LMS's provide a workable framework for delivering critical information, planning individualized and collaborative learning agendas, and conducting and communicating formative and summative proficiency-based assessment. As education embraces blended models of in-school and online learning, adopts LMS's, and takes seriously a commitment to equitably preparing students for a technology-rich world, the stakes will surely grow higher and higher. Yet the engagement of students in this work leaves us both hopeful and optimistic.

Culture and Community

Emerging technological trends have considerable implications for the culture and community within and around the effective middle school as well. Our experience in partner schools suggest how thoughtful integration of technology can expand a sense of community and redefine family and community involvement.

Expanding Community. Many students, particularly those from low socioeconomic backgrounds, noted how networking tools such as Facebook, district-provided email, instant messaging, and video chat helped them connect with peers and enhanced their affiliations at school. One student explained in reference to receiving a

laptop through the school's one-to-one program, "I get to, like, socialize more than I did because of it." Teachers also acknowledged the benefits of technology to enhance connectedness with students, particularly as a way to open communication about learning problems and questions. "It appears to me like they're not nervous on a computer. And so they just shoot me an email. And then that then opens the door for greater conversations and connections." Similarly, a school counselor noted how electronic communication extended her reach of support to students.

> The main thing is students are emailing me 24 hours a day. Not excessively, but it's nice because when you have a problem or you want to talk to somebody, at least they can put it on paper and send it to me. And then I can – they type it up and send it to me and then I can follow up in the morning, or I can respond if I'm on and I see it. So it's definitely, for me, another way to access me and another way for students to problem solve and probably a little bit therapeutic because you're not holding onto that information until you can get to me. And I know stress wise for kids, a lot of them are emailing their teachers ahead of time, too. So again, they're not having to, like, worry about it all night long.

Administrators also noted the influence of technology on relationships and a sense of community. One building principal related how she used email and audio book technology to initiate a supportive connection with a struggling reader.

> I emailed him and said, you know, I was a struggling reader. And now if a book's really hard, sometimes I listen to a couple chapters and then I read a couple chapters. And then I listen. Or sometimes I listen while I'm looking at the words or whatever. He's like, oh, Mrs. S., I would love that. He goes, you have a thumb

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drive? I'll slip it right in I-tunes. So he did. And he's like, will you read the book

with me?

In these circumstances, technology breeds both greater access and comfort in

connecting with local peers and adults. Such transformed relationships between student

and educator signify students' growing autonomy and self-directedness. The exploding

array of social networking and communication technologies such as ePals and Skype can

further extend relational opportunities beyond students' local communities. Students

embrace social networking in their social lives, and continue to use it for ambitious

learning agendas, whether through multiplayer online games, developing hobbies and

passions online, or through structured learning activities initiated in the classroom. One

student noted how his online gaming led to a broader array of perspectives than those

limited to his local community, leading us to wonder how progress in educational gaming

might enrich students' social networks.

> I play with a lot of different people, you know, people in my guild. I mean there's
>
> some people that live up in Canada. Some people who live out west. Some people
>
> who live in this area. All over the United States. There's probably people in other
>
> countries, too. It's kind of cool. You get to see different backgrounds and stuff.
>
> You know, like the people who live up in Canada, it's kind of fun to – I ask them
>
> what's it like up in Canada and stuff. It's cold. And it's fun to connect with
>
> people.

Redefining Family and Community Involvement. Increasingly, schools are

capitalizing on technology's potential to engage families in new ways as well. Email and

websites are both a means to disseminate information (e.g. Mitchell, Foulger & Wetzel,

2009; Sanchez, 2011). Other schools have established 'parent portals' as means to communicate a child's assignments and progress in individual classes. Some schools text families regarding absences or homework; still others tap into social networking sites as a means to distribute information.

Applying Epstein's (2005) well-established Typology of Parent Involvement as an analytical lens, however, most of these current efforts fall into the 'communicating' category. Effective family involvement is a much broader picture, including at least five additional types: parenting, volunteering, learning at home, decision-making, and collaborating with community. As yet, the promise of technology for family engagement remains largely unfulfilled. As a means to foster deeper and more sustained connections between parents and other important adults in a youth's life, we are intrigued by the disruptive nature of LMS's to promote personalized and proficiency-based student learning.

To date, the LMS's primary benefit for parents has been on-demand access to their child's current grades; it remains relatively untapped for meaningful family engagement. Yet most schools still lack capacity to support sustained, meaningful involvement of families in the process, products and discourse of real learning. A LMS aimed at a broader audience could offer families access to assignments and include them in the process of learning, and in formative and summative assessment. Electronic portfolios and personal learning plans, both aspects of an effective LMS, can be fertile approaches to transformative family involvement. E-portfolios provide access to a child's running record of work and reflection. Student-led portfolio conferences based on these e-portfolios, which have been enthusiastically embraced by teachers, students, and

families at several of our sites, can highlight goal setting and growth over time and benefit students' self-concept and sense of efficacy (Belgrad, Burke, & Fogarty, 2008). And personal learning plans present opportunities for a collaborative approach to assessment, including establishing norms for teacher-student-family discourse and mutual goals for students' learning.

Similarly, this discourse can be opened to include community members in the learning and assessment process. At one of our partner schools, for example, a field mentor was able to participate in a triangular reflection between and among the student, her teacher, and the mentor himself, through a Google Docs version of the student's internship journal. This level of participation, facilitated by an effective LMS, affords a broader and more meaningful perspective on the student's knowledge, skills and growth over time, while simultaneously reinforcing the critical role of the community in education.

The pursuit of LMS's to enhance young adolescent learning takes on even greater significance in the context of the rapidly developing field of learning analytics. Learning analytics explores how data generated by teachers and students using technology—completing assignments in an LMS, online social interactions, and content viewing, for instance—can be mined for many evaluation purposes (Johnson et al., 2011). Through this, educators can discern which learning methods work best for specific students or groups of students. We imagine, for instance, how analytics might inform weekly student self-reflections about their personal learning network. "This week I noticed that my contribution score was up from last week, which is what I was aiming for. But next week I want to raise my critical questioning score." Algorithms in learning analytics could

reflect our commitment to responsive practices, targeting authentic student engagement, student-directed learning, and student self-efficacy, enriching assessment schemes that too often focus on achievement disconnected from the learning context.

Leadership

The recent experience of one of our partner principals speaks compellingly to the potential of technology-rich leadership in the middle grades. She set two goals for her efforts to integrate technology: to transform her supervision process; and transform her building-wide dialogue and decision-making process.

Transforming Supervision. Her efforts to transform her supervision system were designed to move from a summative to formative teacher evaluation process. She launched a pilot involving 7 teachers, 3 teacher leaders, and herself. After considerable searching, she selected the TeachPoint iPad app that allows observers to enter and organize data while conducting walkthroughs and observations. Observed teachers could then review and respond to feedback via the TeachPoint website from their desktops. As she noted, the goal was to "convert the supervision process to an electronic platform because it's just so cumbersome the way it is." She added,

> Prior to this pilot, they didn't have a culture of a back and forth dialogue about
> their classrooms that is really meant to develop their practice. There are teachers
> here who are used to an administrator never being in their room or … giving them
> feedback.

The TeachPoint app allowed her, in collaboration with her pilot group, to combine the district's guidelines based on Danielson's Framework for Teaching with observation prompts grounded in "more concrete expectations." The pilot yielded a number of

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important findings for this group. First, the efficiencies garnered by the software promoted a shift toward what she referred to as "feedback in small bites," moving away from once or twice per year observations of full lessons toward more frequent walkthroughs lasting 10-20 minutes. Accordingly, the emphasis shifted from what teachers are doing—how they design and deliver full lessons—to what students are doing. "They're more used to 'What have I created for students and what is your judgment around that.'" She noted,

> So now they're getting lots of feedback and they're learning how to incorporate that into their own psychology about who they are as a teacher and what they're doing and how they choose to think about how they're moving ahead. Just that feedback is a safe thing and it's something that I think they're learning to count on as part of what helps them be a better teacher.

> Further, teachers received feedback from multiple observers, including their principal and the other members of the pilot team. Since the TeachPoint app conveniently stored all observation data in a single online "box" for teachers, notifying observed teachers via email whenever observer comments were submitted, the app invited teachers to synthesize the multiple perspectives. The principal recalled one teacher asking her, "Could I talk with you about how to put these two pieces of information [feedback from principal and teacher leader] together?" She noticed that this was a type of analysis like "nothing I've seen our teachers experience—or any teachers for that matter—in my career…. Multiple eyes are seeing into their classroom and [they're] asking for help about doing that in a way that helps them determine how to move ahead." Rather than being intimidated by the increased feedback, she added,

The teachers are saying that it would be helpful if we could think about having

their mentor teachers be able to put feedback in their box using TeachPoint, which

is not part of the current pilot, but just shows you how much they are valuing the

idea of having all their thoughts in one place.

Further, with so much feedback and a viable platform with which to organize and

make sense of it, teachers were now open to developing their reflection skills. The

principal recognized that as a next step in transforming the teachers' learning culture. The

pilot team also designed their TeachPoint templates to encourage teachers to give

feedback on the degree to which observer comments were helpful. "That's nothing that's

ever been done before," the principal observed. "The individual teachers have spoken

highly of that and their comments have been very helpful."

Opening up the Dialogue. For her second agenda, this principal used the

district's cloud storage, Microsoft's SkyDrive system, along with Google Forms to

provide continuous collaboration among her staff and "make teachers feel a greater

degree of inclusion in building-wide decisions and directions." She was responding to

frustration that,

The communication to the leadership team and from the leadership team out can

be cumbersome sometimes and not as timely as it needs to be to make people feel

they have individually a voice … and to feel, I think, emotionally that they are

contributors to the whole, singly and as a team.

Via the SkyDrive, she shared documents in development and established a

feedback window between leadership team meetings through which anyone could

provide feedback.

And then the leadership team is able to take a look at that feedback. And of

course, everybody can see everybody else's feedback there, which is something I

think people really have appreciated. [And] they can do that anonymously so that

they can add to the conversation and just pose a question and not feel like they

have to do it where people know it comes from them.

As a result, she observed, "It's just made people feel that they're valued as contributors

and collaborators on things."

This principal's use of Google Forms initially focused on "the degree to which

practices that nurture effective teachers were in place here at [our school]." Put together

by the principal and the teacher leadership team, "we had 100% participation, which has

never been the case before with any piece of paper survey that we've ever given."

Because it was electronic, the data were immediately available to staff for analysis. At the

next faculty meeting, she noted,

We were able to dissect the results as a staff so that we blew up the charts that

Google gave us and people went around in teams to the different areas and gave

feedback. They analyzed the feedback the staff had given to me about the degree

to which practices that I'm responsible for are implemented and what they think I

should pay most attention to next.

Her team designed a second survey to generate a building-wide conversation

about effective teaming practices.

So we built – again, using research – a Google survey that identified five

components of effective middle level teams. And we gave that out to folks, not

only for people in their teams to fill out anonymously, but for a core group of 11

people who work with the teams—consulting teachers, office staff, so on and so forth—so that every team gets feedback from inside the team and outside the team around the degree to which the criteria that's listed are in place…. And then what that does is not only break the barrier where we can't give each other constructive feedback, but it also empowers the team to have data that they can look at together that opens up their conversation around how they are functioning.

A third effort sought to replace an outdated climate survey used by the district. Using the sharing features of Google Docs, "we built it with kids and staff across two buildings." Students subsequently took the survey using laptops and lab computers. Her excitement at the transformative opportunity afforded by the technologies is evident in her reflection.

Just to think that you could put kids in a position of giving feedback to what questions we should ask and then also giving their feedback in the form of answering those questions, and then the day after the surveys are completed, take a look at the results and give their feedback about what they take from those results. To say nothing about the teachers and the administrator having feedback about what the kids said. It just makes everybody feel a part of something that's vibrant, as opposed to accomplishing a task that nobody really cares about.

The work of this principal suggests that technology can play a substantial role in moving leaders along a continuum from the "great man" style of leadership (Kirkpatrick & Locke, 1991) toward skilled "servant leadership" (Spears, 1995). She further explained,

…Fostering a culture with contributors and collaborators is a fundamental aspect of leadership. [There's a] bucket of technology tools that go along with servant leadership practices. And I think what I've learned is that utilizing those tools helps me stay more in the servant leadership area as opposed to think that, okay, if we're going to accomplish something, I've got to do it by using my dynamic personality and knowledge of this, that or the other thing, and you know, persuasive talents.

This school leader observed a shift from technology tools that "would help me have a presence" to "those that would pull out the innards of the building in terms of what's going on and where we need to go and what people are thinking in service to it." Technology "gets you directly to people being contributors. It takes all of the barriers out that we face so often. And so really the barriers then become can you personally take it, and do you have the right goals in mind in order to move things ahead."

When asked how technology could further advance the cause of responsive middle grades schooling, this principal offered, "I think the natural place to go next are what are ways that kids can give feedback to adults about learning in a way that gives them the same shift in feeling that the teachers have felt." Some of that work is already under way as her teachers use Google Forms for exit tickets, invite student feedback on the degree to which class activities worked, and gauge where students are with their learning. "So there's a lot more student feedback, direct individual student feedback to teachers around what's happening in their instruction in class." In these ways, responsive technologies help us reconsider the concept of courageous, collaborative leadership

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(AMLE, 2012) and present an impressive array of tools to move school leaders—and schools—forward.

Concluding Thoughts

Observers of education and society note an increased emphasis on digital media literacy; economic pressures driving radically new models of learning; and expanding calls for personalized and proficiency-based learning opportunities that extend beyond the school walls. Students vividly portray the widening gap between their in-school and out-of-school technology lives, at once decrying the gap and seizing exciting opportunities to close it. In the experiences of the students and educators in our partner schools, however, we see how technologies already have begun to close the gap. Roles and patterns of interaction are changing. Technology integration in service of effective middle schooling can alter leadership and decision making structures; shift power over curriculum and instruction from teachers toward students and community; and change the way learners young and old, in and out of school, collaborate. We are excited by the prospect of extending the concept and application of learning management systems to incorporate personal learning networks that promote continuous educator and student learning informed by ideas, resources, and people far beyond our school walls.

Our work with partner schools pushes us to imagine technology for learning rather than for instruction, shifting the roles of teachers and students alike. Metacognition and self-awareness become gateway skills to effective technology integration. And the purposes of professional development veer from "building teachers' isolated technical skills to preparing teachers to implement technology-enhanced, learner-centered instruction" (An & Reigeluth, 2012, p. 55). With technology integration, as with so much

else in the field of middle grades education, we must commit to capitalizing on the best of what technology has to offer, while helping students make good choices.

Students at our partner schools identify a number of advantages to technology-rich schooling. They strongly identify with benefits to organization, efficiency, and learning. They do so even in nascent stages of implementing 1:1 laptops, LMS-based learning environments, and online tools like Google Docs and Khan Academy. And in spite of their occasional frustration with wireless connectivity and sometimes daunting learning curves associated with new hardware and software, they are nearly unanimous in their preference for schooling with rather than without technology. Moreover, when we asked students how to address inevitable technical challenges in their 1:1 classrooms, they proposed practical and appropriate suggestions, such as offering workshops on how to use particular software, giving out easier to understand directions, and offering differentiated opportunities for learning discrete skills like keyboarding or file management.

Our experiences point to the substantial challenges of integrating technology in the middle grades. Just as teachers must come to view technology as integral to learning rather than an alluring—and sometimes frustrating—add-on to standard curriculum, network engineers, business managers, administrators and community members must acknowledge that student use of technology is becoming mission critical. Inadequate investment in the devices that teachers and students use, and the network infrastructure in which they use them, can severely undermine learning.

We also see encouraging opportunities. Most important among them, we find students are insightful about these challenges and are ready to suggest and try solutions.

Seizing on these insights adds to a list of learning challenges for educators. In An & Reigeluth's (2012) survey of teachers' perceptions, barriers and support needs in creating technology-enhanced, learner-centered classrooms, participants ranked lowest the statement, "I include students in decisions about how and what they learn and how that learning is assessed" (p. 58). Yet the students we have consulted spoke critically and eloquently about key facets of technology-rich learning. Integrating technology effectively in schools may hinge on whether educators fully appreciate students as full partners in education.

We have learned that preparing schools for 21st century learning is less about designing engaging activities for students and more about unleashing the learning potential of students and their technologies. This holds important implications for teacher preparation and ongoing professional development, as well as for district level policies regarding access, infrastructure, and hardware purchasing. The infusion of technology in schools is merely an extension of the extraordinary expansion of technological power available to students in the rest of their lives. As central players in the lives of young adolescents, middle grades educators play essential roles in how that power translates into growth.

[End of manuscript]

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CHAPTER FOUR: A PRACTICAL VISION FOR

STUDENT INVOLVEMENT

The last chapter described the dynamic context of schooling in our technological age and highlighted the challenges this poses for educators and their professional growth. It argued that the scope and pace of technology integration into education, driven by broader societal forces, not the least the role of technology in students' lives, called for re-envisioning characteristics of effective middle schooling. It observed how young adolescents and their teachers could embrace technology to pursue fundamental aspects of effective educational practice: generate more relevant and engaging learning, promote more inclusive and supportive learning communities for students, and foster a collaborative learning culture for teachers.

This chapter focuses specifically on leveraging emerging technologies for teacher-student curriculum planning. After reviewing the tradition of collaborative curriculum planning, I describe a future in which teachers and students leverage emerging technologies to collaboratively design learning opportunities that honor young adolescents and the promise of technology. I explore implications for teachers' roles and skills, the way middle schools are organized, and finally, how the frameworks for student involvement more generally can contribute to a future of technology-empowered teacher-student curriculum planning. This chapter's emphasis on the role of teachers and students in technology-rich settings sets the stage for subsequent chapters attention to the role of students in teacher learning.

The published piece below was invited for Lipka and Roney's (2013) edited work that revisited a foundational concept of the self-enhancing school in which teachers and

students co-construct learning communities in which young adolescents can thrive academically and affectively. Whereas other contributors to the book focused on other facets of such a school, I was invited to focus on teacher-student planning of curriculum in the emerging, technology-rich context of schooling and society.

FROM TEACHER-EXCLUSIVE PLANNING TO TEACHER-STUDENT PLANNING: THE PROMISE OF PARTNERING IN A CONNECTED WORLD

John M. Downes

The following manuscript was originally published in R. P. Lipka & K. Roney (Eds.). 2013. Middle grades curriculum: Voices and visions of the self-enhancing school. Greenwich, CT: Information Age.

Introduction

The role of curriculum planning in a self-enhancing school remains a compelling yet remarkably elusive aspect of middle grades reform. Lipka (1997) framed curriculum as central to young adolescents' self-concept – their perception of self in terms of roles and attributes – and self-esteem – the assessment they make regarding personal satisfaction with those roles and attributes. Stevenson (2002) entwined curriculum with students' self-efficacy, including their senses of competence, awareness, affiliation, ethical sense of self, and responsibility. James' theory of *Need Polarities* (1974) describes the complex, and at times competing, needs of the young adolescent self, including: the need to need/the need to be needed; the need to move inwards/the need to affect the outer world; the need for routine/the need for intensity; the need for myth and legend/the need for fact; the need for stillness/the need for activity; and the need for separateness/the need for belonging.

These rich psychological perspectives on the young adolescent challenge us to think boldly about how curriculum can enhance the self of middle schoolers. They beg for a curriculum intimately connected to each young adolescent and the wider world. It seems an impossible task for any individual teacher as architect of curriculum; indeed, it seems an improbable task for any group of adults, unless, that is, students are invited into

the design process. For curriculum to serve its vital role in a self-enhancing school, it must emanate from students themselves. The vision and work of schooling must move from teacher-exclusive planning to teacher-student planning.

Teacher-student planning arises as a provocative and proven approach to enhancing the young adolescent self, whether framed as self-concept/self-esteem, personal efficacy (Bishop & Downes, 2008), or need polarities (Brinegar & Bishop, 2011). A common theme across these analyses is the remarkable benefits to the young adolescent self when teachers and students plan curriculum together, benefits that elude far too many students when they are left out of curriculum development.

Today, however, another perspective lends still greater urgency to teacher-student planning. The gap between students' in-school and out-of-school lives always complicated efforts to design engaging curriculum. That gap has widened profoundly with the rapid diffusion of technology throughout youth culture and the surrounding world. However, the prospect of engaging students in closing that gap with compelling and challenging learning is more promising than ever. Tested strategies for negotiating curriculum with students now can be combined with readily available technologies to further transform curriculum development, student and teacher learning, and the selves of all partners in schooling.

In this chapter I briefly examine the long-running challenges inherent in teacher-exclusive planning. I then discuss the role of curriculum integration as a foundation for teacher-student planning. Next, technology-rich approaches to more student-directed and integrated learning are explored. Finally I consider the organizational implications of

moving in such a direction, and offer several critical lenses that may guide our path

forward.

Teacher-Exclusive Planning Defined

Dewey's 1938 (1998) description of teacher-exclusive planning all too well

captures the prevailing adult-driven mode of curriculum design and delivery today.

> The traditional scheme is, in essence, one of imposition from above and
> from outside. It imposes adult standards, subject-matter, and methods upon those
> who are only growing slowly toward maturity. The gap is so great that the
> required subject-matter, the methods of learning and of behaving are foreign to
> the existing capacities of the young…. Consequently, they must be imposed; even
> though good teachers will use devices of art to cover up the imposition so as to
> relieve it of obviously brutal features. (p. 4)

The gap Dewey observed, echoed nearly a half-century later by Beane and Lipka

(1986, pp. 188-189), has been exacerbated by the rapid diffusion of technology in the

lives of youth, creating an ever "widening gap between children's everyday 'life worlds'

outside of school and the emphases of many educational systems" (Buckingham, 2007, p.

96). A teacher's own memories of adolescence are a poor guide, particularly when it

comes to technology and how young adolescents learn today. As Ball and Cohen (1999)

observed, some of what teachers need to know about their students is general, such as

their stage in human development, but understanding children's beliefs and work,

"requires expertise beyond what one gathers from one's own experience. What one

enjoyed, thought, or felt as a child may afford helpful speculation about one's students,

but is insufficient as a professional resource for knowing learners" (pp. 8-9).

