

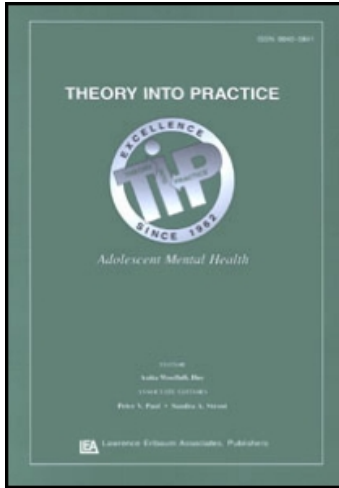
This article was downloaded by: [Krechevsky, Mara]

On: 1 February 2010

Access details: Access Details: [subscription number 918383460]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Theory Into Practice

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t775653706>

Accountability in Three Realms: Making Learning Visible Inside and Outside the Classroom

Mara Krechevsky ^a; Melissa Rivard ^b; Fredrick R. Burton ^c

^a Project Zero, Harvard Graduate School of Education, ^b Project Zero, Harvard Grad School of Education, ^c Upper Arlington, Ohio

Online publication date: 06 January 2010

To cite this Article Krechevsky, Mara, Rivard, Melissa and Burton, Fredrick R.(2010) 'Accountability in Three Realms: Making Learning Visible Inside and Outside the Classroom', Theory Into Practice, 49: 1, 64 – 71

To link to this Article: DOI: 10.1080/00405840903436087

URL: <http://dx.doi.org/10.1080/00405840903436087>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Mara Krechevsky
Melissa Rivard
Fredrick R. Burton

Accountability in Three Realms: Making Learning Visible Inside and Outside the Classroom

This article describes the changing culture of a public school as members of its community explore new ways of being accountable to progressive ideals in an age of skills-based learning and standardized testing. Using documentation makes adult and student learning visible in and outside the classroom, supporting three forms of accountability: (a) accountability to self (looking at what one intended to teach in relation to what actually happened); (b) accountability to

each other (contributing to collective learning as well as one's own); and (c) accountability to the larger community (evaluating the relationship between the school's mission and classroom practice). Documentation leads to more intentional and reflective teaching, provides evidence of student learning not represented by standardized tests, and supports the development of a school's identity. The authors conclude that documentation, although not a replacement for standardized tests, is a versatile tool that blurs the line between formative and summative assessment.

Mara Krechevsky is Research Director, Making Learning Visible, Project Zero, Harvard Graduate School of Education; Melissa Rivard is a Documentation Specialist, Project Zero, Harvard Grad School of Education; and Fred Burton is a retired principal in Upper Arlington, Ohio.

Correspondence should be addressed to: Mara Krechevsky, Project Zero, Harvard Graduate School of Education, 124 Mt. Auburn St., 5th fl., Cambridge, MA 02138. E-mail: mara@pz.harvard.edu

IT IS OPENING NIGHT of the Making Learning Visible Exhibition at the Wickliffe Progressive Community School, a public K–5 school in Upper Arlington, Ohio (see Figure 1). Wickliffe is a parent-choice school serving approximately 450



Figure 1. Visitors viewing teacher exhibits at the Wickliffe learning exhibition. Eight Wickliffe Inquiry Groups (or WIGs) of teachers, administrators, and parents contributed documentation panels to the Wickliffe exhibition. The panels shared what WIGs had learned about student learning.

students. Founded in 1988, the school is known in the Columbus area for meeting the needs of diverse learners. Wickliffe has two specially designated classrooms serving children with autism, as well as an additional classroom for children with severe learning disabilities. The exhibition is an attempt to imagine and explore alternative forms of assessment and accountability in an age of standardized testing. Principal Fred Burton and fifth grade teacher Maureen Reedy address an audience of 200 parents, teachers, and community members:

Fred: Whether they acknowledge it or not, schools stand for something. We stand for our school's 10 principles of progressive education. . . . Testing and accountability aren't always artfully done, but it's not enough just to say that without trying to create some alternatives . . . to be more accountable to ourselves, to each other, and to the community. These exhibits are another way to see children and the kind of intellectual life that children and teachers have at Wickliffe. . . .

Maureen: I'll tell you one thing, the Ohio achievement test next week is not going to have a question that will adequately assess the group learning and intellectual insights and depth of discovery these students have made at Wickliffe

this year. . . . We are exploring another language that reveals knowledge, growth, and students becoming contributing members of a democratic society.