It is precisely the disconnect between what teachers think they know about their students and what the students truly care about that undercuts teachers' efforts to cultivate student self-concept and self-esteem through curriculum design. Addressing this disconnect requires an intimate and unfolding insight into each student that cannot be clearly mapped out ahead of time. Closing that gap between what we think we know about our students and the lives they actually lead is no less daunting than closing the gap between students in-school and out-of-school lives. Trying to do so without enlisting students as co-designers of curriculum in particular, and schooling in general, is absurd.

Curriculum Integration

In contrast to teacher-exclusive planning, teacher-student planning involves "working in a partnership to articulate a problem/concern, develop objectives, locate resources, and evaluate progress in fulfilling objectives" (Lipka, 1997, p. 35). Beane (1993) viewed curriculum integration as integral to generating a middle-years curriculum that should emphasize "general education; help students explore self and social meanings; respect students' dignity; be grounded in democracy; honor diversity; be of great personal and social significance; be lifelike and lively; and enhance knowledge and skills for all young people" (p. 17). Connecting with students' concerns and transforming them into effective learning opportunities, then, becomes a central challenge of curriculum design and implementation. When a curriculum of topics is designed by committees of adults and implemented without students' input, it is likely to fall short of this complex task (Bishop & Downes, 2008).

Curriculum integration, grounded in the questions and concerns raised by students, provides a unique route to authentically engaging curriculum -- "work that

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students believe to be worth doing" (Schlechty, 2001, p. 10). It helps us transcend simple subject-area boundaries and instead embrace disciplinary knowledge to addresses the real and purposeful questions humans ask, including young people (Beane, 1997). Seeking the real concerns of adolescents draws students and teachers into critical human inquiry, where simple answers are elusive; collaboration and humility are essential; and the facts and strategies of fields and disciplines are intellectual lifelines (Beane, 1993).

Brazee (1997) argued that this type of curriculum integration is particularly well suited to meeting the developmental needs of young adolescents. Too often our curriculum fails to engage young adolescents because it "asks students to give answers to questions they do not ask" (p. 187). In contrast, a curriculum built on significant self and social issues is inherently challenging and relevant. As Beane (1997) asserted, "personal and social concerns are quite literally the 'stuff' of life" (p. 15)." These concerns constitute human inquiry itself: to seek meaning and respond to the meanings we derive. Justice, freedom, and peace are meanings we have created, as are enterprise, work and family. Aesthetics, art, and story are also meanings we hold dear, as are joy and play. The list continues and is shared by young and old alike, more than we generally acknowledge (Bishop & Downes, 2008). Curriculum integration holds the potential to capitalize on these shared concerns and meanings and to tap into "students' desire to do things they cannot do *unless* they learn" (Schlechty, 2001, p. 9). Springer (2006) and Kuntz (2005) present vivid examples of curriculum integration and the schooling that supports it.

Teacher-Student Planning

An integrated curriculum—developed collaboratively with students and focused on the real issues and concerns of young adolescents—exhibits important elements of a

democratic learning environment (Apple & Beane, 1995). Negotiating curriculum can take many forms but generally requires teachers and students to rethink their relationship (Boomer, Lester, Onore, & Cook, 1992). Cook-Sather and Youens (2007) describe a process of "repositioning" students from merely "beneficiaries—or victims—of whatever pedagogical commitments and approaches prospective teachers develop" to "stakeholders who have a right to play an active role in the co-construction of their learning, the development of pedagogical commitments and approaches, and the critical revision of educational and social structures" (p. 62). These more recent works build on a rich history of curriculum theory that argues for involving students in the construction of schooling, including the work of John Dewey, L. Thomas Hopkins, and Joseph Schwab. In spite of this foundation, Schultz and Banks (2011) wonder, "Why is it that with such theoretical guidance over the century in curriculum history and the history of public education in the United States, we cannot find it in ourselves to leverage the insights, imaginations, and creativity of our students" (p. 46)?

Recent research illustrated the benefits of collaboratively planned curriculum integration for students. Brown and Canniff (2007) pointed to the extended, flexible time and the interconnection of concepts and principles as bolstering cognitive processing, as well as creating an environment that fosters independence, self-confidence, and the exploration of questions about self and life. Brown (2011) highlighted benefits to students' motivation, ability to make critical decisions about learning, development of advanced thinking processes, and metacognitive and self-assessment skills. Brinegar and Bishop (2011) noted the considerable growth over time in students' self-assessment of their learning styles, motivation, engagement, leadership and time management skills.

They noted, however, that students only gradually came to appreciate and articulate these insights over several years of emersion in a collaborative planning environment.

Benefits accrue to teachers as well when they consult their students about curriculum and school improvement. Rudduck noted that teachers gained

> a more open perception of young people's capabilities, the capacity to see the familiar from a different angle, a readiness to change thinking and practice in the light of these perceptions, a renewed sense of excitement in teaching, a practical agenda for improvement, and confidence in the possibility of developing a more partnership-oriented relationship with their students (Rudduck, 2007, pp. 599-600).

As we consider both Dewey's long ago perspectives and Beane's more recent yet classic work on teacher-student planning (Beane, 1993)—although decades apart—the resources and social opportunities for learning were remarkably similar. Teachers and their students could collaborate with each other to identify questions and concerns, design activities in their classrooms or communities and avail themselves of locally available texts and human resources to enrich their investigations. Today, however, the dynamic is changing rapidly. Increasingly, students are already engaged in learning and knowledge construction using technologies their teachers know little about. And many teachers are missing out on powerful tools to cultivate questioning, collaboration, and challenging learning with their students. In 1938, Dewey (1998) warned that "the gulf between the mature or adult products and the experience and abilities of the young is so wide that the very situation forbids much active participation by pupils in the development of what is taught" (p. 4). In contrast, today collaborating with students may be the only way to keep

up with rapidly evolving knowledge and the technologies in which it is thoroughly intertwined.

The Future of Teacher-Student Planning

A number of social and technological trends raise exciting opportunities and challenges for advocates of teacher-student planning and curriculum integration, including the following:

- The abundance of resources and relationships made easily accessible via the Internet is increasingly challenging us to revisit our roles as educators.

- Technology continues to profoundly affect the way we work, collaborate, communicate, and succeed.

- People expect to be able to work, learn, and study whenever and wherever they want to.

- The perceived value of innovation and creativity is increasing (Johnson, Adams, & Haywood, 2011).

These trends introduce critical challenges to education:

- Digital media literacy continues its rise in importance as a key skill in every discipline and profession.

- Economic pressures and new models of education are presenting unprecedented competition to traditional models of schools.

- The demand for personalized learning is not adequately supported by current technology or practices.

- A key challenge is the fundamental structure of the K-12 education establishment—aka "the system."

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- Many activities related to learning and education take place outside the walls of the classroom [e.g., through online games, learning communities and social networks] and are thus not part of our learning metrics (Johnson et al., 2011).

These trends and challenges invite us to think proactively about how teacher-student planning will necessarily look different in the years to come and how educators can build a sustainable infrastructure for the practice. A synergy exists between the theories and practice of teacher-student planning and emerging technologies, many with which students are already engaged for their out-of-school purposes. Technology rapidly is enhancing the feasibility and capacity of teacher-student planning and curriculum integration. For instance, there long has been an appropriate concern that some educators lacked the knowledge and skills necessary to depart from boxed, but nonetheless expert-created, curriculum. However, contemporary technologies make available sufficient expertise and quality of resources to anyone who knows how to find them. An increasing number of teachers are experimenting with these new technologies, yielding at least four promising directions, all of which could benefit teacher-student planning: 1) crowd sourcing curriculum; 2) Personal Learning Networks (PLN); 3) electronic portfolios; and 4) Learning Management Systems (LMS). Running throughout each of these directions are the common threads of relevance, personalization and differentiation, and the prospect of enhancing the self of all our students.

Crowdsourcing Near and Far

The concept of crowdsourcing (Howe, 2009), taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people, typically using online social media tools, should resonate with readers familiar with

Beane's (1993, 1997) curriculum development process. Once students have generated questions and distilled a theme for study, the next step is essentially within-team crowdsourcing on the resources, expertise and activities that can be brought to bear on the theme. Teachers who practice curriculum integration invite their students to consider who in their family, school and community can bring unique skills, insights, and expertise to the study. These often are the vibrant and authentic resources that invigorate thematic inquiry with field trips, service learning opportunities, community-based projects and interviews with experts.

Crowdsourcing curriculum with social networking tools broadens the pool of contacts to include people and places all over the world. Through the use of Twitter (twitter.com) or ePals (epals.com), for instance, or social bookmarking tools like Diigo (diigo.com) and Delicious (delicious.com), students can solicit input from fellow young adolescents in other countries and cultures, from scientists in laboratories, and from experts at world-renowned museums. Teachers as well can garner expertise from far and wide, filling crucial gaps in prior knowledge that are frequently exposed when teachers follow the inquiring lead of young adolescents. We are no longer merely as smart as we've become; we are in fact as smart as the global crowd.

Personal Learning Networks

Thoughtfully designed and managed Personal Learning Networks (PLNs) lend structure to this practice of crowdsourcing. PLNs "allow us to build global learning networks where … we can pursue our intellectual or creative passions or needs with others who share them" (Richardson & Mancabelli, 2011, p. 2). In Figure 1, Warlick (2009) portrays how a PLN can tame myriad social networking opportunities that can

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inform teacher and student learning. Using freely available tools, such as iGoogle (google.com/ig), Netvibes (netvibes.com) and Pageflakes (pageflakes.com) users can aggregate latest information on specific topics from multiple sources, including reputable news media, bloggers, Twitter feeds, and social bookmarking sites, into a single, personalized start page or "dashboard" available from any computer or mobile device anywhere on the Internet. A PLN, sometimes referred to as a Personal Learning Environment (Johnson et al., 2011), provides a framework for sustained and evolving collaborative learning. As Richardson and Mancabelli proclaimed,

> Right now, assuming we have an Internet connection, we can start to create a personal learning network—a set of connections to people and resources both on line and off line who enrich our learning—at a moment's notice. With a PLN, we can learn anytime, anywhere, with potentially anyone around the world who shares our passion or interest. We can literally build global, online classrooms of our own making on the Web that include networks and communities of learners with whom we interact on a regular basis (p. 2).

Teachers have discovered the power of interest-driven social networking to enrich their own teaching practice (Richardson & Mancabelli, 2011; Warlick, 2009). A unique facet of this approach is that teachers can narrowly define challenges they confront in their practice and tap thousands of educators around the world facing similar issues. Teachers frequently feel isolated or marginalized when changes in their practice, including curriculum integration, strain local relationships and norms. PLNs and a constantly growing array of communication tools can extend and sustain vital collegial networks.

Students as well can avail themselves of PLNs, using these same tools to delve deeply and independently into rich learning (Drexler, 2008). The intentional use of PLNs taps into organic trends in adolescent online life. Youth engage in friendship-driven and interest-driven online activities, sometimes simply "messing around" with new media and acquiring new technology skills along the way. At other times, they "geek out," delving deeply into personal interests, engaging wide networks of fellow enthusiasts, networks in which age or other traditional signs of status have little importance (Ito et al., 2008). Students want to personalize their learning by creating networks of experts using emerging tools (Project Tomorrow, 2010). With adult modeling and guidance, students can embrace "connectivism" (Siemens, 2010) in the context of their integrated curriculum. Moreover, developing and maintaining a PLN is likely to become an essential skill for passionate and lifelong learning. Richardson and Mancabelli (2011) point out that "unlike traditional learning environments, each of our networks is unique, created and developed to our personalized learning goals that evolve and grow throughout our lives" (p. 3).

Electronic Portfolio Assessment

The idea of portfolios often resonates with educators committed to curriculum integration; they offer students the opportunity to communicate their learning and growth in multiple ways, stretching beyond traditional measures like multiple choice tests and essays to include problem solving, artistic representation, and more recently multimedia. More important, when portfolios are structured around individual goal setting, they can paint a vivid and compelling picture of each student's growth over time, particularly in hard to measure domains such as communication, critical thinking, and problem solving.

Portfolios can also be an important source of dialogue about learning. Student led portfolio conferences that highlight goal-setting and reflection on growth over time benefit students' self-concept, self-esteem, and sense of efficacy (Bailey & Guskey, 2001; Belgrad, Burke, & Fogarty, 2008; Berckemeyer & Kinney, 2005). Further, portfolios are likely a necessary complement to a growing emphasis on personalized learning plans and proficiency-based graduation and accountability systems in secondary education (Tung, 2010).

Electronic portfolios have the potential for a multitude of benefits (Barrett, 2007). They extend the traditional portfolio processes of collecting, selecting, reflecting, projecting and celebrating to include archiving, linking/thinking, storytelling, collaborating, and publishing (Barrett, 2007). They offer more manageable storage of learning artifacts, particularly the increasing and broadening array of electronic products students are generating. An electronic format also bolsters portfolios as sources of formative assessment for use by teachers and students from day to day and across students' school and work careers. Electronic portfolios can enrich the role of parents as collaborators in the portfolio process by providing routine and convenient access to their child's running record of work and reflection. And they expand the prospect of peer, mentor and expert involvement in portfolio work to include any trusted person in the world. As more high schools adopt proficiency based assessment and accountability (Tung, 2010), school systems will need an electronic approach to managing student artifacts and reflection. We may be on the verge of best practices in high school assessment actually driving broad implementation of long frustrated assessment reform in the middle grades.

Learning Management Systems

With everything from resources, expertise, activities, and artifacts predominantly online, it is not surprising that a growing number of educators and systems designers are attempting to package the whole process of curriculum, instruction and assessment into a manageable online format. From these attempts have evolved what we now term the Learning Management System (LMS). A LMS provides ubiquitous access to a central portal for day-to-day learning. A key feature of an effective LMS includes easy and instant updating of online content by teachers and students. Through an LMS, teachers and students also enjoy embedded or linked access to popular Web 2.0 tools, differentiated tasks, and flexible grouping. Some LMSs also integrate goal setting, rubrics, portfolios and standards-based evaluation and reporting. A centralized, automated administration for routine tasks such as parent and student notifications, online calendaring, and work submission adds to the efficiency and benefits of these tools. Emerging LMSs, such as EDU2.0 (edu20.org) and Haiku (haikulearning.com) are beginning to bridge the cultural and pedagogical gap between middle schooling and earlier, postsecondary-oriented LMSs such as Moodle and Blackboard. Indeed, now is the time for advocates of curriculum integration and teacher-student planning to press for LMS designs that meet their needs.

Taken together, these four directions in educational technology work synergistically to assist in the process of teachers collaborating with students in the design of schooling. The collaboration of crowdsourcing combines with the information management of PLNs, the flexibility and accessibility of electronic portfolios, and the personalization of an LMS. With these, proponents of curriculum integration possess

powerful tools to embark on learning that is more relevant, authentic, and worldly than ever previously imagined.

<div align="center">**Revisiting Assumptions**</div>

A Partnership with New Roles and Skills

Contemporary technologies, and the ways in which many students already engage those technologies in their out-of-school lives, augur exciting opportunities for modeling updated, and perhaps wholly new, teaching roles with young adolescents. Teachers must relinquish to a considerable degree their traditional role as content and curriculum expert. In its place, they should develop and honor a new role as expert facilitator and curriculum negotiator. Students must relinquish their role as expert consumer of teacher-produced curriculum and develop their new role as creator of personalized learning and negotiator of class curriculum. The transition for students and teachers alike is made all the more difficult given that neither can turn to the other for established expertise. Cook-Sather and Alter (2011) described how teachers and students enter a liminal state, "betwixt and between" (p. 37) their traditional relationship and one aligned with their emerging sense of partnership. Everyone in the classroom may be encountering the ambiguity of change at the same time, creating a potentially fragile and stressful—and potentially rewarding— classroom setting.

Siemens (2010) emphasized that effective teaching is "a critical and needed activity in the chaotic and ambiguous information climate created by [learning] networks" (¶ 10). Siemens suggested that rather than controlling a classroom, teachers now must work to influence or shape the networks with which they and their students engage. Accordingly, new teacher roles include "amplifying" high quality streams of

information to make them more readily available to students and "curating" key concepts and resources so that students "bump into" them repeatedly as they explore issues and develop ideas (¶s 16-19). Teachers now must facilitate "wayfinding and socially-driven sensemaking" that steers students to diverse opinions and supports them as they grapple with that diversity (¶s 20-23). They concentrate on "aggregating" information to help students cope with abundance and monitor the impact of aggregation on their exploration (¶s 24-27). By "filtering" information, teachers acknowledge that they are now only one of many streams to which a student has access (¶s 28-29). Finally, new teacher roles include "modeling" critical skills of learning and networking and being a "persistent presence" online, through blogs, wikis, Twitter, and other modes (¶s 30-32).

The Organization of Middle Grades

What would it look like to organize schools in response to what we value for students and the technology and resources we have available? How might common planning time differ if we fully embraced teacher-student planning? How might student work time change if learners could collaborate face to face—virtually, perhaps—with classmates, peers, and experts anytime, anywhere in the world? Having imagined the many ways that teacher-student planning, curriculum integration, and 21st century technology can enhance students' self concept and self esteem, how might we rethink the structure of middle schooling to maximize these benefits?

Although the structural reforms long advocated for by the middle grades movement won't necessarily bring about needed curricular reforms, they can nonetheless create conditions supportive of teacher-student planning and integrated curriculum. For example, middle school advocates for years have emphasized the need for teacher

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common planning time (Mertens, Flowers, Anfara, & Caskey, 2010). Yet we seem to be a long way away from managing schooling time in such a way that values student participation in curriculum development—and schooling more generally. Too often, administrators, parents, students, and even the teachers themselves pit the two or more weeks spent planning curriculum with students against instructional time. This false dichotomy belies the intimate and powerful connections between curriculum negotiation, integrated curriculum, and the quality of learning that students ultimately experience. The values shift, from teacher-exclusive planning to teacher-student planning, must incorporate the ways we value and use school time.

Educators in general, and middle grades classrooms and schools in particular, need to embrace the wholesale reengineering of their organizations and systems in order to "race with" rather than against technological innovation (Brynjolfsson & McAfee, 2011). Conditions such as ubiquitous access to technology, and tools such as the LMS, can help to reframe learning previously bound by the traditional organization of schools. We must begin to imagine the vast potential benefits of technological change, embrace them wholeheartedly, and respond with the organizational transformations—not simply the hardware purchases—necessary to bring them to reality.

Teacher-student planning frequently reveals organizational constraints. Teachers may reduce time for planning in order to cover mandated content or prepare for high stakes tests. Students may be forced to choose between participation in school improvement initiatives and sports, music, or lunch. The strain of such institutional forces points to the arbitrary constraints of school structure on educational innovation. Our research agenda must include the examination of such fundamental systems and critical

reflection on any initiatives related to student involvement. In short, we need to update

our recommendations for middle grades school organization. In light of teacher-student

planning, student involvement and emerging technologies, what should common

planning time look like? What should teaming look like? Grouping? Scheduling?

Advisories? Are these still viable constructs for thinking about how we organize the

middle grades? Absolutely. Do their current iterations in policy recommendations and

research reflect a bold embrace of student involvement and contemporary technologies?

No.

Student Involvement and School Improvement

We need to see curriculum integration and teacher-student planning as part of a

broader ethic of honoring the intellectual and affective needs of young adolescents. The

literature on student involvement and consultation may contribute to our thinking about

teacher-student planning in the 21st century.

First, Fielding (Fielding, 2001) challenged us with a series of pointed questions

about efforts to involve students.

"How do the systems enshrining the value and necessity of student voice mesh

with or *relate to other organizational arrangements* (particularly those involving

adults)? Do the *cultural norms and values* of the school proclaim the centrality of

student voice within the context of education as a shared responsibility and shared

achievement? Do the *practices, traditions and routine daily encounters*

demonstrate values supportive of student voice? *Where* are the public spaces

(physical and metaphorical) in which these encounters might take place" (pp. 134-

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Second, Fletcher's (2010) challenges us to climb the Ladder of Student Involvement in School, from adult-led to student-led decision making, as we critically examine our collaborations with students. Students and teachers can examine the ladder as they reflect on the quality of their partnership, tasks and activities—and the motivations behind them. More important, subsequent conversations can drive practice toward richer, student-led partnerships with adults.

Fielding and Fletcher invite us to critically consider our strategies, conditions and purposes as we undertake teacher-student planning. We need reflective frameworks that signal to students and educators that the practical and democratic purposes of collaborative planning are valued among the other goals of schooling. Valid frameworks may also make it easier for others to chart a path toward genuine and democratic student participation. This quest takes on greater significance in the context of the rapidly developing field of learning analytics. Learning analytics "loosely joins a variety of data gathering tools and analytic techniques to study student engagement, performance, and progress in practice, with the goal of using what is learned to revise curricula, teaching, and assessment in real time" (Johnson et al., 2011, p. 7). These tools and techniques are well adapted to examining large data sets drawn from previously elusive learning behaviors, such as online social interactions, content viewing, game play, and reading and writing, and mining them for purposes of ongoing improvement of teaching and learning. The field holds promise for helping educators discern which learning methods work best for specific students or groups of students. An ethic of teacher-student planning and curriculum integration should inform the algorithms in learning analytics, valuing authentic student engagement, student-directed learning, and student self-efficacy.

Imagine, for instance, how analytics might inform weekly student self-reflections about their personal learning network. "This week I noticed that my interactivity score was up from last week, which is what I was aiming for. But next week I want to raise my diversity of opinion score." Now is the time to integrate student involvement into evaluation and performance metrics—a partnering analytics—as if students' voices were vital to educational quality and student performance.