As Fred noted in his opening remarks, all schools—intentionally or not—stand for something. Many school mission statements call for developing communities of collaborative learners and citizens capable of participating in a democratic and multicultural society. Yet these statements tend to remain abstract; school life does not always reflect such lofty goals. In the spring of 2007 and 2008, Wickliffe educators decided to go public with two exhibitions of teaching and learning as a way to hold themselves accountable to the ten principles of progressive education on which the school was founded (see Appendix). The exhibitions were designed to provoke questions and ideas about teaching and learning such as, “What counts as children’s or adults’ learning?,” “What are my assumptions, values, and beliefs about teaching and learning?,” and “How do we instill a sense of responsibility for each other’s learning throughout our community?”

In this article, we discuss *documentation* as a powerful tool for supporting three forms of accountability: (a) accountability to self, (b) accountability to each other, and (c) accountability to the larger community. We define documentation as *the practice of observing, recording, interpreting, and sharing through a variety of media the processes and products of learning in order to deepen learning*. At Wickliffe, the practice of documentation introduced artifacts of learning into the school culture that enabled educators to look at their own and the school’s pedagogical goals and values in relation to what actually happens in their classrooms (accountability to self); to support their own and others’ learning (accountability to others); and to provide evidence of valued student learning that is often not assessed by standardized tests (accountability to the larger community).

Standardized testing in the United States has its roots in the early 1900s. During that time, the tests were used primarily as a form of scientific

management to control the behavior of teachers and students in order to make schools more efficient (Callahan, 1962; Terman, 1919). Since the 1970s, the use of standardized tests has increased dramatically as a way to measure not only student learning, but teacher, administrator, and school effectiveness. Many of today's educators are concerned that our current accountability system is squeezing out more creative and content-rich learning (Pedulla et al., 2003). Even when test scores are on the rise, they do not always reflect deeper learning (Fuller, Gesicki, Kang, & Wright, 2006; Klein, Hamilton, McCaffrey, & Stecher, 2000; Koretz, 2008; Linn, 2000). Teachers in successful, as well as failing, schools are increasingly dispirited when they see the joy, intellectual richness, and passion of teaching and learning take a backseat to testing mania. We hope the ideas and practices described in this article point to another way to think about accountability and how it might be carried out.

Accountability to Self

John Dewey believed that the best teachers were good learners. Teachers become accountable to themselves when they are diligent students of their own teaching. At Wickliffe, documentation became a powerful tool to help teachers learn about their teaching and its impact on students. Documentation serves different purposes at different points in the learning process. But first and foremost it is a tool for internal use—an aid to teachers' or students' reflections and to informing future learning. Documentation helps teachers stay close to students' learning and interests and get to know the students in front of them as individuals and as a group. When teachers document student learning, they are able to compare what they intended to do with what actually took place, and use that information to make decisions about what happens next (cf. Black & Wiliam, 1998). Through documentation, teachers and children are able to revisit their work and their words, deepening their own learning and becoming better observers of learning in the process.

At Wickliffe, teachers, administrators, and parents formed eight inquiry groups that explored questions about student learning connected to one or more of Wickliffe's 10 principles. Third/fourth grade teachers, Molly Hinkle and Cindy Gildersleeve, and first/second grade teacher, Brenda Boyd, formed an inquiry group to study how listening enhances learning. After asking her class what good listening looks like, Molly reflected on her students' words:

I'm learning two things right now. First, I learn a lot more about my students and their thinking if I'm really focused and listening. Sometimes I try to do too many things at once and I miss out on the learning that could take place. Second, I'm learning that many of my students think that listening has to do with [following] directions. I think there's a lot more to it than that. Now I know what to work on with the class . . . and I wouldn't know that if I hadn't listened.

When Cindy was documenting a small group of boys who were refining the design of a machine they had built with K'Nex the previous day, one boy said, "The launch power is stronger and the ball goes farther when it only goes to one side." In reflecting on this comment, Cindy speculated that the boys might be ready to explore the concept of velocity. In the past, Cindy might have set out criteria for the project, determined whether the criteria were met, and asked about the boys' next steps or ways to improve their invention. Instead, by listening closely to the children's words, Cindy decided to introduce a new concept and set the stage for the boys to continue exploring their hypothesis. As Cindy put it,

Before, I listened to children but always felt my best teaching occurred when I was interacting with or instructing students. Now I believe my best teaching occurs after I have listened carefully to conversations the children have, reflected on these conversations, and used my reflections to guide my interactions with students.