Concluding Thoughts

We are witnessing a remarkable convergence of thinking about the roles students can play in shaping their own learning. Secondary school reform is emphasizing personalized learning plans and student involvement in school change (Tung, 2010); educators are realizing the powerful role students can play as collaborators in initial teacher preparation (Cook-Sather & Youens, 2007), continuing professional learning (Downes, Nagle, & Bishop, 2010), and school improvement (Mitra, 2008); and curriculum theorists find ever growing evidence that engaging and challenging learning experiences are hard-won but natural byproducts of negotiated and student-directed curriculum (Brinegar & Bishop, 2011; Brown, 2011). This convergence begs for an integrated approach to teacher-student planning, one that reframes schooling structures, assessment, accountability schemes in terms that foster these proven yet nascent roles for teachers and students. We need to identify and cultivate the skills and dispositions that are essential for teacher and student success in collaborative planning, including modeling teacher-student planning in teacher preparation programs (Pate & Nesin, 2011).

Throughout this chapter I have suggested that teacher-student planning can contribute to other characteristics of self-enhancing schools. Shifting toward a genuine

planning partnership creates a more humanistic environment for teachers and students. A curriculum grounded in students' real-life questions and concerns, played out with personal learning networks and collaborative technologies, creates boundless space for self-direction, peer and multiage interactions. And learning management systems that couple standards, personalized goal setting and comprehensive portfolio assessment raise new hopes for systematic implementation of self-directed learning. These pathways embrace learner characteristics, welcome parents into substantive dialogue about their children's growth, and value students' self-perception. With such a holistic approach to honoring the innate value of each member of the learning community—the truly democratic school—we may embark boldly together upon continuous and rewarding growth as selves and community.

[End of Manuscript]

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CHAPTER FIVE: AN EXAMPLE OF CONSULTATION IN PROFESSIONAL DEVELOPMENT

Earlier chapters described today's dynamic and challenging context for middle grades education at the systemic and classroom levels. The literature on student involvement in teacher learning suggests that students can be key collaborators in the design of schooling. I argued that students and teachers can partner to design technology-rich environments and learning opportunities responsive to the needs of young adolescents. The question remains, how can teachers be prepared to enter into partnership with students?

There are resources and staff developers available to help teachers and faculties learn how to involve students in school improvement, but the competition for teacher professional development time is fierce. Student involvement is not likely to win out over training to teach the Common Core State Standards, for instance. This chapter examines how teachers can learn from students at a summer institute even as they pursue coursework for their license endorsement in middle grades teaching. This chapter also narrows the focus from broader notions of student involvement in teacher learning and school change to the specific phenomenon of students acting as consultants to teachers in professional development. The experience of teachers and students at this institute are the basis of subsequent research chapters.

**INTEGRATING STUDENT CONSULTATION INTO TEACHER
PROFESSIONAL DEVELOPMENT:
THE MIDDLE GRADES COLLABORATIVE**

John M. Downes, James Nagle and Penny A. Bishop

Abstract

Most professional development for teachers does not involve opportunities for them to hone their practice in direct collaboration with students, which sits in stark contrast to the heavy emphasis placed on student voice in middle grades education. For almost two decades, however, the Middle Grades Collaborative (Collaborative) has offered a week-long, summer institute in which a core pedagogical principle is to actively involve young adolescents in developing classroom practices of the approximately 70 middle grade teachers who participate annually. During this time, middle school students act as consultants and collaborators, experts and panelists. They offer their voice and expertise on issues such as young adolescent needs, classroom and school organization, curriculum development, and classroom assessments.

The purpose of this paper is to describe this practice of including middle grades students as consultants in teachers' professional development. We begin by briefly providing the context of the Collaborative and its summer institute. Next we describe the theoretical underpinnings and research base that informs the work of the Collaborative. We then provide an overview of 1) the conditions conducive to a collaborative culture and 2) participant perspectives on student consultation. We conclude by considering how

teachers and students might benefit from such practices within the context of their own classrooms and schools.

Introduction

While teachers' professional development has moved a considerable distance over the past two decades to include collaboration and inquiry as essential components, students' voices remain notably absent from the endeavor. Most professional development for teachers does not involve opportunities for them to hone their practice in direct collaboration with students. This omission sits in stark contrast to the heavy emphasis placed on student voice in middle grades education. How might teachers' practice evolve if given access to young adolescents' perspectives on their pedagogy? What are the possibilities of joint work between teacher and student in middle grades professional development?

This paper examines the use of student consultation as an integral part of teacher professional development. The Vermont Middle Grades Institute (Institute), hosted by the Middle Grades Collaborative (Collaborative), is based on the core pedagogical principle of actively involving young adolescents in changing classroom practices of middle grade teachers. We begin by briefly providing the context of the Collaborative and its Institute. Next we describe the theoretical underpinnings and research base that informs the work of the Collaborative. We then discuss 1) the conditions conducive to a collaborative culture and 2) participant perspectives on student consultation. We conclude by considering how teachers and students might benefit from such practices within the context of their own classrooms and schools.

Background and Context

The Collaborative is a unique alliance of Vermont colleges and universities that has, for almost two decades, provided ongoing professional development for aspiring and practicing teachers of 10-15 year olds. During this time, the Collaborative annually has offered the Middle Grades Institute, a statewide, week-long, residential learning community aimed at providing this support while also helping educators earn their Vermont Middle Grades Teaching Endorsement. The Institute faculty consists of fifteen facilitators, who represent both university teacher educators and veteran middle school teachers. These professors and practitioners team-teach throughout the Institute. Beyond the week-long summer experience, follow-up activities occur during the fall semester in participating teachers' schools, on an online forum, and at a culminating meeting of all participants.

The Institute places student voice at the center of professional development to change the attitudes and practices of middle grade teachers. To that end, the Collaborative invites students to join the teacher participants for the majority of the Institute. Some students come from local schools; some are brought by participating teachers; still others are recruited from a team well versed in student-directed pedagogy. The invited students are culturally, linguistically and economically diverse representing all students from Vermont. Throughout the week, middle grades students act as consultants and collaborators, experts and panelists, offering their voice and expertise on issues such as young adolescent needs, classroom and school organization, curriculum development, and assessment. Most students also partake in their own student strand

during the week designed to strengthen their leadership capacities and expose them to post-secondary possibilities.

These young adolescents join the teachers' courses or "strands" as teachers work individually or in teams on aligning their teaching practices with adolescent needs. In one classroom, where the *Nature and Needs of Young Adolescents* strand takes place*,* a panel of middle schoolers may answer teachers' questions about how it feels to be their age and what they need from teachers and classroom environments. Next door in *Middle Level Curriculum, Instruction, and Assessment*, pairs of students will meet with teams of three or four teachers helping them develop engaging and relevant, standards-based units to teach for the following fall semester. Further down the hall in *Middle Level School Organization*, students from a nearby school may discuss their experiences with teaming and teacher advisories or their feelings about grouping. Table 1 depicts the most common forms of consultation employed at the Institute.

Table 1. Student Consultation

Form of Consultation	Enacted at the Institute
Student Panels	Students serve as an expert panel before a gathering of 15-30 teachers (e.g., on creating a positive team culture, service learning, young adolescent needs)
Small Group Collaboration	1-3 students serve as expert members of a group of 3-5 teachers trying to design an engaging standards-based unit
	Students join with teachers in small groups to try out something new that teachers might be reluctant to try first

Co-Experimenters	with their own students (e.g., an activity meant to explore and honor early adolescence; James Beane's process of generating curriculum from kids' questions; or creating Dada poems as a literacy activity)

As members of the Collaborative, we have found these moments of consultation--when students work with teachers in the midst of professional development--to be rewarding and powerful. They affect how students and teacher see each other and inspire substantial changes in teacher practice.

Theoretical Underpinnings and Research Base

Teacher Professional Development and Joint Work.

Over the course of the last two decades professional development for teachers has moved from isolated, de-contextualized, externally driven training sessions for teachers toward a more integrated, collaborative process of on-going teacher learning anchored in teacher practice. In a review of research on teacher professional development for the National Staff Development Council, Wei and colleagues suggested that a 'new paradigm' for professional development has emerged that clarifies the content, context, and process of effective professional development (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009).

They note that the content of professional development is multifaceted and most useful when it focuses on "concrete tasks of teaching, assessment, observation and reflection;" specific pedagogical skills and how to teach specific content to learners; and student learning (Wei et al., 2009, pp. 3-4). In essence Wei and colleagues reiterate the

call that Ball and Cohen sounded a decade earlier when they stated that teachers would need to have an understanding of their subject, an appreciation of cultural backgrounds different from their own, an expansion of their ideas about learning, a grasp of pedagogy, and a knowledge of children (Ball & Cohen, 1999). Ball and Cohen's framework of "learning in and from practice*"* relies on two implicit assumptions: (1) teacher professional development engages teachers in the pursuit of in-depth understanding of professional knowledge – pedagogy, content, and context issues; and (2) teacher development builds learning communities that promote collaborative interactions among teachers. In the broadest sense of the term, "learning in and from practice" requires a new kind of understanding of teaching: one that is inquiry based and collaborative.

The framework of learning in and from practice derives its theoretical roots from Judith Warren Little's construct of joint work (Little, 1990). Through her observation of teachers who worked together, Little defined joint work as the shared responsibility for the work of teaching involving collective conceptions of autonomy, support for teachers' initiative and leadership with regard to professional practice, and group affiliations grounded in professional work. Practically speaking joint work required teachers to both collaborate with each other as professionals and investigate their teaching in an honest and forthright manner.

Many researchers since Little have found the dual elements of collaboration and inquiry of joint work essential for teacher learning and school reform. Putnam and Borko concluded that "the context for effective professional development includes designs that are a coherent part of school reform efforts; incorporate collaborative and collegial learning environments and communities of practice; and is intertwined" with teachers'

own practice (Putnam & Borko, 2000, p. 6). There are now a variety of professional development pedagogies that focus on inquiry into teacher practice, including microteaching and laboratory experience; computer simulations; uses of video technology and hypermedia; case methods; portfolios in teacher education; and practitioner research (Grossman, 2005). These recent professional development programs mark a shift toward "viewing teaching itself as a form of inquiry and experimentation" (Tabachnick & Zeichner, 1999, p. 311).

While professional development programs highlight the importance of inquiry, the context of these programs has also become important. Collaboration among colleagues plays a significant role in how teachers inquire about their practice. No longer are teachers expected to work alone behind the closed doors of their classrooms. At the middle school level organizational structures and cultural norms have pulled teachers together to do joint work. Teachers are grouped on grade level or multi-age teams. Wei and colleagues devote considerable space in their report to exploring research into these new structures and norms such as professional learning communities; peer observation of teacher practice; analyzing student work and student data; developing study groups; professional communities that operate beyond the school; and school-based coaching and mentoring.

While professional development has moved a considerable distance to include collaboration and inquiry of teacher practice, nowhere do the researchers refer to opportunities for student involvement in the work of professional development of teachers even though these same researchers argue for teachers to understand the students whom they teach (Wei et al., 2009; Cochran-Smith & Zeichner, 2005; Darling-

Hammond & Sykes, 1999). Ball and Cohen's emphasis on knowing students is particularly salient to this discussion. They note that a teacher would need to know,

> …what children are like, what they are likely to find interesting and to have trouble with, in particular domains. They would need to become insightful in listening to and interpreting children's ideas about academic subjects. They would need to expand the interpretive frames they are likely to bring to their observations of students so that they could see more possibilities in what students could do. And they would need to come to see children as more capable of thinking and reasoning, and less blank slates who lack knowledge. Some of this knowledge is general—about children of certain ages, for instance. Some of it is particular—what this child believes, how she works, what she means by what she has drawn or written or said. Learning to attend to one's students with insight requires expertise beyond what one gathers from one's own experience. What one enjoyed, thought, or felt as a child may afford helpful speculation about one's students, but is insufficient as a professional resource for knowing learners (1999, pp. 8-9).

In light of the research on professional development and the understanding of educational researchers on the need for teachers to understand their students' interests, needs and strengths to provide effective teaching, it seemed natural to us that the next step in teacher professional development was to involve students in the joint work of teaching.

Involving Student Voice as Part of Joint Work

In a comprehensive review of research into student voice, Thiessen (2007) describes three bodies of work that have emerged in recent decades: students

participating in and making sense of life in classrooms and schools; understanding students and their development in school; and how students are actively involved in shaping their own learning opportunities and in the improvement of what happens in schools (p. 8). The first strand examines students' thoughts and feelings (Davies, 1982; Phelan, Davidson, & Yu, 1998), their relations with teachers (Apple & Beane, 1995; Cothran & Ennis, 1997; Lampert, 2001), and how they contribute to a social world and academic success (McCadden, 1998; Woods, 1990).

The second strand focuses on how the dynamics of classrooms and schools influence students' identities (Diaz-Greenberg, 2003; Nagle, 2001) and how students adapt to different classroom and schooling structures, expectations, and work (McLaren, 1999; Nieto, 1994; Willis, 1977). Cultivating and listening to student's voices, particularly marginalized voices, helps teachers to understand the "various ways in which student perceptions and identities are constructed" (McLaren, 2003, p. 242).

The third strand examines how teacher consultation with students shapes classroom management and curriculum design (Boomer, 1982; Brodhagen, 1995; Lee, 1999) and school rules, leadership, and governance (Kaba, 2000; SooHoo, 1993). Such student "engagement" appears to have benefits beyond informing reforms, but also in the development of students themselves, including their sense of agency, belonging, and competence (Jackson & Davis, 2000; Mitra, 2004; Stevenson, 1998). Others have focused on "democratic" forms of student engagement in classrooms and schools (Apple & Beane, 1995; Beane, 1993, 1997; Flutter, 2007; Whitehead & Clough, 2004). Rudduck (2007) describes student consultation as follows:

Consultation may involve: conversations about teaching and learning and the

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conditions of learning; seeking advice from students about possible new

initiatives; inviting comment on ways of solving problems, particularly about

behaviours that affect the teacher's right to teach and the student's right to learn;

and inviting evaluative comment on school policy or classroom practice.

Consultation is a way of hearing what young people think within a framework of

collaborative commitment to school reform (p. 590).

Rudduck points out that "consultation implies participation," and that student

participation does not necessarily indicate that students' voices are being heard or

honored.

Consultation in the research on student voice usually involves students'

participating on school committees that "focus on real issues, events, problems, and

opportunities, and involving them through a wider range of roles and responsibilities. At

the classroom level participation is about opportunities for decision-making and having

choices and about understanding and managing your own learning priorities" (Rudduck,

2007, p. 590). Teachers who have opened themselves to these experiences appreciate

students' insights into the effectiveness of various teaching methods, how teachers might

address the needs groups of students may have in classrooms, and teachers'

underestimation of students' ability to handle challenge and responsibility (pp. 595-596).

Drawing on data from a number of projects, Rudduck found that when

thoughtfully implemented, student consultation offered a range of benefits to students and

teachers. Students said they valued,

- being able to talk about things that matter to you in school;

- being listened to and knowing that what you say is taken seriously;

- feeling that you belong and that you can make a difference to how things are done; and

- feeling that by talking about things and taking part in things you understand more and have more control over your learning (Rudduck, 2007, p. 598).

Rudduck observed that students "felt more included in the school's purposes… felt positive about themselves as a result of being asked to respond… and valued being able to do something for the school" (2007, p. 598).

Rudduck noted benefits to teachers as well. After hearing from students in their role as consultants, teachers spoke of

- a more open perception of young people's capabilities,

- the capacity to see the familiar from a different angle,

- a readiness to change thinking and practice in the light of these perceptions,

- a renewed sense of excitement in teaching,

- a practical agenda for improvement, and

- confidence in the possibility of developing a more partnership-oriented relationship with their students (Rudduck, 2007, pp. 599-600).

Rudduck also suggested that there is a difference between "work on student perspectives and work on student voice," observing that, "[e]liciting and using student perspectives can provide a practical agenda for change, but it does not guarantee change in the status of student within the school" (p. 591).

We believe a substantial missed opportunity results from the distance between the literature on teacher professional development and the literature on student consultation for educational improvement. Student consultation presents important opportunities for

professional development designs that are focused on knowing students better. Formal professional development settings are untapped sites for teachers and students to benefit from consultation. In order to advance such practice, we describe 1) the culture we strive to create for this work at the Middle Grades Institute; and 2) the outcomes of this work as perceived by both teachers and students.

<div align="center">**Our Practice and Learning**</div>

Cultivating a Culture for Student Consultation

The Institute facilitators have developed an elaborate and embedded repertoire of strategies proven to prepare participants for consultation with middle grades students during the Institute. These reflect shared beliefs about honoring young adolescents in general, and they contribute to more successful first-time student-teacher consultations. There are several ways that we establish this culture.

Establishing the Culture. Early in the planning process, Institute faculty identify opportunities for meaningful consultation as they plan their curriculum and coordinate schedules with other strand facilitators, an annual process that reinforces and deepens commitment to consultation as a valued pedagogical principle of the Institute. During this process we integrate learning opportunities for both students and teachers to work together in meaningful ways such as small group collaboration and student panels.

Additionally, throughout the intensive week – including opening remarks, morning meetings, evening activities, and strand sessions – Institute faculty emphasize how rare and important student consultation can be, often in the presence of the consulting students. For example, one could expect a session leader to say, "We are truly honored to have a group of students with us this week to offer their expertise on young

adolescence, how they learn, and what they need from their teachers, teams, and curriculum in order to enjoy and succeed in their learning."

Further, Institute faculty include in evaluation rubrics expectations that teachers will incorporate students' ideas and interests in the planning and implementation of their final Institute projects. Facilitators continually seek out opportunities for students to take on and portray roles and abilities that stretch teachers' expectations for what young adolescents can know and do. And students take part in whole-group Institute activities, work and play alongside teachers, join with teachers in literature circles, lead morning meetings, and present projects in which they reveal their hopes for the future.

Managing the Consultation. Institute facilitators typically prepare teachers for consultations and intervene during consultations when necessary, with various types of guidance. At times they emphasize that teachers will have only a relatively short period of time to take full advantage of this rare opportunity to consult with students about how to improve teaching and learning. At other times, facilitators counsel teachers that they are entering a different kind of student-teacher conversation than they may be used to. Here the students are the experts and teachers are there to listen and probe them in order to understand their unique perspectives and insights.

Institute faculty also encourage teachers to ask open-ended questions that prompt students to share ideas unimagined before. For instance, rather than asking "Would you prefer to learn about water quality by conducting experiments in the classroom or collecting and analyzing data at a nearby stream?" they might ask instead, "What are some ways you think you'd enjoy learning about environmental problems?" The facilitators instruct teachers to be patient and let the insights emerge naturally. It is

tempting to leap immediately to judgments about students suggestions, concluding that one suggestion would be too expensive, or another impractical given travel challenges, building constraints, or inadequate time to accomplish the task. Instead, they emphasize patiently listening to what the students suggest is important to them. Students are then quite adept at helping navigate around the realities of schooling.

Further, although there are many benefits to pairing teachers with their own students, there is also an advantage to connecting with those they do not know. In a course on the development of young adolescents, for example, teachers and students agreed that the relative anonymity contributed to the comfort and quality of their consultations; students spoke of feeling less anxious about presenting and participating given that they would "never see these teachers again," and teachers noted feeling freer to ask questions of students not from their own classrooms.

Rudduck (2007) also described how students commenting on teaching and learning can be "tricky to manage" among students and teachers who share classrooms. Teachers may apply various "demanding criteria" when judging the validity of students' comments and are sensitive to "over-personalized account[s] of classroom realities," whereas they were generally receptive to ideas students offered which emanated from experiences in other classes (p. 596).

Honoring and Sustaining the Work. Institute facilitators and participating teachers openly express their gratitude for students' service as consultants. Facilitators are careful to save time at the end of consultation sessions for teachers to thank the students personally and reinforce the strands' appreciation of their time and honest effort. Students generally depart the Institute a day before other participants, which provides a

chance for a whole-group meeting at which students share some of their own work and thoughts from the week, which often include how much they enjoyed working with the teachers and how much they appreciate teachers' clearly evident commitment to improving schooling for students. Teachers then are offered a chance to share their own appreciations. Teachers enrich and sustain the consultative culture from year to year; approximately 30% of the Institute's participants each year are returnees and help convey the value and significance of working with students during the week.

Participant Perspectives on Student Consultation

The Collaborative's commitment to continual improvement takes the form of considerable ongoing program evaluation. Through surveys, observations, artifact review, and a collection of online postings we have learned much from and about this practice of student consultation. Teachers and students alike value various forms of interaction at the Institute, including student panel presentations, small group collaboration, and informal conversations.

Teachers' Perspectives on Students. An overwhelming majority of participating teachers report that interactions with students during the week contribute to changes in their pedagogy. These contributions take many forms. One teacher pointed to student panel presentations on negotiated curriculum as important to negotiating her social studies curriculum with her students the following fall. Another teacher ascribed to small group consultations with students her decision to develop a student-led portfolio initiative in her school. In each case, participating teachers were surprised at the level of maturity students can bring to their learning. Approximately 30 % of teachers enriched and

sustained from the consultative culture at the Institute are returnees and their presence further conveys the value and significance of working with students during the week.

Teachers often also come away from the student consultations with renewed appreciation for what it means to listen and to know students on a personal level.

> …Listening to the stories of students connecting to their teachers made me remember my own experiences these past few years as being very self-centered…. The students' stories about teachers taking the time to just listen made me rethink the way I should spend my time. Rather than spending most of the time coming up with lessons, implementing them, and all of the grading and assessing that goes with that, I need to incorporate strategies and activities to understand who my students are from a personal level." (7th Grade Math Teacher)

Teachers also acknowledged that such experiences provide them with greater confidence to work with their own students this way.

> "I learned a lot about who middle school students are and what kind of things they are capable of. [T]he frankness of the visiting children was awesome and I will think differently about my kids!" (Grades 7-8 Social Studies Teacher)
>
> "And it was really exciting to see that happen [at the Institute]…. I was pretty amazed. It showed us that okay, we can do this with our kids. They've never done this before. But … I don't think [the kids at the Institute] had ever done it before." (6th Grade Generalist Teacher)

Another teacher discovered inspiration from her participation in an Institute literature circle,

Wow! What a great idea to have a literature circle by combining students and teachers. The story from (the book) *13* was the poem *Such Foolishness,* which could have been a touchy subject but the girls [in our group] were great – they really got it and all of us were so impressed in how they handled such a mature subject. It really makes me want to try more young adult lit that handles real issues for students." (Middle School Librarian).