For Brenda, recording and reviewing a group discussion about what it means to learn in groups

helped her to realize: (a) students were mimicking her words rather than answering for themselves; and (b) they thought learning happened only with the teacher present. Brenda reflected, “When I was listening to and recording the children initially, I didn’t notice them using my words as they spoke. It was only after looking at the transcript of their words that I was able to see my words in their speech.” The students’ responses suggested to Brenda that she needed to focus more on the Wickliffe principle of encouraging children to create their own knowledge and share their thinking more directly with one another. She began to document times when the class invented new strategies to solve problems. Brenda would write a math problem on the board, ask students to share their solutions and problem-solving strategies, and then put students’ names next to their responses on the board. This practice communicated both that problems could be solved in multiple ways and students could tap their peers as resources. Later, when students ran into problems they couldn’t solve, Brenda would say, “Who can you ask?” The children would matter-of-factly name their classmates who had previously offered ideas that worked. Referring students to each other also gave Brenda the opportunity to step back, document, and make student thinking visible to the students themselves.

Being accountable to oneself entails being intentional about what you are doing and why, and whether what happens in class reflects your intentions. Steve Seidel (2008) likened this kind of accountability to *philosophical*, as distinguished from *psychometric*, justification. In describing the extraordinary work of the preschool teachers in Reggio Emilia, Italy, Seidel (2008) said,

Every moment of the day, every detail of the physical environment, every dimension of relationships in the school is considered, debated, refined. Choices are examined in relation to the ideas that animate them and the actual experiences of children and teachers in the classroom. This is endless work. What is decided today is reconsidered next year, next week, or the next day. (pp. 14–15)

For Molly, Cindy, and Brenda, better listening and visibility lead to greater intentionality—articulating more clearly their learning goals in relation to the school’s mission and taking students’ views into account when making decisions about their next teaching moves.

Accountability to Each Other

In *Accountability to Each Other*, everyone in the school takes responsibility for contributing to one another’s learning and growth, as well as their own. They also take responsibility for forming the school’s identity as a *community that learns*. Documentation plays a key role both in supporting individual and group learning and in building a collective identity. Students and teachers support each other’s learning in multiple ways—who the learner is can shift at any moment (Elmore, 2003). For example, rather than answering questions themselves, teachers frequently refer students’ comments and questions back to other students. Teachers invite colleagues into their classrooms—literally as well as through documentation—to get other perspectives and share ideas. From time to time, Cindy would watch a colleague’s class so her colleague could observe Cindy’s students and give her feedback. Teachers also invited students studying related topics to look at documentation from other classrooms. Parents, too, were asked to become intellectual partners. Teachers sought out parent input during the planning stages of a project or study and parents helped to collect documentation. For Fred, formerly *evaluative* principal–teacher relationships became *learning* relationships, with documentation at the center and teachers doing more of the talking.

Increased awareness around how documentation can support everyone’s learning also changed expectations of what was displayed in Wickliffe’s hallways. Adults and students evaluated the effectiveness of hallway displays, in large part by determining what others could learn from them. Reviewing a panel with their teacher about an economics unit, fifth grade students critiqued both its content and design. In discussing the

purpose of the display, students said it was partly to teach others what they had learned. The panel included many statements such as, “I learned how to write checks” and “I learned about registering to vote.” When the teacher asked the class, “Where is the evidence of this learning?,” several students decided to collect or create artifacts that demonstrated their learning in a way that would also teach others. One student’s hope for the board was that next year a fifth grader might say, “Hey, I already know how to do that. I learned it from your display last year.”

Fifth-grade teacher Maureen Reedy posted three questions that she asked her students about ecosystems in the hall (emphasis added):

1. What is important *for others* to know about what we have learned about our ecosystem?
2. How can we share what we learned about our ecosystem *with others*?
3. How does your model *help others* deepen their understanding of the subject?

Maureen’s questions demonstrate a subtle, yet powerful, shift in orientation—asking that her students consider the learning of others. The questions encourage learners to take a step back and consider creating a public and collective body of knowledge that benefits everyone. In the past, Maureen sometimes asked students to discuss questions like this before sharing what they learned at the end of a study, but now she asks students to think about what others could learn during the learning process as well. (This is reminiscent of a question that teachers in Reggio Emilia often pose before beginning a new project with children, “What can we do to remember what you did so we can communicate it to others?”) Bringing attention to sharing learning with others—before, during, or after the learning process—encourages learners to take a metacognitive stance and often reach greater clarity and understanding.

As learning became more visible at Wickliffe—through documentation in the classrooms and halls, as well as at PTO meetings and exhibitions—parents began to post their own reflections on the hall panels. Sabrina Walters,

a first/second grade teacher and Wickliffe parent, used to share students’ final products to celebrate the end of a unit. Now she facilitated structured discussions with small groups of parents to look at works-in-progress. Among other things, these discussions allowed her to see what kinds of learning parents valued most and to better understand their expectations for their children. Led by Sabrina, nine parents at Wickliffe formed their own inquiry group and identified a question about the value of children having unstructured time. The parent group used the same structures and discussion protocols as the teacher groups, bringing documentation to their meetings and contributing a panel to the Making Learning Visible exhibition. Although parents continued to fulfill the more common roles of fund-raising and social planning, they also more fully reflected Wickliffe’s sixth principle of parents and teachers as coeducators.

Accountability to the Larger Community

Much of the information the public receives about schools takes the form of short newspaper articles or news spots that, more often than not, focus on the failures of particular schools or public education more broadly as measured by federally or state-mandated tests. Such a myopic view provides a limited account of schools’ and children’s capabilities. It is much easier to mandate tests than to go into schools and figure out how to improve instruction directly. But accountability to the larger community should include multiple ways of demonstrating student learning. Standardized tests are one form of evidence; learning exhibitions are another.

The documentation panels created for the Wickliffe exhibitions—each connected to one or more of the 10 principles—are one way to determine whether the Wickliffe mission is being realized. The exhibitions served at least four purposes:

- To provide a form of self- and peer-assessment related to the school’s mission;

- To provide evidence of the kinds of learning that many people value, but are not reflected in standardized tests;
- To provoke conversation about teaching and learning in the wider community, in part by challenging unexamined notions of children's capabilities; and
- To deepen the exhibitors' own learning (teachers, parents, principal) through the hard but rewarding work of communicating learning to others.

Documentation can provide evidence of learning not captured by most standardized tests, like students listening to and learning from each other, using their imaginations, thinking critically and creatively, developing a sense of esthetics and emotional understanding, and understanding what it means to be members of a democratic society. For example, in intervention specialist Jill Hughes's exhibition panel documenting a unit on emotions, first and second graders (all on the autism spectrum) identified their questions about emotions, looked for pictures of different emotions, and analyzed them for physical cues. ("He is kind of smiling, but does that always mean he's happy?" "No. I think sometimes you can smile, but not really feel happy—maybe you're nervous or something. Sometimes I laugh when I am really kind of scared of something.") The children identified four cues: eyes, eyebrows, mouth, and sometimes hands. One week after the study ended, a visibly upset student came into the classroom. As Jill went to meet the student, she overheard a brief exchange between three children: "Is he sad?" "No, he's really mad! Look at his mouth." "No, I think he's frustrated. See how his hands are up by his eyes." For students for whom the socio-emotional world often remains a mystery, these comments and Jill's documentation showed more about what they had learned than many external assessments could have.

Moreover, when documentation is shared outside the school, it extends the learning experience to the wider public and contributes to the collective knowledge about how children learn. In another example, our colleague Ben Mardell's

(2008) video documentation of his kindergarten's study of the Boston Marathon served at least two purposes: (a) It informed next steps in the study so Ben could more effectively support children's learning; and (b) it demonstrated to other educators the potential of the group as a context for learning and suggested ways they might develop powerful learning groups of their own. When Wickliffe parents were shown the video at a PTO meeting as an introduction to ideas about documentation and group learning, many gained new insight into the role children could play in their own learning and the capacity of young children for generating high quality work. One parent, in reflecting on his role in his youngest daughter's recent kindergarten homework to create a robot head, resolved to approach things differently in the future:

I will turn the roles around. I will be the helper and focus more on letting the children figure things out for themselves, giving them support where needed, and "reviewing the results" through pictures, such as the ones we took of making the robot. I began this robot experience understanding the value of time spent with my daughter, wanting to teach her new skills, and trying to help her to learn the "correct" way to do things. I have learned that through brainstorming together, putting my child in the driver's seat, documenting her thoughts and actions, and helping her to put them together as something concrete, I help to open her mind and learn to think—and in the process I can feel my mind is more open as well . . .

From viewing the Marathon video, this parent realized that assigning prescribed tasks to his daughter such as measuring, taping, and finding parts for the robot deprived her of an opportunity to problem-solve and create a product that reflected her own thinking, creativity, and standards. Although the Marathon video shows children in the Boston area, documentation like this allows the project to be shared outside its original context and provoke assumptions and beliefs about how and what children learn. Likewise, the Wickliffe documentation panels trav-

- In what ways does the documentation focus on *learning*, not just something we *did*?
- How does the documentation make visible the learning *process as well as product*?
- Does the documentation *promote conversation or deepen understanding* about some aspect of learning?
- Is there *evidence to support the interpretations* made in the documentation?
- Is there other information the viewer needs in order to *follow the account of learning* represented in the documentation?