Students' Perspectives on Teachers. While teachers express the benefits of student consultation, students also report newly found appreciation for the work of teachers. Consulting students with experience in student-directed learning, for example, appreciated the challenges it poses for teachers trying it out for the first time:

KEVIN: I think that's it got to be a really hard thing (for teachers) just to dive into [building curriculum with students] and to learn it in just a few hours because it's really complicated.

ANDREA: It took us like a year to learn it.

KEVIN: Three!

ANDREA: Well, yeah, but we're trying to teach them in like 25 minutes.

KEVIN: It's really a lot deeper than – anyone who hasn't gone through the program can't really like understand, so it must be like really tough.

Similarly, students voice admiration for teachers' eagerness to improve their practice and listen to students,

"I thought what worked was that we got a chance to like – the teachers always help us so we got to help the teachers." (7th Grade Girl, Consulting Student)

"The teachers all seemed really like into it, because they were asking questions." (7th Grade Boy, Consulting Student)

In these ways, teachers and students share genuine respect and warmth as they work together toward the common goal of improving schooling for young adolescents. Teachers generally appreciate whichever interaction focused on a change in practice they found particularly interesting. No one format appears salient, suggesting that multiple formats and opportunities for interaction may increase potential benefits.

Discussion and Conclusion

The many benefits of student consultation noted by Rudduck (2007) and discussed earlier are reproduced when consultation is incorporated into formal professional development, even when the teachers and students involved do not know each other. We echo Rudduck in asking, "Why then is student voice still so difficult to introduce and sustain" (p. 600)?

Among the obstacles are "time, building institutional commitment, anxieties generated by the change in power relations, sustaining authenticity, and inclusion [of often marginalized voices] " (Rudduck, 2007, p. 600). Introducing student consultation in a formal professional development setting, particularly with students and teachers who do not know each other, addresses many of these concerns. Institute facilitators provide the time, create a safe environment, promote authentic dialog, and intentionally address

inclusion in the selection of students, perhaps more readily and easily than teachers and school leaders can in their own buildings.

The Institute facilitators appreciate the benefits of consultation for the learning that occurs during the week but the larger goal is to expand the role of student voice in schools. The MCG facilitators strive to help teachers make the leap from consulting with students at the Institute to engaging their own students in a similar manner back at their schools. We are encouraged that many teachers speak eloquently about their desire to incorporate student voices into continuing change efforts, including efforts to improve classroom climate and revamp curriculum. A large majority of participants report consulting students about curriculum design after returning to their classrooms, and even more seek student critique on their Institute projects. The Institute consultations appear to inspire these efforts; for a year or more after their Institute experience, many teachers point to those experiences as pivotal in their pursuit of change. Some teachers describe revisiting the memories for encouragement to persevere in the face of obstacles in their school context and as an important reason to return to the Institute in subsequent summers.

We acknowledge, however, that much more can be done to promote student consultations in participants' schools. Building on their insights into students as consultants, teachers can organize their own students to serve as an expert panel before a local curriculum committee, school climate task force, parent involvement committee, or faculty meeting. Students might routinely serve as consultants to a group of teachers designing a unit of study, culminating event, festival, or field trip. And students permanently or intermittently can join professional learning communities, critical friends

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groups, or collaboratively examine student and teacher work. Virtual consultations are also possible. Further, teachers may invite students from another team or nearby school to help field test and hone a new activity or process.

Vibrant and inspiring professional development experiences are too rare. Rarer still are professional development activities that lead to greater student voice in the schooling. Yet for nearly two decades, the Middle Grades Collaborative has built upon a rather traditional summer institute framework to make vivid to participating teachers and students – as well as staff – how students can contribute to teachers' professional growth and school improvement. Teachers and students consistently point to Institute consultations as the week's most important source of learning, inspiration, and teacher-student understanding. We have witnessed a remarkable convergence of teacher enthusiasm for changing their practice, students' pedagogical insights, and both groups' joy and appreciation in puzzling together to make classrooms and schools more responsive to the nature and needs of young adolescents. The Institute culture – steeped in our respect for students and their voices – creates a rich foundation for introducing teachers and students to consultations year after year. Underlying it all, however, is our simple belief, arrived at through our own experience in middle school classrooms: when our practice is stuck, when we are failing to connect with the vitality, passions, and imagination of our students, ask them what they think.

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CHAPTER SIX: EXAMINING STUDENT
CONSULTATION AT THE INSTITUTE

The previous chapter described student consultations at the Middle Grades Institute. The chapter that follows examines how middle grades teachers and students perceived student consultations. In so doing, it begins a deeper exploration of the viability of student consultation as a standard practice in summer institutes regardless of their primary purpose. Chapter 7 will focus on whether student consultations can be integrated into classrooms as teachers implement what they've learned at the Middle Grades Institute.

MIDDLE GRADES STUDENTS AS TEACHER EDUCATORS

John M. Downes, James Nagel and Penny A. Bishop

Abstract

Although many middle schools have embraced collaborative teacher learning, and student voice often is heralded as critical to successful middle grades programs, young adolescents are rarely provided a role in teacher education. This study examined middle grades teachers' responses to students serving as consultants at a summer professional development institute. The qualitative, case study design, involving interviews, focus groups and surveys with 72 teachers and 20 students, explored teachers' and students' perceptions of student consultations, their response to the shift in voice and authority, and the practices that were productive in student consultations for teachers' learning. Most teachers and students perceived the consultations as enjoyable and contributing to their learning, willingly embraced shifts in authority during consultations, and noted the benefits of a variety of strategies employed to support the culture and practices of student consultations.

Introduction

Over the past two decades, a "new paradigm" for teacher learning prompted highly collaborative norms reflected in professional learning communities, peer observation of teacher practice, lesson study, and school-based coaching and mentoring (Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). Yet although many middle schools have embraced collaborative teacher learning, and student voice often is

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heralded as critical to successful middle grades programs (Jackson & Davis, 2000),

young adolescents are rarely provided a role in teacher education. What happens when

we shift perspectives and young adolescents become the teacher educators?

The purpose of this research was to examine middle grades teachers' response to

students serving as teacher educators. We posed three research questions:

1) What do teachers perceive as outcomes of student consultation?

2) How do teachers respond to the shift in voice and authority?

3) What practices are productive in student consultations for teacher learning?

Perspectives/Theoretical Framework

The concept of students as teacher educators emerges from studies of students

acting as consultants on teaching and school change (Fielding, 2001; Rudduck, 2007).

Rudduck (2007) noted:

> Consultation may involve: conversations about teaching and learning and the
>
> conditions of learning; seeking advice from students about possible new
>
> initiatives; inviting comment on ways of solving problems, particularly about
>
> behaviors that affect the teacher's right to teach and the student's right to learn;
>
> and inviting evaluative comment on school policy or classroom practice.
>
> Consultation is a way of hearing what young people think within a framework of
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> collaborative commitment to school reform (p. 590).

But systematic involvement of students as participants in teacher professional

development is rare (Cook-Sather, 2011; Cook-Sather & Youens, 2007; Fielding, 2001).

And studies of middle grades student-teacher consultations outside of regular school

contexts are equally scarce (Downes, Nagle & Bishop, 2010). This limited research base does, however, reveal several useful findings.

First, teachers who consulted with students about teaching and learning rethought students' capabilities, gained a capacity to see and act upon new perspectives, sensed a new excitement in their practice, developed practical agendas for improvement, and felt more confident in partnership-oriented relationships with students (Rudduck, 2007). Additionally, consultations can reposition students (Cook-Sather & Youens, 2007), redefine their roles, and transform traditional teacher-student hierarchies (Cook-Sather & Alter, 2011). Yet Rudduck (2007) warned that "[e]liciting and using student perspectives can provide a practical agenda for change, but it does not guarantee change in the status of students within the school" (p. 591). Finally, consultations were effective when teachers wanted to listen to students, created conditions of dialogue, provided feedback to students about the effects of their consultation (Rudduck & McIntyre, 2007) and viewed students as knowledgeable (Cook-Sather & Youens, 2007). Downes, Nagle & Bishop (2010) described a range of strategies to cultivate successful consultations, including referring to young adolescents as experts, using multiple formats, and requiring student involvement in the design, implementation and evaluation of teacher action research projects.

Context

This study examined middle grades teachers' experience with student consultation at a statewide, weeklong, credit bearing, and primarily residential program hosted on a college campus. Seventy pre-service and in-service teachers participated in one of seven courses on middle grades education. This study focused specifically on the experiences of

students and teachers in three of these strands: Middle Grades Organization

(Organization); Middle Grades Curriculum (Curriculum); and Embedded Literacy

(Literacy). Faculty consisted of university professors, veteran middle school teachers and

20 students from different schools who spent two or three hours each afternoon

consulting with teacher participants across the courses. The consultations took the form

of student panels or focus groups about student needs, interests and perceptions; small

group teacher-student collaborations on curriculum projects and teacher teaming; and co-

experimentation with new teaching methods.

Methods of Inquiry and Data Sources

Case Study Design

This study was based on an interpretive epistemology, exploring meanings as

perceived from different perspectives as our research team strove to "understand

individual and shared social meaning" (Crowe et al., 2011, p. 9). We therefore adopted a

case study design, a method primarily used to explain, describe or explore phenomena or

events in the contexts in which they occur (Yin, 2009).

Sample Selection

Seventy-two teachers attending the five-day professional development institute

comprised the teacher sample. They represented rural, suburban and urban geographic

regions and their teaching experience ranged from zero years (pre-service) to over thirty

years. They were predominantly White and approximately 70% were female, fairly

representative of the national teacher labor market. Twenty students also participated in

the study. They participated in a four-day program at the Institute aimed at promoting

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postsecondary career and college success. Their role as consultants to teachers took place in the afternoons.

Data Collection

As a research team, we applied four primary methods in this study. We conducted four, 30 minute, focus groups with between eight and 14 teachers, using a common and open-ended protocol. We interviewed ten teachers individually for 30-45 minutes each. We observed numerous sessions in which students served as teacher educators, including consultations, panels, mini-lessons, and large group interactions. All interviews, focus groups and observations were recorded and fully transcribed. We also administered a survey comprised of selected response and open-ended questions. Seventy-two teachers responded to the survey; 66 provided a response to the open-ended prompt, "How, if at all, did consulting with students influence your thinking and work this week. Please be as specific as possible."

Five students participated in individual interviews and eight students participated in a focus group interview. In addition, students and teachers were observed and audio recorded as they participated in the following consultation sessions: two trial literacy lessons in the Literacy Strand; a student panel in the Curriculum Strand; and three consultations in the Organization Strand in which students provided feedback to a simulated teaching team.

Data Analysis

We entered all transcripts, observation notes and narrative survey data into qualitative research software, HyperResearch, for the purposes of thematic coding (Glesne, 2006). We applied initial, open coding by analyzing any participant statements

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that appeared categorical, examining similarities and differences, synergies and tensions. We then applied axial coding and refined the initial codes into a modified coding scheme. This allowed us to identify further patterns in the data, to recognize potential sub-codes and themes within the data.

Findings

Teachers and students openly shared their perspectives on student consultations. They described their consultation experiences in the Curriculum, Organization and Literacy strands of the Institute, their perceived outcomes from the consultations, their experience with the shift in authority from teacher to student during consultations, and the practices they perceived as most productive to effective consultations. First, an initial description of their experiences in consultations helps convey the participants' overall perceptions of student consultations.

General Experiences with Consultation

Curriculum Strand. The basis of the Curriculum Strand is a simulated, negotiated curriculum development process that grounds integrated, thematic learning in students' questions about themselves and the world (Beane, 1997). Accordingly, in that strand's first consultations, teachers and students were tasked with categorizing students' questions—generated in a previous student session—in order to identify a theme for their unit development. After a first meeting at which teachers and students got to know each other, one teacher described subsequent consultation sessions:

> And the second time, we split into groups and we looked at their questions and we
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> categorized them. And then the third time we started building the curriculum with
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> them. And it was great to hear their investment and their ideas and how they were

so excited about—like one of our students that we worked with was starting to draw one of the activities we talked about. She just couldn't wait, so she started to draw some of her ideas.

Impressed by how he was able to produce work with students, this teacher emphasized that, "We were able to actually do work together. And it wasn't just [to] ask some questions about their middle school experience." As another teacher described the process,

> We were privileged to work with kids to develop simulated curriculum model. And my group worked with two girls and a boy. And they provided input in terms of the products they would like to produce to demonstrate their knowledge of the things that they learned. I wish we had them more because they were a lot of fun to work with and it was a lot of fun to get their input. They had lots of good stuff to share. And they were good at articulating what they like to do. So it was a good experience.

Students' participation in curriculum development had an impact on teachers, as expressed in this anonymous survey comment: "During curriculum building they showed how philosophical their thinking can be, how they are concerned with the bigger meanings of why we are here and how the curriculum should reflect that." Another survey respondent explained that the curriculum development simulation "reinforced the need for student voice when developing curriculum." Contrasting student voice in curriculum and other aspects of schooling, a teacher with more than 10 years of teaching experience revealed in the survey,

> I feel like I've, over the years, developed a way to encourage student engagement

and problem solving in social arenas at school. Working with students in the Curriculum Strand toward Curriculum Integration gave me a great sense of how to democratize content.

Students also appreciated working with teachers on curriculum development. Reflecting his opportunity to drive curriculum rather than his teachers, one student declared, "I like that. I'd do that all the time. I want to do that all the time. That'd be awesome." He explained that in his Social Studies class in school students had been able to choose Australia as the continent they would learn about. Selecting a continent, however, was different than designing curriculum based on his interests. He said,

> Instead of learning about boring things, I picked evolution [as a theme for study in the simulation], and I really want to know more about that. And like Australia – I mean I don't really want to learn about Australia. I want to learn about something big and cool and how our human race came to be and all these awesome things. Australia was cool but it was kind of boring, I guess.

Other students consulted with teachers about how to integrate technology into their curriculum. As one described,

> I like being asked questions and I like sharing my opinions. And the first group, the first day, the people were the groups of teachers were asking me about how we use technology in school. And that was kind of interesting to talk about because we don't really use technology a whole lot in school and I like to share my opinion. And I liked that they wanted to hear what we were saying.

Organization Strand. Participants in the Middle Grades Organization Strand spent the week on a simulated teaching team, or on an authentic team if a team of

teachers attended the Institute together, and were tasked with designing key components of highly effective teams, including a team name, shared mission statement, family involvement plan, service learning agenda, scheduling and grouping strategies, and transition plans. They drew on periodic consultations with students to hone their work. Consultations took the form of direct consultations with the team, posing questions to a student panel, or collaboratively creating a presentation for a simulated school board meeting.

In survey comments, teachers in this strand described their experience. One noted, "Students gave us feedback and contributed ideas during our team simulation. She actively participated in discussions and told us about what she liked and didn't like about her past experiences in middle school." Another respondent asserted, "They were instrumental in providing a unique point of view in the design of an 'ideal' middle school." Added another, "It helped us to understand what students want to do/see in their homerooms/advisories, which is the basis of our action research project."

An exchange among a team and their consulting student illustrated the collaborative nature of the discussions. The team was designing a transition plan for a grades 6-8 multiage team wanting to welcome rising 5th graders from three feeder elementary schools.

Teacher 1: So we need to plan three information nights.

Teacher 2: Well we could do one information night, like they could all come to
the school but what I was thinking was that we could have three
different trips to the schools.

Teacher 3: Definitely with the 6th graders going.

Teacher 2: And on the one informational, do we want all the kids coming together

that night.

Student: And when the 5th graders meet the 5th graders, what if all the 5th

graders came up to the 6th graders? Because then they could meet

each other, too.

Teacher 3: That's good, too.

Teacher 2:   [Verbalizing as she takes notes] 5th graders come to the 6th graders.

Teacher 3: Right. I think yeah, we're going to kind of do both of those, right?

Cool.

In addition to welcoming unsolicited advice from their student consultant, in a

later exchange the team turned to their consulting student's experience with a move-up

event in her school.

Teacher 2: So the next [transition activity] is like in the spring. And I think

Margaret's an expert on this. Because I really liked your ideas about

how you had your meeting where they came to your school and they –

and everybody sat down. And then they had a mentor. Did you have

like a group meeting ahead of time?

Student: Well, we had a team meeting where the teachers told us what was

happening and they told us what to do to make them feel welcome.

And then they came. We had sort of a team meeting and then we

played like the game.

Teacher 2: So I guess our next step is 6th grade preparation for welcoming the

new students.

Students appreciated the opportunity to discuss effective middle schooling. Describing his consultation on transition planning, one boy remarked, "We've talked a lot about our change from elementary school to middle school. And it was fun telling them what was scary about it, what I liked about it and all that." He added, "We talked about like climate and like what we liked about group work and our students – did we like group work, did we not, and technology…." Others students brought unique perspectives to conversations about establishing and improving teacher advisory programs. One rising 8th grade girl recalled, "I think the first thing I did was I talked to them about like teacher advisories, and we don't have them in our school, and they wanted to see like if we think those were good ideas and stuff." In contrast, a rising 7th grade girl reported sharing her insights into the subtleties of advisory implementation:

> And then we were talking about TA's and advisories. And I really like talking about that because it's kind of an issue in my school, too, because a lot of teachers just they don't really communicate with each other. So some teacher—well, one teacher might be really focused in the morning and he'll say all the announcements and then another teacher won't even pay attention to the students. And that's an issue that we have to face and so I like talking about that because it was just a lot to say.

Overall, students and teachers in the Curriculum and Organization strands expressed appreciation for the genuinely collaborative and productive nature of the consultation.

Described Outcomes from Consultation

Teachers and students described a range of outcomes from their consultation experiences, including hearing about students' lives in school; direct benefits to their

Institute project work; a new appreciation for student voice to improve teaching and learning; and enhanced prospects for consulting with students in their schools.

Hearing about students' school lives. Several teachers emphasized benefitting from the different voices and perspectives students brought to consultations. One teacher found the presence of students made a choice session "a lot more powerful, to get their perspectives and participation." A survey respondent remarked, "The time spent talking was informative and offered insights into what truly matters in school and how this connects with their 'other world lives.'"

Insights into students' lives emerged from different forms of consultation and sometimes tangentially to the purpose at hand. One simulated team turned to their consulting student to help identify a meaningful team name. In addition to fruitful steps toward a team name, however, they also heard about the student's challenging workload, her work ethic, and her rewarding experiences with service learning. When teachers asked their consulting student for words that "reflect our feelings just about middle school and middle level education," the following exchange ensued:

Student: Challenging.

Teacher 1: Challenging. I'm going to jot these down. That's a good one.

Teacher 2: So what's challenging about it?

Student: Probably trying to keep up with all your work. Like still try to do

sports and all that.

Teacher 3: Yeah, so do you play sports?

Student: Yeah. I play softball. I remember I had to have a two-week suspension

for having an "F" but I always try to get that back up with that. So it's

really hard to keep up with homework while trying to play sports. So I

guess it was kind of challenging at the same time, but it was also

Teacher 2: That's a lot going on.

Student: Plus it's challenging in a good way to get a good challenge so you ….

Teacher 3: That's great. It sounds like a really good positive outlook.

When prompted for another word the exchange continued:

Student: Rewarding.

Teacher 3: There you go. When did you feel rewarded?

Student: When you get a question right or you're the only one that knows the

answer to something. Or if when you put a lot of work into homework

and you get an A on it or something like that. It always feels good to

know that you did something right.

Moments later, after the student offered "cooperation" as an additional word, one

of the teachers probed her about the service learning program on her team.

Teacher 2: Do you feel like you're doing things that, like your service learning,

that are meaningful to you?

Student: Oh yes! For service learning we had to do 15 hours of community

service, do a journal log of every time we served, take pictures, and

then at the end of the year, we put it all together on like a board and had

this big night of presentations and all that. We did speeches and all

that. And it was really like rewarding…. We all, like some people

worked at animal shelters, some people worked at, like I worked at

setting up a school store over the summer. And some people would

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babysit. And you could not get paid at all. Because community service is not supposed to be a job. It always felt good after I did an hour or so every day. Yeah, it was really rewarding to know that you helped out your community and didn't ask for anything back.

Teachers in the Curriculum Strand consulted with a panel of students during which students described their perspectives on parent volunteers in the classroom. When asked, "What is it that makes it so that you do not want your parents in the classroom any more?" students replied:

Student 1: I wouldn't mind my parents being in school but I think most people think that their parents are embarrassing so that's why they don't want them. And I think that if the parents weren't there through the whole day, maybe it wouldn't be so bad. I just think people are embarrassed.

Student 2: Well, my mom is embarrassing because she subs for us. And like one time I went to the bathroom and I came back and everybody was like oh, my God and they were looking at my baby pictures. So like that's really ….

Various Teachers: That was cruel…. And weird…. Crossed the line a little bit there….

Student 3: Did you do something that made her do that?

Student 2: No. She just did it. And I'm like, I don't want her to come on any of our field trips because she'll be like, oh, honey, I packed your lunch. And it's like when I was in kindergarten, I was like oh yeah, my mom's here and I'm so fly but like, because like I thought it was so cool to

have your parents, but now I realize that like they're kind of in your

space.

Student 3: The reason I wouldn't want my mom there is because I feel like I'd be

more responsible for my actions and like I'd get in more trouble. And

like, just like, yeah, it's like embarrassing.

Student 4: I think a lot of students and kids change when their parents are around

from going to having the attitude of being fun and disrupting maybe to

the classroom. And then your parents come in and you just kind of

change personalities a lot. So we wouldn't want to do that in front of

our friends.

These exchanges likely contributed to teachers' perceptions that consulting students were frank, honest and insightful about their school lives, serving to round out their existing knowledge of young adolescents and inform their planning for curricular and organizational work of teaching.

Hearing what students want in school. A second prominent theme that emerged from consultations regarded what students want in their schooling experience. Teachers with varying years of experience acknowledged novel insights into what their consultants want in a teacher. In a focus group interview one teacher captured what many other teachers expressed across the data:

What I learned from them was that they want teachers that listen…. They want

teachers to share things about themselves. They want teachers to use humor when

appropriate, and they want to be able to use humor when appropriate; and that

they don't want to be worksheeted to death. They want to interact and they want

to have meaning from the lesson…. And [regarding TA] their most favorite wasn't games. It was interaction and fun through humor or stories or whatever. It was really funny. I thought that they were going to say oh, well, "I like the TA leader who plays the most games." And it was more of, "I like the TA leader that's there consistently. I like the TA leader that shares about themselves and listens to us and interacts." I think consistency was a big thing too.

Another teacher in the focus group added,

You've covered almost everything I wanted to say. But they also want structure, … to know kind of know how things are going to go. But they also want hands on and some creativity and they want some freedom at the same time. So they kind of want both. Best of both worlds. But definitely consistency in adults.

An exchange with the student panel elicited students' thoughts about learning in the community. When asked whether they prefer venturing outside the school to engage community members or having them come into the classroom, students clearly preferred leaving school. As one replied, "I think it would be better to go outside because I don't like going to school with people coming to me. I like going out the school where I can experience everything out of the school." Students also revealed a range of reasons they get excited about school. Several students wanted to see their friends. Other comments included: "I like learning new things and I really love reading;" "I like being with my friends and having physical education;" "Sports and Geography;" "Science;" "To learn those new things, those little facts."

Teachers learned from the panel that one student's ideal classroom is one in

which "we'd be having a lot of fun but at the same time we're learning new things but in different ways than just in textbooks." He added that. "I can picture it like a little bit quiet because my classroom last year was really, really loud and it disrupts my learning." A girl on the panel imagined a classroom that has her friends "that are fun and more wild in the classroom" but also "able to stop when the teachers need you to stop." She explained further, "Because you'd want a fun teacher that kind of goes with the flow of how the students are going, and when it's time to really get them to pay attention, they're able to focus."

One teacher asked about competitive activities "that get people motivated." A boy on the panel replied, "Like if you were memorizing the states and we had to call them out real fast, I wouldn't like that because I can't remember things really fast and I'd always lose, and I don't like losing." Nonetheless, he quickly suggested a more nuanced approach to kinesthetic learning: "maybe if we got out and threw a ball around and I said like the states or said whatever we were learning." A girl on the panel suggested further, "In our classroom, when we were practicing the times tables, we throw a ball around and we each say the times table. And in science, we did a lot of active motion when we were talking about gravity."

In a survey comment, one teacher described her conversations with students about group work in their preferred activities. "They made me aware of issues that impacted them in the classroom which I did not realize for example, not wanting to have a choice choosing partners in a group." She continued,

This particular student preferred to have the teacher assigned groups. In this way he would not have to turn down a friend who would goof off. Several students

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indicated that they preferred working with peers to learn material as opposed to having teacher instruction. I talked with six students and they all indicated that they preferred hands-on type of projects.

As one teacher concluded in a survey comment, "Their insight has helped me to see what middle school students are looking for and want within a school setting." Another added, "It gave us a birds-eye view of what students really need and want in their education."

Benefits to Institute coursework

In addition to helping teachers understand young adolescents and what they want from their middle school, teachers spoke of direct benefits to their Institute projects and coursework. A teacher in the Organization Strand described his consultant's role in the range of assignments including family involvement plans and transition plans. "Whatever we're doing," he pointed out, "they're there." He recalled asking his consultant, "Would you be doing this? Would you be okay to take this survey? Would you feel comfortable doing this?" He further observed, "They're not here today, and we notice it…. She totally added to the group, the dynamics."

Teachers in the Literacy Strand were invited to develop lessons in line with the course concepts, try them out with consulting students, and to debrief with the students afterward. This consultation format struck several teachers as particularly valuable and unusual. As one teacher acknowledged,

I haven't taken a class before that was actually with students so we could apply what we learned immediately in the context of the class. It's usually take this with you, try it out and talk about how you think it went. But even though it was a little nerve wracking like whoa, we're actually going to be teaching students

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tomorrow, I mean it made sense that if we're learning how to teach these concepts that we would get to practice during a class and I'm actually wondering why that doesn't happen more often. But I found that incredibly valuable, particularly to ask like, well, how did that go for you? It isn't something we're typically taught to ask. It's usually our opinion about – well, how do I think the lesson went.

As a result of his debrief with the students, he noted that "there were several things I jotted down, [and] where I teach this lesson again, I would change. [And] that came right from the students."

Other teachers commented on the benefits of consultation to the development of their action research projects. As one stated, "It was great to try out a lesson from my action research project with them. They were engaged and offered valuable feedback that will be used when further developing lessons for the project." Another concluded, "Students help to direct our planning for the upcoming school year. Their honest opinions have guided our action research proposal and helped us to fine-tune and create a solid beginning to our initial literacy unit."

Another teacher wrote in her survey comments,

Consulting with students was critical to my work this week as we developed a project together to implement in our school. It was very necessary for us to have their input throughout our strand to ensure a project was driven through student voice.

Another teacher concurred, "They were the brains behind the project, for suggestions, content and ownership." As another teacher described,

In true democratic fashion, it was the students who came up with our project idea.

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My colleague and I really wanted to start a Gay/Straight Alliance, and while the

kids were pumped about that idea, they led us to do a community service club,

because that was what they truly wanted. It was so encouraging to work with

them and to hear their voice and watch as they took on leadership roles. It was an

awesome experience.

Shift in Voice and Authority

Talk of shifting voice and authority resonated strongly in the transcripts and

survey comments. As evidenced in the comments above, students frequently played

leading roles in project design. They participated as equals in the exchange of ideas.

Teachers acknowledged the important contributions students made to their understanding

of teaching and learning and students relished their role as pedagogues. In particular,

teachers quickly discovered a new appreciation for students' perspectives.

New appreciation for students. Teachers frequently spoke in surprised terms

about students' intellectual and affective abilities demonstrated in the consultations. As

one experienced teacher admitted, "I keep sharing with [my journal] that I felt bad that I

didn't expect it already; I'm very impressed with how open these kids are and how well

spoken they are." Another teacher added, "They are articulate and they're verbal and

they really are interested in this process." Another teacher's comments captured other

frequently shared impressions:

What I was amazed about was their self-confidence. They didn't know us from

Adam and they just came in and seemed so happy to answer us and work with us.

They were poised. If they were a bit shy, they worked off each other.

As an experienced teacher recalled, it took some time—and a student's

reminder—to begin seeing students as capable pedagogues who are ready and willing to collaborate in teaching:

And I said to two [consulting students], "Have you ever been in a position where the teachers asked you to give feedback about another student or how did it work …? I'm looking for ideas on how I can do this." And this young lady just looked at me, and very off the cuff, she wasn't being a smartass or anything, but she said, "You could ask them." You know? … I was thinking well, yeah, … I could ask my own students and not have to ask you guys. I said, "Well, does your teacher do that a lot?" And she said, "No. But I wish they would." And I thought, wow. And this is what we've been talking about, the democracy in the classroom. She nailed it!

Although most teachers also imagined their own students in new roles as consultants in teaching, one teacher expressed some doubts. She acknowledged, "It wasn't just a surface level conversation. It went deeper" and "really seemed to get to the core of who they were and that their interests were." However, she then asserted,

But mostly the kids that I work with in a classroom environment, they don't want to have anything to do with me as a teacher…. They want to be like, "Leave me alone, don't even look at me, I don't want to stand out." And so I was impressed with how [the consulting students] just seemed to be un-tethered by some of those insecurities. Maybe it's because I wasn't their teacher or we weren't their teachers and they were just going to see us for a day or that they weren't around their regular social group.

Teachers were further impressed when they discovered that the consulting

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students were not handpicked as high-flyers. As one teacher discovered, "I really thought that these were the stars…. And then when I heard the background of [the student strand], I thought, wow." The diversity of students contributed to teachers' sense that their own students would be capable of consulting. Another teacher confirmed that students believed the same thing: "They were all in favor of collaboration with teachers and said that they felt that most students would be."

Consulting relationships

Teachers and students frequently referred to the relationships they formed in the course of their consultations. Teachers generally adopted attitudes that contributed to meaningful student participation in conversations and activities. One teacher described her simulated team's relationship with their consulting students, "She was a colleague. We were pretending she was our math teacher so we could have a team." In the course of their work, their student recommended using the presentation program, Prezi, during a strand activity in spite of the fact that none of the adults had ever used the program. Students took note of the teachers' attitudes: "They were really nice and it wasn't awkward or anything," observed one; "They were open minded about all of our ideas and never put us down," another added.

Humanness. Comments frequently cited how consultations revealed a more human side of teachers and students. One teacher discovered, "I learned they have a lot to say. They have great ideas…. And they were really interested in making connections with us." As two teachers discussed this new teacher-student relationship, one concluded, "It works both ways, right? They view you as more human." Another teacher appreciated "how important it is for these students to see us as people not just a

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teacher…."

Student picked up on the same theme in their interviews. One student noticed,
"The teachers felt more like friends because they were very understanding." As students
and teachers in the Curriculum Strand debriefed their experience with consultations, two
boys exchange the following:

Student 1: I think that the teachers that are here are actually very nice. I feel like
I'm not talking to an educator, I guess. I feel like I'm just talking to
someone about things that interest all of us so we can get more of our
views out and stuff.

Student 2: Like [he] said, I don't feel like I'm talking to teachers. I feel like I'm
talking to like one of my friends because sometimes they'll like get into
a conversation and fool around with you, but then they'll still get back
to work.

Student 3: Yeah… Like when you're talking to a teacher like you know they're
your teacher, you're usually more scared and apt to not say that much.
But like since these aren't our actual teachers and we feel comfortable
around them and got to know them and it feels more easy for us to
express what we feel.

Teacher: Do you feel like you could get to that point with your teachers at school
if they came in the first day and were like, let's create this curriculum
together. Do you feel like you could feel that way around them as
well?

Student 1: If I didn't know 'em.

Student 2: Yeah, we already know them so it's kind of scary.

Hearing students' trepidation, adults urged the students to try connecting with their teachers as they had with them, as in the following exchange:

Teacher 1: I'd like [your teachers] to see how excited you are about the fact that you got to participate in planning something with the teacher the kind of, you said it got rid of the teacher/student role where everybody's a student …

Teacher 2: What you have to realize is all your teachers are just like us. We have students just like you and they're just as scared of us as you are of your teachers. But we're all human. …

Student 3: I feel like… Since we were all working together — instead of we just learning from you guys, you've also learn from us a little.

Teachers: A lot. A lot.

Teacher 3: They don't always tell you but there are a lot of times teachers are like, wow.

Listening. The ways in which teachers listened to their consultants resonated strongly with students. "It feels good that they're listening to you," reflected one student. "I thought it was really cool how they listened to all of the ideas and not like just keep [the conversation] to themselves," responded another student. Some students noted the importance of active listening. As one boy explained the importance of taking notes during a consultation:

I know that [the consulting teachers] will listen to me and they will [write] it down. If I had one of my teachers that I wasn't very comfortable around, I

wouldn't think they would put it down. Like I wouldn't think they would care what I said. These teachers [at the Institute] that I didn't know actually cared about what I said…. And like I think if we hear them, then they will hear us back because I think if we respect them, they'll respect us, too…. It's like, if they're talking to us and they have an idea, we would write it down and we would care about it. And I think that would be the same way if we told them something, they would write it down and they would actually care about it.

Teachers also appeared to appreciate the benefits of active listening. As one teacher observed, "We had two [students] who were very talkative and one who was very quiet. But the quiet one began to talk, I think, as she began to feel comfortable with us asking questions and not judging answers." During their lesson consultation, two teachers were very deliberate in acknowledging and soliciting student input through active listening: "I want to read you some of your answers because they were very interesting," said one, while the other concluded the lesson debrief by asking, "Do you guys have any questions for us?"

Students appreciated the opportunity to teach, as well. As one student recognized, "It was fun teaching something for once instead of listening like I was the one that was teaching and they were listening to me. Not I was listening to them. So that was fun." He concluded, "It was definitely different, but I have to admit that I did like it." Another student admitted, "I mean it's kind of cool to kind of tell them what to do instead of letting them boss you around."

Parameters for voice. The dilemmas teachers faced during their Institute week shed further light on the shift in voice and authority from teachers to students. One

teacher struggled with the definition of student voice. After hearing the terms voice and choice used interchangeably in an interview, the interviewer asked, "Do you distinguish between encouraging student voice and giving students choice? Or are they the same things in your mind?" "Hmm," the teacher replied, "I've never really thought about that." Among other facets of her practice that she discussed, she noted, "They got to choose what they're doing for their movement breaks." She added, "A lot of times they get to choose the location that we're going to work, which I think is a little more of a voice instead, maybe, I don't know." Her thinking became clearer in the following passage:

> I don't know. Now I'm really unclear. Like I feel like I have to go and define voice and choice. Well, choice to me is like when you have three novels and we are going to be studying survival unit and you can read *Hatchet* or you can read these three books and this is your choice. And voice is like actually saying, well, we would like to have our period broken up like this and for the first 10 minutes we're going to do this and we know but they still have to do certain things in that period so there's greater choice, which maybe doesn't equal voice.

A consulting student echoed similar confusion between voice and choice. After acknowledging that offering teachers advice "feels good because it feels like they're listening to us," the interviewer asked if she ever interacts as "the consultant or the expert" with teachers at her school. She replied, "Not like one on one, but our teachers will give us choices in class if we start a new project sometimes. Sometimes it's a requirement, but usually they'll give us a couple of choices on what we want to study." Another consulting student, after collaboratively constructing a unit of study in the Curriculum Strand, was quite clear about the difference between voice and choice. "I

like how we did that and how we come together as like five people and figure out want to do—not just the teachers—what we can do. And like what we want to actually learn about." He contrasted the experience in the Curriculum Strand with his Social Studies class the previous year in which students "voted on these specific things [to study], but we didn't choose them. They were already there…. But I don't like doing that. I like making up my own thing with other people and figuring it out."

A second dilemma emerged from a consultation aimed at creating a name for the group's simulated team. A consulting student's passion for the rock band, The Grateful Dead, a passion her parents share, led her to suggest Deadheads as a possible name. Several younger teachers, one of whom also shared a passion for the band, tried to work with her idea, being careful not to reject her suggestion out of hand. Eventually, an older teacher in the group said plainly, "I think Deadhead has a whole lot of connotations that really are middle school not appropriate. Because in our school, the ultimate term for deadhead is drug user. You know? And I just don't think that that's like middle school appropriate." In her debrief with teachers later in the day she shared, "I rained on their parade. Like an old person. Like I know you have to give kids a voice but you also have to give them a framework for what's appropriate."

The subsequent conversation highlighted whether or not teachers and students should be friends, the slippery slope for new teachers wanting to be cool, and the compromises inherent in cultivating student voice while also exuding the strength and values students ultimately need. This discussion spoke to the sometimes subtle challenges that accompany a shift in voice and authority. The dialogue resonated with one of the self-described young and new teachers:

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I was open to the idea of maybe incorporating [The Grateful Dead] into the team

name, but as soon as one of the older educators [objected] … that really sparked

something interesting for me: I want to involve [the student's] voice in the name

of the team but am I compromising something by just overlooking that? And

maybe it's me wanting to incorporate her voice so much that I should have

stopped myself and kind of lost my own judgment there.

Although he continued to wrestle with how the group might have best handled the

incident, he concluded that it "goes miles for me thinking about next year." He

explained,

You know, when this comes up again, when it happens again, now that I've had

that experience—and I think it's a challenge for myself—can I really use that

experience and so oh, wait a minute, I think I've handled this situation before.

The transcripts provided ample evidence that a shift in voice and authority is

central to the consultation experiences at the Institute. Teachers and students acquired a

new appreciation for the role students can play as pedagogues. Their perceptions of each

other shifted from more familiar teacher-students and adult-child roles to ones marked by

humanness and partnership. Students particularly appreciated the shift from being

listeners in teacher-student dynamics to the teachers' conscientious listening during

Institute consultations. But some participants struggled with the concept of voice and

others sought clearer parameters to guide the shifts. The third research question

addressed the practices participants identify as fostering positive experiences with

consultation generally and the productive shifts in voice and authority.

Productive Practices

When teachers and students discussed factors that contributed to successful consultations at the Institute, several themes emerged. They described an immersive experience, one in which the emphasis on students as potential experts on teaching and learning was consistently reinforced from multiple angles, including the Institute schedule and how faculty spoke about students and consultations. Participants also referenced the significance of consulting with strangers, that is, students consulting with teachers whom they had not previously known. And they spoke about the various student-to-teacher ratios in different consulting arrangements.

Immersion into the Institute. Teachers spoke about the impact of the Institute as a whole on the new relational dynamic between teachers and students. As one teacher revealed, "I just really appreciate the tone that was set right from the beginning, the emphasis on community building, which is reflected a lot in … the schedule for our activities for the week. So that's been really great." In a teacher focus group, one teacher observed with regard to the presence of students at the Institute, "I mean you're eating, sleeping, drinking chocolate milk and playing Frisbee with them." Another teacher noted, "It's just incredible how close they've gotten [with adults at the Institute] and how they feel the comfort level of kidding around and being goofy and things like that."

Teachers ascribed the immersive experience with students as collaborators and consultants to a number of factors. From beginning to end, Institute faculty consistently framed for teachers and students the purpose and significance of consultations. At the opening session of the Institute, students were introduced as resident experts on what works for them in middle grades classrooms. The rubric for the action research

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proposals, the culminating product of each teacher's graduate work for the Institute, made it clear that to meet the standard, action plans needed to contain evidence that "student voice is part of the planning and implementation stages" of the action research.

Throughout the week, strand faculty members framed the consultations themselves, including the curriculum, teaming and literacy teaching simulations, as rare opportunities to solicit expert input from students. For instance, prior to a lunch break in the Organization Strand, a strand leader instructed participants to plan for their afternoon consultation:

> So what we just want you to think about as you move back to your teams is just to refer to your reflection from yesterday to anticipate your collaboration time this afternoon. Because the kids will be back from 1:00 to 2:00 this afternoon. And just to be thinking about okay, what do we want to establish with our student partner for the afternoon's work?

Faculty closed consultation sessions with effusive acknowledgement of students' contributions. Said one faculty member,

> "All right, so it's time for the students to go do something else. But I just want to thank the five of you [students]. Because we could not do the work that we did …
> . [teacher applause interrupts]. So thank you, thank you, thank you very much. I'm glad you had fun."

The significance of consultations was reinforced by routine post-consultation debriefs amidst an already packed Institute schedule, sometimes with students only, other times with teachers only, and occasionally with teachers and students together. In a typical introduction to a post-consultation debrief with teachers, a faculty member

introduced the session with the following, setting the tone for the discussion:

> We have this experience at the Institute that not many professional development
> experiences provide. And that is to have students in that role, not just as
> consultants, but really as in collaboration with you. So in each of the strands
> we're using students in a variety of ways, but in all those ways as collaborators.
> And so we wanted you to first think for a minute and then start to kind of debrief
> – what's the value of collaborating with students? What value does that bring to
> you as an educator? What does that bring to your experience here?

In the course of these debriefing sessions, faculty members openly shared their personal histories with consultations and student voice. Several faculty members who are practicing middle school teachers shared their direct experience with extensive student voice in curriculum development and team leadership. Two faculty members from higher education wove their research on student's perceptions of middle school classrooms into strand activities and debrief conversations. As one teacher concluded:

> It all kind of comes together, the kids, going to these different workshops and then
> what we're trying to do for our project and what we're seeing…. It's hard to
> know where it came from, but it's good any way you get it….

Staff highlighted the significance of student consultations as well. For example, a faculty member of the Curriculum Strand offered the following explanation to students about the curriculum design process they had just begun, and the consultations with teachers that would follow later in the day.

> You guys worked this morning on questions and concerns you have about
> yourself and questions and concerns you have about the world…. And you're

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going to be working with the adults in the room to help them think about how

they could create classroom activities and curriculum that is based on your

interests. And I'm not sure if anybody's ever done that before, but you're going

to kind of experience this process with the adults. And you are really the experts.

You're serving as experts here for them. So we value everything you say and

we're really looking forward to working with you today and tomorrow.

In debriefing the two days of curriculum consultations, strand instructors

expressed their hopes for the future and their appreciation for the students' contributions.

"I'm hoping you guys will share with [your teachers] what you did here," said one faculty

member. She continued, "Because that might give them some really great ideas about

how they can do things a little differently when you guys get back in the fall." In a

typical acknowledgement to close a consultation session, her faculty colleague said to the

students, "Let's just give you a round of applause. Thank you very much for your time—

two days, all your insights. Just wonderful." Her colleague added, "We hope you

enjoyed it. It's hard work, so we appreciate the hard work you all are putting in this

summer."

Consultations with strangers. In interviews, focus groups, debriefs and survey

responses, participants spoke to the Institute's unique opportunity for consultations

among teachers and students who had never previously met. Their conclusions about the

benefits of consulting with strangers were mixed. One teacher voiced a common

perception in her survey response:

Often I try to encourage feedback and input from my own students to better my

practice as an educator. However, because the students are connected to me, I

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don't know that they are as straightforward as I would like them to be. Because these students [at the Institute] were not connected to me as their classroom teacher, I believe they were more open and honest about their experiences—this is important.

Another survey response read, "It's great to have students who are not MY students." "They might feel safer," another teacher surmised in an interview. A first year teacher, self-described as "struggling with just being a new teacher" acknowledged in his interview that "there are advantages if they're not my kids that I've had all year. I think it gives them a fresh start and me a fresh start." Another teacher asserted, "I have a feeling—because I was probably one of those kids myself when I was younger—if I sat and had these discussions with my own students, they're going to try to say what they think I want them to say." "These kids," he concluded, "they don't have that filter."