Figure 2. Considerations when creating or viewing documentation.

eled to other schools, teacher education classes, and educational conferences.

Documentation in this form is not intended to be an assessment of the progress of either an individual child or all children. Nor is it a method for comparing children, giving grades, or determining placement. Rather, it is intended to reflect a group of children and adults as a learning community and to deepen our individual and collective understanding of how children learn in and as a group (Forman & Fyfe, 1998). (See Figure 2 for factors to consider when creating or viewing documentation.)

Bringing school life into bold relief for members of the wider community expands their images of children's intellectual, emotional, and aesthetic lives. For students, knowing their work goes beyond school walls lends authenticity to their learning.

Concluding Thoughts

In our view of accountability, documentation blurs the line dividing summative and formative assessment. Learning becomes more visible and new learning happens when teachers share students' work and words back with them. Making learning visible inside and outside the classroom can provide evidence of student learning and extend that learning or inform next steps. The act of documenting slows students and teachers down in ways that enhance teaching and learning. Exhibitions not only show the products and processes of learning, they also provoke the way we conceptualize learning and how to measure it. Moreover, preparing documentation

for public consumption deepens the exhibitors' own learning. Documentation reinvigorates assessment practices that draw on teachers' observation and analytic skills; it makes public a conversation about our educational beliefs and values.

Acknowledgments

The work reported in this article was supported by a generous grant from the Ohio Department of Education. The authors would like to thank the Wickliffe Progressive Community School teachers and parents whose extraordinary work is reflected in this article and Howard Gardner and Mindy Kornhaber for their helpful comments.

References

- Black, P. J., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy and Practice*, 5(1), 7–73.
- Callahan, R. (1962.) *Education and the cult of efficiency*. Chicago: University of Chicago.
- Elmore, R. (2003). Agency, reciprocity, and accountability in democratic education. In S. Fuhrman & M. Lazerson (Eds.), *The public schools* (pp. 277–301). Oxford, UK: Oxford University Press.
- Forman G., & Fyfe, B. (1998). Negotiated learning through design, documentation, and discourse. In C. Edwards, L. Gandini, & G. Forman, (Eds.), *The hundred languages of children: The Reggio Emilia approach to early childhood education—Advanced reflections* (2nd ed., pp. 239–260). Norwood, NJ: Ablex.

- Fuller, B., Gesicki, K., Kang, E., & Wright, J. (2006). *Is the No Child Left Behind Act working?: The reliability of how states track achievement* [Working Paper #1]. Berkeley, CA: UC Berkeley, PACE.
- Klein, S., Hamilton, L., McCaffrey, D., & Stecher, B. (2000). *What do test scores in Texas tell us?* Santa Monica, CA: RAND/IP-202.
- Koretz, D. (2008). *Measuring up: What educational testing really tells us*. Cambridge, MA: Harvard University Press.
- Linn, R. L. (2000). Assessments and accountability. *Educational Researcher*, 23(9), 4–14.
- Mardell, B. (2008). *Learning is a team sport: Kindergartners study the Boston Marathon* (DVD). Cambridge, MA.
- Pedulla, J. J., Abrams, L. M., Madaus, G. F., Russell, M. K., Ramos, M. A., & Miao, J. (2003). *Perceived effects of state-mandated testing programs on teaching and learning: Findings from a national survey of teachers*. Boston: National Board on Educational Testing and Public Policy, Boston College.
- Seidel, S. (2008). Foreword: Lessons from Reggio. In L. Gandini, S. Etheredge, & L. Hill, (Eds.), *Insights and inspirations from Reggio Emilia: Stories of teachers and children from North America* (pp. 14–15). Worcester, MA: Davis.
- Terman, L. M. (1919). *The intelligence of school children*. Boston: Houghton Mifflin.

Appendix: Ten Principles of Progressive Education

1. We structure experiences that actively engage the child in producing rather than solely consuming knowledge.
2. We integrate thematic units of study and foster authentic learning opportunities.
3. We provide opportunities for the arts to occupy an integrated place in the curriculum as an essential way to acquire and express knowledge.
4. Teachers and children use time and space in a flexible manner.
5. We respect diversity among children and variation in their development.
6. We collaborate with parents as coeducators in meeting children's needs.
7. Teachers raise children's social consciousness by encouraging them to examine and confront complex issues within society.
8. We value ongoing reflection and self-evaluation by children and adults.
9. We guide child-choice and decision-making.
10. We view our school as a center for teaching and learning for all ages.