Although some students shared this preference for consulting with strangers, one student offered a more nuanced perspective.

I don't think it would be too terribly different [to consult with my own teachers], but if we were trying to talk about an issue in school and it may have been involved with that teacher it probably would have been a little harder to say it because you don't want to hurt their feelings or something. But besides that, I wouldn't really have a problem saying what I said to them to my other teachers.

Teachers frequently expressed confidence that their students are up to the task of consultations. One teacher noted, "When I've asked my own students the same kinds of questions, they've been very forthcoming." Another teacher cautioned, however, " I think a lot of them are honest enough to tell me what they honestly think, but I think

that's a developmental level that a lot of kids aren't at. They want to please."

Yet others observed that the context of a summer institute, rather than the different relationship, might contribute to the success of consultations. "Maybe the fact that it's summer and I'm a little more light-hearted, just in chill mode. I'm a little more giggly and fooling around and stuff." Another teacher in the Curriculum Strand pointed out,

> I think it would take a lot more time to develop that rapport [with her students at school] and I think that when you go back to your own classroom, they're thinking of so many other things in that moment. Like what's for lunch or who am I sitting next to, I hate that I'm in this class or whatever kind of baggage they bring to it. And it just feels like these kids have left that at the door.

As she then noted that in the context of the Curriculum Strand, students were unusually engaged in the work. "They were interested to talk to us and they were interested in the topic because it's what they had created [from] the questions they had. And we were just kind of delving deeper into those questions." Another teacher observed the benefits of "getting a different perspective" from the diverse group of students describing different schools and practices. She appreciated in particular that "there's hardly any diversity with the adult population [at the Institute], but there's so much diversity with our student population [at the Institute]. And just the amount that we could learn from them because they are so honest."

Student to teacher ratio for consultations. Teachers and students saw the benefits of having more than one student in a consultation. One student noted, "I like to be with another student because when they're talking, I can have time to think." Another

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student also appreciated the chance to think "instead of getting the answer right away." Teachers worried that small consulting groups with only one student may be uncomfortable for the student. A teacher in the Curriculum Strand who spent several days developing curriculum in a group with one student suggested that "having one student and three adults may be a good mix to have sometimes but … I felt like sometimes we were just sucking the life out of her." In her assessment, "there's plusses, that you really get to know a kid, but the minus is that you only get one perspective and one perspective is not enough." Another teacher described the ideal group as "two or three adults, couple of kids." Although he voiced concern over increasing the number of adults to four or five, he added, "The kids I've been with this week I don't think it would have bothered them." Other teachers argued for a higher student to adult ratio, "So instead of having three students and four adults, it was more like you could have two adults and three students or something."

Suggested Refinements

Students were prompted to suggest improvements to the Institute. One student remarked, "Honestly, I think that you guys are doing fine. It's completely fine how you guys are doing it. I really like it. But … because I can't really think of anything, maybe you could put out snacks like strawberries." Other student recommendations emphasized basic needs as well. One student wanted access to a washer and dryer, noting, "Like my towel that I use for the pool is always wet." Another student said, "I think we might need more, for us, free time, because we have it only at night. And I think we should have breaks in between the work." Two girls in separate interviews wanted more physical

activities in the context of their student strand activities but also during their consulting work with teachers. One girl observed,

> Like when we go with our RAs [at the end of the day], that's a lot of fun just to be with each other playing games, whether it be soccer or something like that. And I know a lot of students really like that and that's their favorite part of the day. And if we could try to put that in more with what we're doing now [during a consultation]—but this is great, too.

Another girl suggested, "Maybe in the consulting we could do more like interacting, like physical, like activities." When probed about what physical activity might look like in a consultation, she added, "Like we could just do games I guess. Like—I don't know, but I'm sure we could come up with some."

In interviews and in survey responses, many teachers requested more time with students. Some suggested more time for consultation, such as, "It was amazing how much help the students were able to provide. I would love to see even more time spent with students in the future." Others wanted more time for fun and relaxed time together. As one teacher wondered,

> You know what would be neat is if they maybe joined our [small group teacher meetings] at the end of the day and just did the activities with us. I think that might be just as valuable as interviewing them. I think that might get them to loosen up a little bit, too.

Another teacher imagined extending the practice of student consultations beyond the Institute:

> It would be really great if they came to like different schools and had like little

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panels that they could talk to kids, that kids could talk to them, too. Not just the teachers, because I mean if you want the student voice to be heard, other kids have to see what they're doing. This doesn't come out of the sky.

Implications

This study extends the line of research on student consultation in teacher learning, demonstrating that consultations at a summer institute, between teachers and middle schoolers who don't know each other, were perceived positively by most teachers; repositioned students as educators; and introduced alternatives to traditional teacher-student hierarchies. It raises important questions as well.

Our research raises the possibility that a summer institute model can successfully incorporate student consultations for teacher learning. Across the contexts of panels, team simulations, collaborative curriculum design, and lesson study, teachers observed benefits to their practice and understanding of students. In general, benefits of consultation described by Rudduck (2007) with regard to other settings appear to accrue to consultations at the summer Middle Grades Institute, including,

- a more open perception of young people's capabilities
- the capacity to see the familiar from a different angle
- a readiness to change thinking and practice in the light of these perceptions
- a renewed sense of excitement in teaching
- a practical agenda for improvement
- confidence in the possibility of developing a more partnership-oriented relationship with their students (pp. 599-600).

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Practices at the Institute also appear to align well with the principles for planning consultations suggested by Rudduck and McIntyre (2007), particularly a commitment to hear from students and apply what they say; create conditions in which teachers and students can listen to and learn from each other in new ways; focus on students' experiences of teaching and learning; provide feedback to students about the impact of the consultation; and plan realistically for the time and energy needed for consultations to be effective and enjoyable for participants.

The study suggests that interviewing teachers and students about their consultation experience could help to hone collaborative professional development practices. We infer a number of suggested improvements from this study. Teachers could be better prepared for consultations, such as preparing questions and lines of inquiry ahead of time and reviewing active listening skills, such as taking notes about and restating students' comments. Steps could be taken to make sure teachers are fully aware of the value students placed on being embraced as experts and pedagogues. The Institute might also encourage or facilitate floating cadres of students to act as consultants for nearby schools, perhaps tied to students' curriculum around student leadership and civic engagement. And the Institute organizers could more directly solicit suggestions from students regarding their basic needs during the week, perhaps most important to introduce physical activity into the consultations themselves.

Further study of teachers' and students' experience with consultations may help answer a number of lingering questions. For instance, we want to understand how teachers can reposition their own students and solicit the honest insights and critiques heard from students they didn't know. How might technology increase the diversity,

availability and variety of consultation opportunities? How should the role of young adolescents as teacher educators expand beyond that of consultant? And how can student-teacher consultations be integrated into school-based teacher learning and comprehensive programs for professional development and teacher preparation?

The same period that gave rise to the new paradigm for teacher learning witnessed withering critiques of traditional teacher preparation and the rapid proliferation of alternative credentialing bodies such as Teach for America and Troops to Teachers. Researchers and policymakers are asking, who should do the work of teacher education, and what qualifies them to do such work? This study contributes to a growing body of research that says middle grades students, and their valued insights into teaching and learning, are part of the answer.

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CHAPTER SEVEN: STRATEGIES TO EVALUATE

CLASSROOM OUTCOMES OF STUDENT

CONSULTATION

Previous chapters described the novel challenges teachers face in the rapidly changing landscape of technology in schools. I proposed that teachers could partner with students to examine together how to use technology for young adolescent learning. My colleagues and I described the Middle Grades Institute as a way to introduce teachers to student consultation in coursework about other responsive teaching practices for young adolescents. We reported teachers' and students' primarily positive perceptions of those consultations. We noted outcomes aligned with the literature on student consultations, including the repositioning of students as experts as well as teachers' openness to seeing students as capable partners in the quest for better teaching and learning.

This chapter focuses on what happens after teachers return to their classrooms. In what ways do teachers working to integrate technology consult with students in their own classrooms? Moreover, the study applies an evaluative lens to classroom consultations, proposing a teacher-friendly framework for monitoring the characteristics of student consultation throughout the design and implementation of classroom innovations.

COLLABORATIVE ACTION RESEARCH FOR MIDDLE GRADES IMPROVEMENT

John M. Downes, Penny A. Bishop, Meredith Swallow,
Mark Olofson and Susan Hennessey

Abstract

Technology's rapid evolution applies constant pressure to educational organizations (Johnson, Adams, & Cummins, 2012), suggesting a need to continually reenvision schools for the digital age. Yet educators often struggle to understand the growing chasm between students' out of school and in school technology lives (Buckingham, 2007). This gap is particularly noticeable during the middle grades years, when home technology use increases dramatically (Rideout, Foehr, & Roberts, 2010).

The purpose of this research was to examine the experiences of teachers and students engaged in collaborative action research for middle school improvement in technology-rich settings. We begin by outlining our theoretical framework, emphasizing Fletcher's (2005) Ladder of Student Involvement. We then describe our case study design and methods. Findings are organized by action research components and a discussion of key themes follows. Finally, we consider the implications of this study for action research as a means of student involvement and teacher learning.

Introduction

Technology's rapid evolution applies constant pressure to educational organizations, curricula and pedagogy (Johnson, Adams, & Cummins, 2012), suggesting a need to continually re-envision schools for the digital age. Yet many educators struggle

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to understand the growing chasm between the technology-rich lives students lead out of school and the limited technology most access within school (Buckingham, 2007). This gap is particularly noticeable during the middle grades years, when home technology use increases dramatically (Rideout, Foehr, & Roberts, 2010). What, then, might students teach educators about redefining schools in the 21st century? How might teachers and students work together to re-envision middle grades schools to meet young adolescents' needs and interests? And what processes and structures might promote this important collaboration?

This study explores how middle grades teachers employed two promising approaches to these dilemmas: teacher action research and involving students in school improvement. Drawing on the extensive literatures on action research and student involvement, we sought to critically examine the interplay of action research and student involvement in hopes of informing our ongoing work with hundreds of teachers struggling to develop technology-rich learning communities for young adolescents. The following research questions guided the study:

1. In what capacities are young adolescents involved in the action research process?

2. At which steps in the action research process do teachers seek or value student involvement?

In this paper we begin by outlining the theoretical framework that informed the study. We then describe our case study design and accompanying methods. Next the findings are presented: first in terms of the action research cycle, then regarding perceived outcomes. A discussion of key themes follows. Finally, we consider the

implications of this research, in particular, how a critical typology for student involvement may help teachers examine their action research as well as other efforts to involve student in school change.

Context

Our work with the teachers in this study is situated in ongoing partnerships between our university-based institute and teachers' respective middle schools. The institute, part of the university's department of education, provides intensive professional development (Wei, Darling-Hammond, Andree, Richardson & Orphanos, 2009) to middle schools faculties as they create technology-rich learning environments and opportunities responsive to the nature and needs of young adolescents (Association for Middle Level Education, 2010). These schools must already have in place key facets of effective middle schools, including small, interdisciplinary teaching teams of two to four teachers with whom students spend the bulk of their day. These teachers typically use daily common planning time to collaboratively manage their team, and to varying degrees, their curriculum.

We have found, as have others, that transitioning from low-tech to high-tech classrooms, such as providing each student with an Internet connected device, invites fresh questions and conversations about the purpose and process of schooling. With prompting, teachers frequently adopt new norms, routines and pedagogies for their classrooms. Many teachers quickly learn that their students often have key knowledge about technology and can play new and critical roles in helping technology-rich classrooms run more effectively. We make these conversations an integral part of the professional development and ground them in an understanding of young adolescents,

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including their needs and capacities for autonomy and democratic participation in their educational experience. To develop technology-rich skills, curriculum, and pedagogy, we provide teachers with a variety of institute facilitated strategies including in-service days, individual and team level consultations, workshops, mentoring, and optional graduate level courses in which participants conduct action research.

Conceptual Framework

Two bodies of work particularly informed the implementation and analysis of this research. First, action research was the structure through which we guided teachers' inquiry, as they worked to integrate technology into their pedagogy. Second, the study was based on the premise that students can contribute in authentic ways to school improvement and teacher learning. Therefore the concept of student involvement undergirded the research.

Action Research

This study emerged through our work with educators conducting action research projects as they addressed challenges of technology integration in their classrooms. Action research was not the methodology of this study; rather, teachers were expected to conduct their own action research to receive graduate credit for their work with us. We believe action research helps teachers learn "in and from practice" (Ball & Cohen, 1999) with disciplined inquiry questions that emerge in their work with students (Darling-Hammond, 2008). Action research also provides a structure through which teachers can involve students in school change (Schensul & Berg, 2004; Vassilis, 2009), particularly important in a transition to technology-rich middle schools (Downes & Bishop, 2012). Accordingly, participating teachers applied a cycle of problem posing, designing action,

taking action, collecting data, analyzing data, and reflecting and redefining (Herr &

Anderson, 2005; Kemmis & McTaggart, 2007; Lewin, 1946) as they explored new

instructional strategies and assessed pedagogical methods (see figure 1). We examined

each stage of a participating teacher's action research cycles as a stage in their project

implementation, each with distinct purposes and strategies, and each with opportunities to

meaningfully involve students.
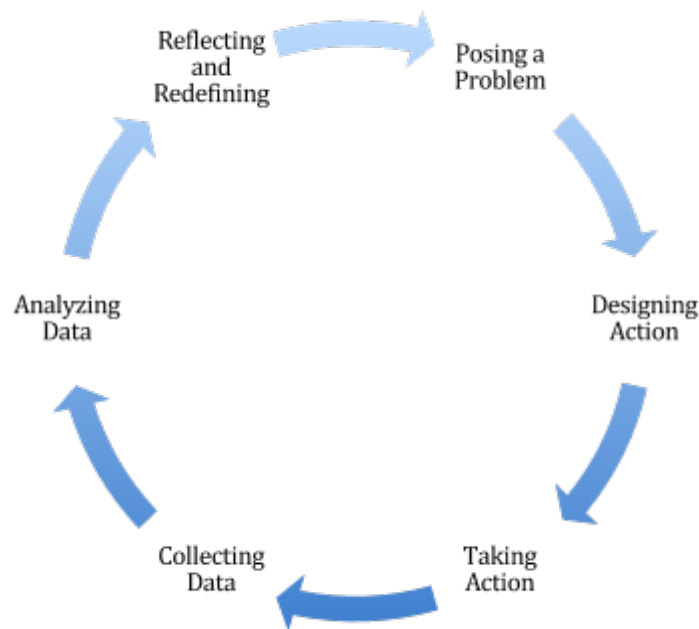
Figure 1. Action research cycle. This figure illustrates the cycle of action research that

guided this study's analysis.

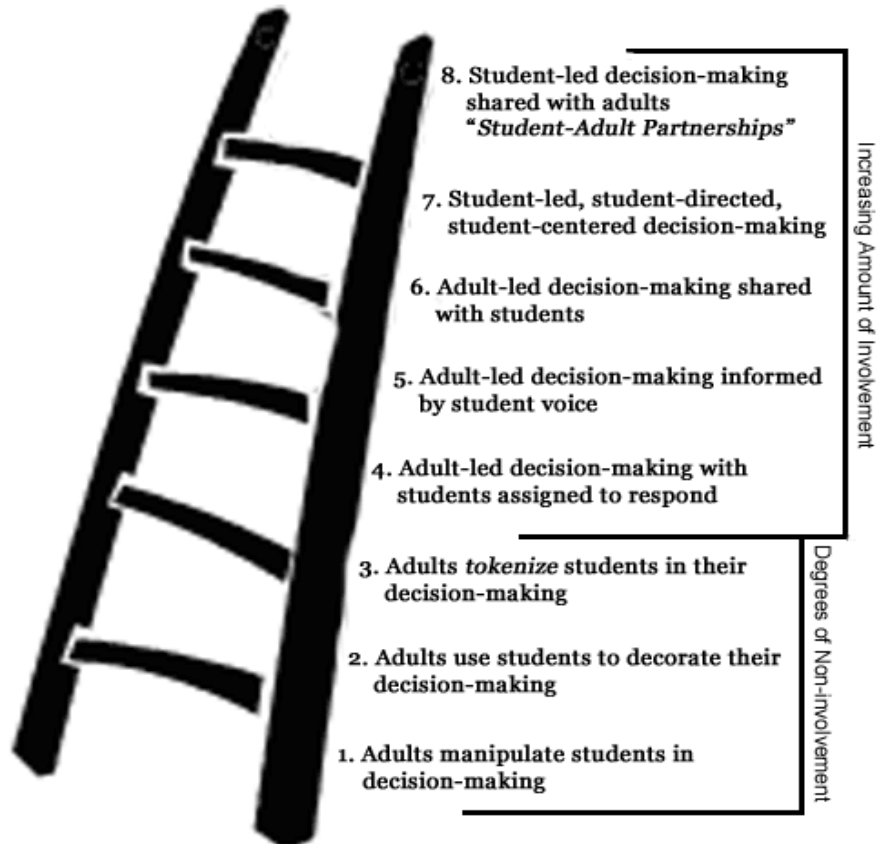**The Opportunity of Student Involvement**

Our orientation to student involvement taps one of several bodies of research into

student voice described by Thiessen (2007): "how students are actively involved in

shaping their own learning opportunities and in the improvement of what happens in

schools" (p. 7). For example, they can play central roles in curriculum design (Beane,

1993; Warwick, 2008), effective teaming (Boyer & Bishop, 2004), school governance (SooHoo, 1993), and teacher learning (Downes, Nagle, & Bishop, 2010). Students benefit affectively and academically from the sense of agency they derive from designing their schooling (Mitra, 2004). For teachers, student involvement can yield a more practical change agenda, enhanced student commitment to learning, a transformed knowledge of students, and more positive teacher-student relationships (Rudduck, 2007). While student involvement reflects a commitment to creating more democratic spaces (Beane, 2005), it invites students and teachers into "liminal positions' beyond their traditional roles (Cook-Sather & Alter, 2011), which can strain teachers' identities and school relationships (Bragg, 2007).

Fletcher's (2005) Ladder of Student Involvement (See Figure 2) informed the implementation of this study and provided the primary perspective for the analysis. It also provided us with a succinct list of key distinguishing characteristics of student involvement that has proved useful in conversations with our partner educators. Based on Hart's (1992) analysis of children's participation in social change, the ladder's rungs provided a typology to assess students' levels of involvement in learning and decision-making. Whereas Lodge (2005), also drawing in part on Hart, outlined six levels of researching with students, we sought an evaluative framework of student involvement in teacher project work more generally, sometimes as co-researchers, but often assuming other roles. The ladder represents a range of ways students are—and can be—meaningfully involved in school change. It is not a ladder to be climbed as a sequential process. Nor should it be construed to mean that more student involvement is necessarily better or that forms of involvement at the higher rungs are appropriate in all

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circumstances. Rather, it "is meant to represent possibilities, not predictions, for growth" (Fletcher, 2005).

The Ladder of Student Involvement in School

8. Student-led decision-making shared with adults *"Student-Adult Partnerships"*

7. Student-led, student-directed, student-centered decision-making

6. Adult-led decision-making shared with students

5. Adult-led decision-making informed by student voice

4. Adult-led decision-making with students assigned to respond

3. Adults *tokenize* students in their decision-making

2. Adults use students to decorate their decision-making

1. Adults manipulate students in decision-making

Increasing Amount of Involvement

Degrees of Non-involvement

Figure 2. Fletcher's (2005) adaptation of Hart's (1992) Ladder of Student Involvement. This figure illustrates the framework used to characterize instances of student involvement in this study.

The top five rungs represent degrees of student involvement, ranging from adult-led decision making, with students acting primarily as respondents (Rung 4), to student-led decision making, with these decisions being shared with adults (Rung 8). The bottom

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three rungs represent degrees of non-involvement. Table 1 presents additional descriptors

for each rung of the Ladder.

Table 1

Fletcher's (2005) Descriptors of Student Involvement

Rung	Characteristic	Descriptor
Degrees of Involvement		
Rung 8	Student-led decision-making shared with adults	Students initiate projects, classes, or activities, and decision-making is shared among students and adults. These projects empower students while at the same time enabling them to access and learn from the life experience and expertise of adults.
Rung 7	Student-led, student-directed, student-centered decision-making	Students initiate and direct a project, class, or activity focused only on student concerns. Adults are involved only in a supportive role.
Rung 6	Adult-led decision-making shared with students	Adults initiate projects, classes, or activities, but the decision-making is shared with students involved.
Rung 5	Adult-led decision-making informed by student voice	Students give advice on projects, classes, or activities designed and run by adults. The students are informed about how their input will be used and the outcomes of the decisions made by adults.
Rung 4	Adult-led decision-making with students	Students are assigned a specific role, told about how, and taught why they are being involved.

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assigned to respond.		
Degrees of Non-Involvement		
Rung 3	Tokenism	Students appear to be given a voice, but in fact have little or no choice about what they do or how they participate.
Rung 2	Decoration	Students are used to help or bolster a cause in a relatively indirect way; adults do not pretend that the cause is inspired by students. Adults determine causes, and adults make all decisions.
Rung 1	Manipulation	Adults use students to support causes by pretending that those causes are inspired by students.

Depending on the purposes pursued and the roles students are offered, student involvement can promote quality control, compliance, useful information or active community dialog (Lodge 2005). Just because students are involved in designing their schooling does not mean their voices are being heard or that their status within the school is changed (Fielding, 2001; Rudduck, 2007). Fielding (2006) observed that students' participation could contribute to efficient and effective learning organizations that nonetheless marginalize students as persons. Alternatively, their involvement can inform communities that respond to their affective needs without producing an organization that serves their needs as learners. Instead, we seek with our teachers what Fielding called a person-centered learning community, one in which broad student engagement serves

moral, interpersonal, and instrumental ends, in which the "functional is used for the sake of the personal" (Fielding, 2006). As Bahou (2012) suggested, attention to the power relationships among teachers and students within such a community is a critical compliment to using Hart's ladder of youth participation; we concur with regard to Fletcher's ladder as well. Accordingly, the teachers we worked with in this study employed important scaffolding for meaningful student involvement: small learning communities focused on caring relationships; and curriculum, authentic learning opportunities, and pedagogy designed to be responsive to students' needs and interests (Fielding, 2006; Smyth 2007).

With our participating teachers working in such promising contexts, we saw an opportunity to tease out how they involved students in their project work. The action research cycle provided a temporal as well as functional framework; the Ladder of Student Involvement helped characterize the roles and behaviors of students that teachers involved in the work. Integrated as a matrix, we examined student involvement in various stages of project development and implementation. We aimed for an analytic framework of sufficient critical value to serve researchers as well as teachers as they engage students day-to-day in learning communities and school change. In so doing, we sought to advance the cause of bringing the potential benefits of student involvement from the periphery into the heart of pedagogical practice (Thompson, 2012; Frost & Roberts 2011) as teachers grapple with technological imperatives for change.

Methods

Participants

We employed a multi-site, collective case study design (Yin, 2009; Stake, 1995). Working with 90 teachers from 10 schools across Vermont, we facilitated 44 action research projects among young adolescents and their teachers to foster teacher learning about student-centered pedagogy and technology integration. Applying purposeful, intensity sampling, we identified six of these projects to study. Intensity sampling enables researchers to select "information-rich cases' that "manifest the phenomenon of interest intensely (but not extremely)" (Patton, 1990, p.171). Because our institute work supports effective teaching practices through technology integration, innovation, and student-centered learning, we focused our research on technology-rich classrooms in order to better understand learning partnerships between and among students enabled through technology integration. Twelve teachers and 241 students participated in these six projects. Of these, nine teachers and 22 students from five schools participated in interviews or focus groups. These schools varied in demographics (See Table 2). Numbers have been rounded to preserve confidentiality.

Table 2

School and Case Level Data

Case Title	School Config-uration	% FRL	% IEP	% ELL	# Students in School	Student Participants	Adult Participants
Flipped Classroom Project	K-6	50	14	*	120	40 5th-6th graders	1 Teacher
Investi-gating Outcomes Project	6-8	25	11	*	450	60 6th-8th graders	3 Team Teachers
iPad Project	5-8	50	15	*	300	4 7th-8th graders	4 Student Services Professionals
Personal Devices Project	5-8	50	15	*	300	40 5th-8th graders	1 Teacher
Leadership Council Project	6-8	80	18	20	150	12 6th-8th graders	2 Team Teachers
Twitter Project	7-8	30	**	*	150	85 8th graders	1 Teacher
Note. * = <1% ** = data not available							

Action Research Projects

- **Flipped Classroom Project.** One science teacher on this multi-aged team of 40 fifth and sixth graders flipped her science classroom so that students acquired knowledge through web-based videos viewed at home in order to provide more class time for inquiry-based learning.

- **Investigating Outcomes Project.** The teachers and students used a participatory action research model to investigate the outcomes of their student-centered, technology rich learning environment. Teachers and students focused their action research on how increased technology impacted all learners and how 1:1 computing impacted differentiated instruction.

- **iPad Project**. A special educator and colleagues explored using iPad tablets to increase communication across special education services and examined the iPads' potential for increasing student engagement.

- **Personal Devices Project.** A small group of middle schoolers in a daily leadership class identified the use of personal handheld devices, such as smart phones and iPods, as a source of tension between teachers and students. They conducted action research on this issue, resulting in a change in school policy.

- **Leadership Council Project.** This multiage team was created for students who were disengaged from learning when placed on other teams in their middle school. The teachers wanted the team's 12 students to become more involved in their schooling experience and constructed a student leadership council as a component of their action research.

- **Twitter Project.** This 8th grade science teacher was interested in using social media in the classroom. He and his students explored how Twitter could increase exposure to science-related ideas and experts, encourage peer-to-peer sharing, and promote connections between science and students' lives.

Data Collection

As a research team, we conducted seven focus groups and five individual interviews with teachers and students. All were commonly structured but open-ended, as "in collective or multiple case studies, data collection needs to be flexible enough to allow a detailed description of each individual case to be developed" (Crowe, Cresswell, Robertson, Huby, Avery & Sheikh, 2011). All recordings were transcribed verbatim, totaling 11.5 hours of interviews yielding 212 pages of transcripts. We also gathered web-based resources and documents from participants' action research, including action research planning websites, research instruments, and data. These artifacts verified or called into question emerging findings; however the primary focus of subsequent analysis centered on interview and focus group transcripts.

Data Analysis

Our two frameworks—the Ladder of Student Involvement and the Action Research Cycle—provided the focused, dual coding structure for analysis. Using HyperRESEARCH, a qualitative analysis software (ResearchWare Inc., 2013), three researchers on our team first analyzed the data independently by applying focused coding to all transcripts. We coded interview transcripts for each of the six projects to identify on which rung of the Ladder of Student Involvement teachers and students were operating at each stage of their action research projects. We adopted the term "teacher-driven" to

describe activities at rungs 1-3, in which teachers neither involved students nor claimed to try to involve students. Within the context of the professional development, teachers were provided with the Ladder of Student Involvement framework as a suggestion for understanding different ways students could be involved in class or school decision making processes. There was no requirement to use the Ladder within the projects; teachers independently chose whether or not to structure their projects using the framework. In order to maintain robustness of data, we gathered to ascertain how consistently we were applying the pre-determined codes. Our research team chose interpretive convergence, by way of merging data, group discussion, and consensus, as the agreement goal (Harry, Sturges, & Klingner, 2005). Our team met repeatedly throughout the coding process to hone our application of key codes, particularly those associated with the Ladder of Student Involvement. Throughout these conversations we shared extensive context about individual cases, enhancing our understanding of context subtleties within and between cases. As analysis and writing proceeded, the researcher most familiar with each case checked the validity of interpretations.

Limitations

Several limitations of this study should be noted. First, while a qualitative approach was well suited to the descriptive and analytical purposes of this research, the findings cannot be generalized to other settings or populations. Second, the six cases took place in the predominantly White state of Vermont and the sample reflected a relatively low level of racial/ethnic diversity. The site with the highest degree of cultural and linguistic diversity in the sample was approximately 50% White and was comprised of 20% English Language Learners. Third, focused coding served this study's purpose well

but did not allow for the more emergent findings that might arise from other forms of coding, such as open and/or axial (Patton, 1990). Fourth, in most sites we did not conduct observations, which has potential to be a helpful form of triangulation. Finally, while our ongoing relationships with the participating teachers provided a unique opportunity to support daily classroom activities and provided helpful insider knowledge, they also may have complicated teacher response and data interpretation. To combat potential bias in the data, two researchers who were not involved with the teachers' professional development posed continuous questions about the coding, provided external analysis of the data, and reported on findings.

Findings

Posing a Problem

In this stage of the research cycle, participating teachers tended to take the lead while minimizing the types of and places for student involvement. Teachers purposefully identified issues to be addressed, absent of student involvement. For example, in the Flipped Classroom Project, the teacher identified the goal "of the kids being able to access content at home and then be better able in the classroom to do inquiry and to do projects and also to differentiate." She established the goals of differentiation and inquiry without consulting students.

Similarly, another teacher described creating the Student Leadership Council to get students more involved in decision making about curriculum, pedagogy and team governance "to develop learning experiences for my students that they truly could engage in and felt more connected to." Here again problem identification happened independent of student involvement. As one teacher explained, students "don't say 'I want to be part

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of team governance.'" She reached the conclusion based on her interpretation of student behavior. Regarding that behavior, one student reported, "Teachers kind of thought it was a problem. I don't know if other students really noticed it, though." Even though the council created an avenue for student involvement, teachers identified the problems it was designed to address.

Not all problems were posed solely by teachers. Students helped identify project themes in The Investigating Outcomes Project. One student explained, "We make posters that basically advertise ideas to all our other classmates as project themes. And then we all vote on the project themes, like which ones do we want to have as a project theme." However, the student indicated that this process was still "directed by the teachers. I mean, we can't just go and do something random." Adults mediated student-driven decision making by creating, implementing and monitoring a process through which students ultimately determined project themes.

An exception to the adult-driven posing of problems occurred in the Personal Devices Project, where the teacher and the student leadership class shared in the process. Their decision to create a new policy for personal electronic devices was raised "kind of jointly," the teacher explained, continuing, "some of the kids in student leadership had been talking about it and I brought it up and said, 'okay, do you want to work on this?' And they did."

Designing Action

In the next stage of the research cycle, student involvement was more prominent. Although some projects still indicated a teacher-driven model, many cases showed it was more common for students to play a bigger role in designing the action. Often students

were able to contribute to designing action in spaces created by teachers. For example, students involved in the Leadership Council project were able to contribute to action design within the teacher-created space of the council. Similarly, the special educator in the iPad Project explained,

> My very first task with them was to let them explore the iPad and then come back with apps that they wanted to try…. So I had made like a little inquiry for them that said, 'What topic do I want to research? What do I want an app to look like?'

Students in other projects designed various policy action plans for their respective schools. Students in the Personal Devices Project described building on the work of students from a prior leadership class that had developed a zoned approach to where personal devices could be used in the school:

> They're the ones who kind of put it together and we're the ones who put the finishing touches and worked all the kinks out…we've been working on being able to do this for a couple of years now. They gave us the outline. But it was like – we kind of trashed the entire outline. We didn't agree with it…. We added two more zones because we felt like that wasn't enough. So we gave a more structured, learning-based zone and a more structured green zone. And changed the red zone.

> On the Leadership Council Project, students worked to create a new technology policy. They indicated that the new approach to using cell phones in school materialized through teacher-student collaboration. When asked if the new rule had been determined exclusively by students, one student responded, "Kinda both, teachers and students." This level of joint participation demonstrated a shared decision-making process.

Still, there were examples of lower student involvement in this stage as well. The teacher in the Flipped Classroom project decided on that action by a teacher-directed path: "I went to a presentation by some science teachers who had flipped a classroom. And I thought it was an interesting pedagogical thing so I thought I'd give it a whirl." Additionally, although students in the Investigating Outcomes Project voted on student-identified project themes, one student noted that, "Once we've voted on a project theme, the teachers take the project theme and by themselves make a list of various project choices." This description illustrated that student-posed problems could feed into teacher-directed project design that was informed by student voice.

Taking Action

In the taking action stage, we found that in many cases, although students were involved in decision-making, their involvement was often constructed and assigned by the teacher. For example, one teacher described the explicit expectations she gave her students: "I [said], 'This is the expectation. You're going to be watching videos at home. Here's how I want you to go about looking at it. Here's vocabulary. Here's the note taking.'" Student dependency on this high level of teacher driven decision-making became apparent during the student interviews. Students relied on the videos for instruction and did not identify a role they might play in addressing any difficulties they might encounter with the material. "I think (the teacher) does a really good job of trying to make sure that every word in that video, that every difficult word, it has an explanation so we can get more of an idea of what we're doing." Similarly, in the iPad project, the teacher initially structured the ways in which students contributed to software purchasing decisions.

However, some projects indicated a high level of student involvement in decision-making at this stage. In the Investigating Outcomes Project, one student described his teachers in a supporting role during the grant writing process to acquire netbooks and other support to launch 1:1 computing on the team:

> So there was 21 paragraphs and it was going – every person [student] had to go through and read it and edit and that took a long time… She [the teacher] just stood by and made sure we were doing everything right…she just made sure all our writing was grammared [sic] right.

Students in the Personal Devices Project also played a prominent role in taking action, as they piloted their zoned use policy, explained the new policy in student-led presentations to each classroom and marked the zones with posters they created and placed throughout the building.

Collecting Data

Student involvement at this stage was generally rather low; students primarily served as sources of data. Teachers usually designed the definition and collection of data, although students did help design the content and collection of data in some projects.

The teacher-centered data collection occurred with varied levels of transparency. For example, in an effort to track one student's independent learning time in the iPad Project, the teacher noted that she and her colleagues "had to keep track of [the student's] independence time and her non-independence time." This adult-driven approach left the student unaware of and apart from the design and implementation of data collection. In contrast, the Flipped Classroom Project teacher openly assigned her students the role of respondents to her online survey and feedback forum, explaining to her students, "This is

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what we're doing. I'm happy to have any thoughts. What's your thinking on this?" Although she stated that, "They really didn't know what I was talking about," students nonetheless recalled in their interview the scale she used in her survey as well as the timing of the pre- and post surveys. In the Twitter Project, the teacher elicited feedback from his students by using a T chart to ask, "What's working and [what] do you enjoy? ... What have you found challenging or unexpected about using Twitter?" By asking students for advice on this adult-driven project, the teacher found, "Kids give you what they're thinking. I hope they felt like…the only thing we wanted was honesty…and they gave us a lot of good feedback about what was working and what wasn't."

In contrast, students in the Personal Devices project designed and distributed a survey of their own. They collected data not only from other students but also from teachers and used the information to make decisions. Using the survey instruments expanded student—and teacher—input into the project. Additionally, administration regularly provided these students with summaries of school-wide discipline data. These data, while designed and collected by adults, allowed the students to more fully understand the effects of the project on discipline referrals.

Analyzing Data

For most projects, student involvement in analyzing the data generally mirrored their degree of involvement in the data collection stage. For example, the teacher completing the iPad Project revealed that, "I never even told them that I was doing a project…I just presented them the technology and we worked through it." When conducting student interviews she discovered, "The two kids that recognized that there were connections certainly clued into the fact that, oh, there was something going on,"

but she did not consider partnering with them to analyze these connections. Likewise, in the Flipped Classroom Project, the teacher found positive survey results in her evaluation, stating, "One of the things that I was very pleased with both the parents and the kids was that it was thoughtful." However, she did not share the results or involve students in analysis.

In the Personal Devices Project, as they had with data collection, the students adopted an active role in data analysis, with teachers playing more of a supportive role. The data on discipline referrals made available to students by school administrators provided rich fodder for analysis. One student recalled, 'so we looked at the data on that and actually, during the week of the pilot, our data went down. Like it went from 30 [discipline referrals] a week and then it went down to 15." Additionally, due to the student and teacher surveys, students were able to analyze "a lot of data from a lot of different sources. And it showed us that we had some places that needed improvement."

The Twitter project provided an exception to the mirroring trend, as the teacher "did share the data with the kids," informing them of the results and eliciting advice. He first explicitly shared his objectives for using Twitter in his science classroom with his students, and then shared the feedback.

> Then we had discussions around why and how is that working… to try to have those conversations with kids and talk about...[what] the implications are when you join a community of several hundred million people and it involves people from all throughout the world and it tries to validate and recognize free speech. How do you make sense of all of this? So we tried to get their feedback and have discussions to make them comfortable and ourselves honestly feel comfortable in

using it.

Drawn from his data and these conversations, he concluded, "85 to 95 percent said they either agreed or strongly agreed that Twitter enabled them to realize those objectives. And so that led me to believe that it was successful." Including student input at this stage allowed for a different type of analysis, and affected the decision-making around the project.

Reflecting and Redefining

Although many students we interviewed reflected thoughtfully on these projects, student involvement in this stage of action research was minimal in most of the six cases. .Reflecting upon her Flipped Classroom Project, the teacher concluded, "I think I'll continue to use the videos but as a support rather than completely flipping the classroom," since "it's good to have the resource of the videos for the kids because it's just a different way to access the information." She summarized:

> The level of understanding…that they came with wasn't where I wanted it to be so I ended up continuing to do instruction [on the video content]…but the idea of then freeing up time in the classroom to do more scientific inquiry or to differentiate (was not met).

Although she stated, "Whenever I've done anything with students, just talking with them, their thoughts, you get a lot out of them," she did not include them in this reflective stage of action research. The students, however, were nonetheless thoughtful in their reflections about flipping and differentiation. One observed,

> It's good because then when we get to class, we can just start right up. We don't have to worry about watching it altogether and stopping and take notes. Because

sometimes people are slower at taking notes. So then you can do it at your own speed at home…you can just keep on learning and they don't have to be like, okay, so this is what you do here.

In the Twitter Project, the teacher identified explicit goals during the action research cycle. He wanted to "have embedded digital literacy and digital citizenship opportunities that are authentic in the classroom as we use this tool." In addition, he hoped that "modeling [Twitter] as a way to learn about and communicate science might make some kids realize it's more versatile than they initially thought. And in doing so, maybe their parents or maybe other teachers would be influenced." This teacher, absent of student involvement in redefining the next steps, determined he would use Twitter the following year, stating, "I've just scratched the surface a little of what this project could become and the different ways it could be used." In contrast, students in the Personal Device Project were fully involved at this final stage. They observed that "some teachers were like, 'we need more structure; there needs to be like different levels of technology zones.'" And so we took that into account and we really changed it all." This shared decision-making model led to a clarification and redefinition of the technology zones, which, after further trial through the remainder of the school year, became official policy on personal "Use of Electronic Devices" in the school's Student Parent Handbook.

Discussion

Upon analysis and reflection, we identified three themes regarding the nexus of action research, student involvement and teacher learning: 1) the same project often exhibited different levels of student involvement at different stages of the research cycle; 2) teacher facilitation was critical to cultivating student involvement; and 3) instances of

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low student involvement were frequently accompanied by missed opportunities to improve the action research.

Different Rungs at Different Stages

Projects often exhibited different degrees of student involvement at different stages of action research, even within the same project. Teachers drove the initiation of most projects. For example, teachers in the Leadership Council Project and the Personal Devices Project decided to establish student leadership opportunities through the leadership council and the leadership class. Thereafter, however, both projects assumed a consistently student-directed path, with the ongoing support and facilitation from adults. The Twitter, Flipped Classroom and iPad projects were also initiated by teachers but then pursued markedly varied paths: the Twitter Project made effective use of a pilot group of students; in the iPad Project, students played a role in app selection and evaluation but otherwise it remained largely adult-driven; and in the Flipped Classroom Project student involvement was limited to responses to surveys, forum prompts, and informal interviews conducted by the teacher.

We were encouraged that student involvement in action research is not an all or nothing proposition but noticed that collaborative structures may be important for student involvement at any stage. Two projects, for instance, were hatched during a summer institute when teachers had, on the one hand, creative time in a facilitated environment that emphasized action research and student involvement.On the other hand, although the institute encourages teachers to bring their own students—and some do—the teachers in these two projects did not have access to their own students as potential co-developers during the week. The Flipped Classroom project emphasized techniques for soliciting

student feedback but not broader student involvement in the flipping experiment or in future projects. In the other, teachers designed a student leadership council that placed students at the heart of the team's ongoing problem posing, implementations and evaluations for the long term. The Twitter Project's pilot team was an example of a temporary structure that enabled different levels of student involvement at various stages of action research. The teachers and students involved in the Investigating Outcomes Project used longstanding practices to negotiate curriculum, modeling a sustained commitment to student involvement readily applied to action research.

It was in the context of these structures that we heard teachers and students describe well-established routines for student involvement such as one teacher's mention of a "standing practice …, if [students] feel there's something that they want to bring up that would make the school better for them that they should feel free to do that."

Facilitation and the Rungs

With appropriate structures in place, the effectiveness of student involvement may hinge on effective facilitation. The special educator facilitated student involvement in the selection of iPad apps by designing "a little inquiry for them that said, "What topic do I want to research? What do I want an app to look like?'" Another teacher described a routine whereby students regularly had access to school behavior data: "And the students design sometimes a behavioral challenge for the school that relates to what they see in the data." Routinely sharing school data with students likely facilitated higher-level problem solving, signaled respect for students' ability to grapple with real and complex data, and institutionalized data sharing with students to improve schooling.

Students at several sites portrayed their teachers' role as deferential to student-driven discourse and decision-making. Students in the Personal Device Project described their teacher as "like a facilitator." Another elaborated, "She's the one moving us along if we get stuck. She helps us along, but we're the ones who were mainly coming up with it." A student in the Student Leadership Council described the teachers' role similarly,

> Most of the time it's just like teachers come to the people who are on the leadership council and say, "Do you want to talk about this during it? Because I think it could be a good idea to talk about." Or … like asking what we think we should be talking about during that time.

However, teachers' deferential facilitation sometimes came with risks. As one teacher recalled, "[T]here were a couple of occasions where both [of the teachers] would try to steer them in the direction of more [student-directed curriculum] and it always seemed to come back more to the team governance." The teachers' sincere interest in developing curriculum and pedagogy with their students—arguably a more substantial role than determining technology policies—was thwarted by students' overriding interest in team governance and policy making, through which they could focus primarily on their immediate quality of life concerns.

Despite their consensus that students should be leading decision making, both students and teachers in the Student Leadership Council also acknowledged ongoing tensions associated with their open and often contentious dialogue about policy issues. As one student described it,

> It was like back-and-forth arguing about like how does this – how do hats make it so we can't learn? How does hats make it so we can learn? Just a back-and-forth

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conversation that went on for I think three meetings and then she let us wear hats. And then soon came on music and then the same thing happened there. And then electronic devices. And just keep going.

Perhaps the "back-and-forth arguing" is the "back-and-forth conversation" of truly shared decision making, cultivated from the beginning of the year when, as one teacher described, "We modeled right away, the very first day of school, we established community agreements in our classroom and what if's, and had really good class-wide discussions, very similar to what we have in our leadership council."

Missed Opportunities

The frustrations of projects with low student involvement may have been alleviated had students played more central roles in the action research. The teacher in the Flipped Classroom Project shared her frustration that the project failed to free up more time for inquiry learning in class.

But they're still learning about what inquiry really looks like. So that still really needs to be taught… but the level of understanding that they came with wasn't where I wanted it to be so I ended up continuing to do instruction.

The teacher could have posed the challenge to her students by asking, "How can we get everyone up to speed with basic content and concept knowledge so more class time can be dedicated to inquiry?" Students had definite ideas about this. In interviews, they spoke in compelling terms about the need for differentiation, for instance, "Because like sometimes, say in science, like sometimes other kids like science more than others, so they like know more about it. And then like you're getting taught something that you already know." Another student observed,

I think there should be at least two teachers in there for science so that you can have separate groups for like the ones that don't understand it as well and then the ones that do understand it as well so we can get all on the same track.

Students also suggested what they would do with the project's survey data if they had the chance. One explained:

I would look at all the answers first and see what people think in common and what people have to say and get together with some of the teachers and say, "okay, this is what most of the students think, how can we fix this?" and find a way to fix it.

Another student elaborated, "Like you look at the questions and then you look at the answers. And sometimes like it'll have a percentage of people … then you can kind of get an idea of what most people think." Yet another added, "If I was a teacher, I'd take all the suggestions into consideration, then go over it with other teachers to see what they think. Then whatever one had the most suggestions, … I'd most likely go with that."

The teacher voiced considerable doubt about students' ability to participate in action research, stating, "I would love to see that done successfully at this grade level. Because I don't know how it would work and I don't know if it's just developmental." She noted that she was working with a behaviorally challenging class of students. She yearned "to see how it could be set up to get them to be more thoughtful about the whole process." Her students' comments suggested that they have key abilities for constructive involvement in their teacher's pedagogical innovations. Indeed, it seems plausible that teachers' innovations may prove more challenging when students are marginalized from the problem posing, analyzing, and reflecting stages of the research.

Conclusion and Implications

The findings from this study have several implications for our ongoing work and for others pursuing technology integration, designing teacher learning opportunities, and advocating for greater student involvement in the improvement of the middle grades.

Action Research for Teachers' Professional Growth

Teachers' past experiences with action research varied greatly. One teacher shared, "This summer was my first time doing action research and I was, like, lost," whereas another reported having just finished "a pretty heavy duty action research project for a graduate program." Two participants who trained at the doctoral level reported being particularly comfortable framing questions, managing data collection and analysis, and looking for themes. One asserted that her "doctoral program… helped me be more patient about sort of looking for opportunities that related to more of a democratic approach whenever possible [and] helped me recognize those better."

Despite the varied backgrounds and experiences with action research, teachers were universally enthusiastic about action research as a strategy for growing professionally and changing practice. They noted especially the role action research can play as teachers take on the challenges of technology integration. As one teacher said,

> So I think that the action research really framed – reframed how I use technology with kids…it's the perfect vehicle for integrating technology because it gets you away from just being stagnant with, here's what I know…it's about new learning…I don't need to have the answer for you...the fact that the learning is going back and forth between me and kids is huge.

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Another teacher added that action research "forces you to do the reflection and not just do the work."

One teacher pointed out how using action research as a structure for faculty-wide growth, particularly when focused on technology integration, made the questioning of teacher practice more palatable and provided safer entry points into tougher conversations about personal practice. "[T]echnology is not the point, of course," another teacher explained, "but it's something that we can talk about instead of the point sometimes. And so in doing that, you can reduce the anxiety." Collaboration with colleagues who were also engaged in action research helped, "Because the excitement from them kept me going," and "we felt that we were collaborating and moving forward together as a group."

While enthusiastic about action research, teachers noted an array of obstacles including a lack of time to collaborate, the pressure of standardized assessments, competing school agendas, and struggles with the stages of action research, such as developing a question and collecting and analyzing data. But teachers were also quick to offer suggestions. They recommended routine follow up emails and meetings with professors or mentors to promote ongoing progress and troubleshooting of the process. And the teachers pointed to participation in summer institutes as important for providing the time and setting the stage for their research. In spite of the challenges, teachers generally preferred action research to traditional professional development models, leading one to state, "[The] action research model could be just the system that's in place for professional development. Period. … Maybe it's just really embracing action research more as a model for improving a whole school…."

The results of this study reinforce our belief as professional development providers that action research can offer a helpful structure for embedded teacher learning. Each stage of the action research cycle became a chance to engage teachers in critical examinations of their work and provide feedback and resources to meet the unique demands of each stage. The action research cycle also presented us, as researchers, with distinct contexts for investigating student involvement in classroom change, such as asking questions about the classroom, imagining and implementing improvements, and critically evaluating the outcomes. As we discovered, student involvement differed substantially from stage to stage within most of the projects, indicating that examining each stage separately provided an illuminating framework in this study.

Student Involvement in Action Research

Teachers' enthusiasm for action research extended to involving students. "[T]o me it's a no brainer to have the students be part of that," one teacher argued. Another teacher added, "I think we need to be more transparent about the work that we're doing, what we're curious about and then have [the students] help us answer those questions." Students and teachers we interviewed pointed to examples of student involvement in all stages of the action research cycle, manifesting all rungs of the Ladder of Involvement. The examples suggest that examining the stages of action research with the Ladder of Involvement can shed critical light on the ways in which teachers are pursuing their commitment to involving students in classroom change. They demonstrate how meaningful and ambitious student involvement can help teachers navigate the novel and rapidly shifting landscape of technology integration.

This study suggests, however, that even teachers committed to promoting student voice may not translate their disposition into effective students involvement in action research. Facilitation skills matter. As students contrasted the facilitation skills of their regular teacher and the occasional substitute teachers of their leadership class, one student stated plainly, "We kind of need [the regular teacher] to help guide us through." Indeed, our interviews suggest that facilitation may play a key role in the effectiveness, and perhaps the degree, of student involvement in action research, and that teachers as well as students may need help in developing their facilitation skills. Committing to action research as a norm in school improvement, as suggested by one participant, may help develop the confidence and skills teachers need to effectively involve students in the work of technology integration. As Fletcher (2005) suggested in his description of shared decision-making, students can flourish in an empowering context that nonetheless provides ample opportunity for adults to model the nuts and bolts of democratic life, including deep facilitation skills. User-friendly resources are available to help teachers— and students—develop these skills (e.g., Fletcher 2011). Action research may provide a coherent and supportive framework for facilitation to be applied and practiced.

Teachers who successfully involved students also relied on structures such as a student leadership council, leadership class, collaborative curriculum process, or participatory action research. And these structures were supported by norms and routines, such as monthly sharing of school behavior data, transparent note taking, and standard practices for collaborative decision-making. Together, these structures and routines reflect and reinforce practices to promote student involvement. Several of the projects in our sample took place in multiage or looping classrooms, in which the lead teachers had

two- or three-year relationships with students, a reasonable timeline for developing robust

structures, routines and facilitation skills in collaboration with students. And particularly

in multi-age contexts, older students can play leading roles in the transmission and

continuing evolution of student involvement in action research. Our findings reflect

Fielding's (2001) observation that structures to support student involvement, and the

routines that sustain them, are fundamental to meaningful student involvement in change

initiatives, perhaps essential building blocks of Fielding's person-centered learning

community.

As facilitators of professional development, we are convinced that action research

is a powerful model of teacher learning and classroom change, particularly in light of the

rapid evolution of educational technology and its impact on classrooms and pedagogy.

We are also committed to promoting meaningful student involvement in the design and

workings of school, for its functional utility and to honor young adolescents as persons in

a democratic society. Yet the considerable variability, and in some cases paucity, of

student involvement at critical stages of our teachers' projects gives us pause. It

highlights once again that student involvement—or non-involvement—in school change

can be highly nuanced. As we suspected, we need accessible and critical tools to scaffold

our conversations with teachers about the quality of student involvement in their work.

Our teachers have appreciated the clarity and relative simplicity of Fletcher's Ladder of

Student Involvement, and here it helped us characterize student involvement across a

range of projects and at critical stages of action research. In contrast to typologies of

students as researchers in educational action research specifically (e.g., Lodge, 2005),

Fletcher's ladder may be applied to other opportunities for involvement as well, perhaps

presenting teachers with a typology of student involvement applicable across their practice. While not a comprehensive tool for critically examining student involvement, we hope it can help teachers' learn from their efforts to meaningfully engage with students in day-to-day learning communities and in school change. We see Fletcher's typology, like Hart's, not as a roadmap to democratic participation as much as a lever to dislodge prevailing classroom practices and steer teachers toward opportunities for student involvement that honors young adolescents.

However, we are wary of, as Fielding (2001) cautioned, "developing increasingly sophisticated ways of involving students that, often unwittingly, end up betraying their interests, accommodating them to the status quo, and in a whole variety of ways reinforcing assumptions and approaches that are destructive of anything that could be considered remotely empowering" (p. 124). Cook-Sather (2006) added that "enacting the most radical, transformative versions of [rights, respect, and listening] takes more than awareness and commitment; it takes understanding and hard work, consideration and reconsideration, calling into question, and, most important, changing" (p. 381). As Cook-Sather and Youens (2007) noted, "In combination, constructivism and critical reflection, like social justice and repositioning of students …, keep the focus of learning and teaching on learners as complex, social beings enmeshed in relationships of power and ongoing processes of self-construction" (p. 65). We hope that using a relatively simple typology such as Fletcher's Ladder stimulates new teacher-student dynamics and leads teachers and professional developers to apply additional frameworks better suited to examining, for instance, the attitudes, systems, culture, spaces and skills within learning communities that engender more democratic dialogue (Fielding, 2001). Moreover, we

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hope such deliberate steps to scaffold student involvement in shaping teacher practices helps to move student voice and involvement from peripheral school dynamics (Thompson, 2012; Frost & Roberts 2011) to the heart of young adolescent experience with teachers and learning.

Implications for Future Research

This work raises several new questions regarding teacher learning, student involvement, and action research in the context of technology integration in the middle grades. For example, we would like to examine the efficacy of various methods of preparing middle grades teachers for involving young adolescents in action research, particularly given the challenges of implementing 21st century classrooms. We wonder how a typology of student behavior, such as Fletcher's Ladder, could be complemented by tools to help teachers critically reflect upon the dialogue between teachers and students as they engage each other in school change (Cruddas, 2007). Further, the teachers in this study operated in technological contexts unheard of through much of the recent period of interest in student voice and involvement. Many others we work with are struggling to design learning environments that extend well beyond the classroom and operate around the clock and every day of the week. To serve them well, we hope for more research that links the promise and perils of student involvement to contemporary challenges of hi-tech learning with young adolescents.

We hope that continuing research will bring to life the vision we share with one teacher, who described, "The best part would be a couple years down the road when the students are generating engagement strategies that they find helpful." Another observed, "We have kids being responsible for themselves individually, charting their growth on

their learning or even their personal growth, but we don't necessarily ask them to chart the growth of the school…. There could be a deeper feedback loop." These comments take on added significance as teachers and students adopt rapidly changing technologies, constantly evolve their approach to teaching and learning, and work to close the gap between students' in-school and out-of-school technology lives. This study reinforces our belief that students and teachers engaged together in action research holds promise amid these challenges. Indeed, it may be our best response to the reality one teacher framed so succinctly: "I need their help figuring it out."

<center>[End of Manuscript]</center>

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CHAPTER 8: SUMMARY AND IMPLICATIONS

The previous chapters made the case that students can play an important role in teacher learning, particularly in times of rapid change in schools. The implications become clearer when we reconsider these forces of change, the potential of student consultation, and the opportunities available to teacher educators seeking to embolden professional development and promote classroom improvement. As with any school reform, effective teacher learning may determine success or failure.

The Challenge of Contemporary Teaching and Learning

Teachers and teacher educators will face extraordinary challenges in the years ahead. The profusion of technology in schools and society is radically changing how teachers and students interact and learn. Technology integration is an obvious and increasingly inescapable driver of change in classrooms. Beyond the school walls, as students acquired mobile technologies that connected them to the Internet, their learning options multiplied: through social networks, multimedia production, and synchronous and asynchronous access to expertise and resources that few schools can match in terms of breadth, depth, or quality. Control over curriculum and instruction shifted as teachers and students adopted new technologies and modes of teaching, learning and collaboration. Leadership and decision making structures changed as a principal leveraged technology to streamline information flows and strengthen collegial capacity to grapple with intensive technology integration. The novelty of emerging technologies invited teachers and students to explore their potential together, in direct response to unfolding needs as growing teachers and learners.

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Further, students' technological empowerment is increasingly bound up with deeper and ultimately more disruptive challenges to prevailing middle grades practices. Legislation recently passed in Vermont (Vermont State General Assembly, 2013), the site of the studies reported above, mandates that all students in grades seven through twelve establish personalized learning plans in pursuit of proficiency-based high school graduation requirements. Students may pursue—and schools must provide—flexible pathways toward achieving these proficiencies. Teachers and school systems will soon be expected to consider any evidence of proficiency whether or not it was generated in conjunction with traditional school coursework. Seat time and Carnegie units are no longer graduation requirements. Vermont is one of a number of states mandating more personalized and flexible pathways to high school completion (Tung, 2010; Great Schools Partnership). Accordingly, on a statewide level, a proficiency-based credentialing system, combined with anytime, anywhere access to computing, remove key impediments to learning experiences that are truly responsive to the nature and needs of young adolescents.

Even amidst such promising trends, however, innovations are likely to be imposed from above, serving primarily teachers and administrator perceptions of students' needs. Teachers may crowdsource the curriculum only with other teachers. They may develop their own personal learning network but deny the same to their students. Teachers and administrators may select or design portfolio systems without attention to how students will want to actually use them. Administrators may select learning management systems that cement in code traditional roles for teachers and students.

Teachers and students can collaboratively construct these innovations by informing each other of their unique perspectives. Students can crowdsource their personal learning plans. They can gather portfolio evidence aligned with their passions and solicit feedback from experts they identify in their personal learning network. They can use learning management systems to design their own projects, include collaborators from around the world, and evaluate their progress according to learning analytics they have selected or designed. Yet they will need the support of adults, including their teachers, to engage in these new ways of learning. In turn, teachers will need effective professional development to support their students.

Understanding the Potential of Student Involvement

The drive toward more personalized and technology-rich learning drives teachers even further from their memories of middle school while at the same time calling them to know ever more about their students. It is worth revisiting Ball and Cohen's (1999) sober assessment of just how much teachers need to know about their students, such as,

> …what children are like, what they are likely to find interesting and to have
> trouble with, in particular domains. They would need to become insightful in
> listening to and interpreting children's ideas about academic subjects. They would
> need to expand the interpretive frames they are likely to bring to their
> observations of students so that they could see more possibilities in what students
> could do. And they would need to come to see children as more capable of
> thinking and reasoning, and less blank slates who lack knowledge.… What one
> enjoyed, thought, or felt as a child may afford helpful speculation about one's

students, but is insufficient as a professional resource for knowing learners (pp. 8-9).

Previous chapters illustrated that partnering with students in the design of schooling is an effective way to build self-esteem and self-efficacy in young adolescents. It can also be used to ease the transition from low-tech, teacher-directed classrooms to hi-tech classrooms responsive to the affective and academic needs of today's technology-empowered students. Crowdsourcing, personal learning networks, e-portfolios, and learning management systems can be channels for teachers and students to know each other better.

Engaging students in school change can take many forms in pursuit of different ends. These studies focused on student consultation as one critical and manageable facet of a larger reimagining of students' place in schools. The broader literature on student voice and involvement demonstrates the efficacy of turning to students to understand there needs and experiences in their classrooms, and understand how schooling shapes their identities and their place in school and society. The studies above have built on a specific body of knowledge that sees a rightful and essential role for students in the design of their own educational experience. They reveal that in technologically rich and dynamic classrooms in particular, teachers and students appreciate the practical and affective benefits other researchers have observed in more traditional school contexts. These findings suggest that more teachers should consult with students to improve educational practices. More teachers should acquire the dispositions and skills to consult with students effectively. Perhaps then, the bold innovations made possible by a

transformative technological and policy context in places like Vermont can yield transformative learning experiences for young adolescents.

Opportunities in Traditional Professional Development

In spite of the rich literature on student involvement and the demonstrated benefits of consultation, students remain on the margin of most professional development activities. The prevailing consensus among researchers of teacher learning heralds the benefits of collegial communities of practice, embedded and sustained professional development, and the deliberate examination of student and teacher work. For the most part, however, students are nowhere to be found in either the design or implementation of these practices. Moreover, rarely are they present in the in-service days, workshops, and graduate coursework that still characterize most teachers' professional development. Perhaps one way to disseminate the dispositions and skills for student consultations is by modeling consultations in otherwise traditional professional development settings.

In these studies, the Middle Grades Institute represented one such setting: a week-long professional development institute designed primarily to provide coursework required for Vermont's middle grades teaching endorsement. Using a variety of strategies, the faculty has learned to scaffold and sustain successful student consultations with hundreds of teachers for over two decades. Teachers do not attend the institute to learn about consultation. Rather, institute faculty use consultations to deepen teachers' learning during the week. It has become a standard professional development tool at the institute; teachers are expected to consult with students just as they are expected to consult with institute facilitators, design action research projects and collaborate with colleagues throughout the week.

Our research on the experience of teachers and students at the institute suggests that consultation is a valued and accessible tool that other professional developers could incorporate into summer institutes. Even without extensive instruction on managing consultations, teachers and students nonetheless experienced shifts in voice and authority, garnering fresh insights into the teacher-student relationship. The context for successful consultations was established by immersing students in the institute as honored community members and experts schooling for young adolescents. Although some teachers attended with students of their own, the majority consulted with students they had never met and would never teach.

In all, the methods used by institute organizers are accessible to others organizing professional development. Neither participating teachers nor students require special training in order to prepare for consultations. Consultations require little time from participating teachers, leaving the bulk of their institute time to work with adult facilitators and colleagues. Instead, students dedicate considerable time – two hours or more – each day of the institute week to acting as consultants, a role they consistently enjoy. Three essential and novel design elements can be employed to integrate student consultations in almost any professional development institute. First, enmesh students in the events of a professional development week as participants in their own strand of learning and embrace them as full members of the institute community. The content of their strand is unimportant; it could be a strand about considering postsecondary options, as at the Middle Grades Institute, but it could just as readily be a technology camp, arts camp or remedial summer school. Second, establish time in the daily schedules of

teachers and students to participate in and debrief the consultations. Third, establish a culture of respect for the students as experts worth consulting.

From Modeling to Classroom Implementation

The final study explored the how teachers consulted with students as they carried out change projects in their classrooms. More important, we introduced two new structures to help us understand student consultation in school and classroom change. We described a six-stage action research cycle used to ground teachers' projects and highlight successive opportunities to involve students in the change process. We applied Fletcher's Ladder of Student Involvement as a typology for distinguishing different types of student involvement. By interlacing these two structures, we examined the types of student involvement adopted by teachers at each stage of their action research. Two of the projects involved in study were initiated at the Middle Grades Institute. All of the projects were grounded in teacher action research, the model of teacher project planning and implementation employed by the Institute. It is important to note that the study focused on teacher-directed action research, not participatory action research in which student participation would necessarily be extensive and require substantially more training. Rather, the use of action research in this study is likely more typical of action research used in graduate-level in-service professional development. This study demonstrated how student involvement, including consultation, could be introduced and evaluated in the course of teacher action research.

Teachers and students in the study were enthusiastic about student involvement in their classroom action research, echoing the benefits observed by teachers and students at the Institute. Across the whole study, we found evidence of purposeful and effective

student involvement, including a variety of forms of consultation, at every stage of the action research cycle. We learned that teacher and student facilitation skills were important for initiating and sustaining student involvement in the projects. Within each teacher project, however, student involvement was highly variable from stage to stage. Teachers in the study, as well as the researchers, appreciated Fletcher's Ladder as an accessible and effective typology for evaluating student involvement at different stages of action research. By focusing on the qualities of student involvement, Fletcher's Ladder showed promise as a typology applicable to many contexts for student involvement, including teacher action research. Each of these findings has important implications for the faculty of the Middle Grades Institute and for others engaged in similar work.

In order to improve the uptake of student consultation in participants' classrooms, designers of professional development may want to heed several recommendations. Describe more explicitly strategies for and examples of student consultation that teachers could apply at each stage of their action research. Discuss with participants other forms of student involvement and how different forms of involvement may be particularly helpful at certain stages of teacher action research. Introduce and scaffold facilitation skills and collaborative leadership structures at the institute that teachers could use in their classrooms. Introduce typologies of involvement, such as Fletcher's Ladder, to enhance teachers' ability to evaluate their experiences with student involvement in classroom and school improvement. Schools should develop or adopt a common typology to apply to school-wide conversations about student involvement in school change as well as the day-to-day operations of school.

Becoming Innovative Teachers for an Innovative Era

The pace of change in schools is enough to demand student involvement in teacher learning; the teachers in these studies made clear that they need students to help them figure out how to integrate technology, for instance. It would be ironic indeed if students were not consulted in the design and implementation of new systems to personalize student learning. Teachers deserve practical benefits of student consultation as they develop and apply radically new approaches to teaching. In an era of personalized learning, the relationship between teacher and student may be more important than ever. The relational benefits of consultation, therefore, are all the more significant. These chapters provide compelling evidence that teachers innovate more successfully, and enjoy the process, when they turn to students for guidance.

In addition, effective teacher-student collaboration needs organizational support. Accordingly, several principles of middle grades organization need to be revisited. School calendars and weekly schedules should make time for teacher-student collaborative planning. In-service days, common planning time, and other opportunities traditionally reserved for teacher planning may need to be reimagined as we embrace students as consultants and partners in change. Family and community involvement strategies need to explain the new roles of teachers and students in designing, implementing and evaluating school improvement.

It would be unfortunate if the student voice movement and teacher learning movement remained on separate tracks. Teacher educators can take steps now to bring students into teacher learning as we cultivate schools as learning organizations for teachers as well as students. Teacher educators and professional developers have

tremendous leverage in how their programs are designed. Even from the periphery of

school systems they can leverage student consultation in professional development to

foster in teachers a disposition toward student consultation. In an era of rapid

technological and pedagogical change, teachers do indeed need students' help figuring it

out. Integrating student consultations into professional development introduces teachers

to a critical tool for thoughtfully changing their practice.

> As McLaughlin and Talbert (2006) observed,

> A considerable body of theoretical and empirical literature exists about the design
>
> principles associated with communities of practice and effective learning
>
> environments. We know much less about the process—how teacher learning
>
> communities get started, how they develop, and how requirements for their
>
> development and markers of maturity change (p. 129).

We know considerably less about designing and implementing communities of practice

that include students as vital members. The work presented here may offer one small part

of an answer.

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