My Education:
Students With Disabilities Describe High School in Pictures and Words

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Abstract

This article describes a process called "Photovoice," originally developed by Carolyn Wang and Mary Ann Burris (1997) in the field of public health, and illustrates how thirteen students with disabilities in three high schools used cameras and text to show and tell how they engage or fail to engage in their education. This article indicates a step-by-step description of the Photovoice process with examples from interviews, observations, and pictures that students took. The article closes with lessons we have learned about students' perceived levels of comfort, support, and self-efficacy in school and provides recommendations for implementing Photovoice projects with other students who have disabilities.

Keywords
Photography, Secondary Education, Self-Determination, Self-Advocacy

In the high school chorus room, Ashley, Sarah, Kayla, and Melissa[1], juniors and seniors in Mrs. D.'s life-skills class, arranged coffee, tea, donuts, and muffins on a table covered with a green cloth. The girls mingled nervously near the food and stayed close to Mrs. D. who set up a computer for a Power-Point presentation. Kayla had her eight-month old daughter with her whom she fed and rocked until the baby fell asleep. The audience filtered in, sat in the chairs arranged for them, and waited expectantly. This gathering was the culminating experience of a project in which the students used cameras and short narratives to define for themselves and others who they are as learners and where they want to go in life after high school.

One by one, each young woman stood near the screen and read text that she had prepared to accompany her pictures in the presentation. The pictures illustrated the likes and dislikes of each girl, her learning style, the people in school she relied on for help, the aspects of her educational experience she found helpful and those she did not. Each girl read carefully and smiled as she presented images that mean the most to her: a favorite teacher, activity, or accomplishment. Kayla's voice strengthened as she showed a picture of her two children and read, "I'm proud to be a mother." Each girl occasionally stumbled over a word or phrase, but nonetheless moved steadily along, never expressing self-consciousness or concern for her performance.

After the last slide showing the girls and Mrs. D. smiling and standing together with arms around each other, the girls sat back and breathed audible sighs of relief. The audience then erupted with applause. Over coffee and donuts, the girls talked animatedly about their first successful public performance and remarked, "I kept messing up!" They agreed: "I was so nervous!" Everyone acknowledged that this had been a powerful presentation and that the girls had clearly expressed themselves as individuals and learners. Ashley, Sarah, Kayla, and Melissa accomplished all this in spite of the fact that each of them struggles with reading, writing, and academic performance due to identified learning disabilities.

Purpose, Participants, and Inquiry

Purpose

The presentation described above was one of three exhibits that resulted from my work with students with disabilities in Maine and Massachusetts during the 2003-2004 academic year. In this age of accountability, teachers, researchers, and community members are examining students' educational outcomes and the effectiveness of our schools with increasing scrutiny. Often missing from conversations about standards and reform initiatives, however, are the voices of students who are affected by these education reforms. Even less frequently are students with disabilities asked to reflect on what and how they learn. My purpose in the three schools was to give students a voice to describe their educational experience from the inside. The primary purpose of this article is to introduce educators to the Photovoice process as implemented by students who have disabilities. A secondary purpose is to describe themes that emerged from analysis of the pictures, written texts, interviews, and observations. To these ends, this article describes the process, reveals how these students engage or fail to engage in their education, and discusses im-

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[1] The names of students used in this article are pseudonyms.

plications for getting to know and educating struggling learners.

Participants

Ashley, Sarah, Kayla, and Melissa attended a comprehensive high school serving approximately 1,500 students, called Theodore Grand High School[2]. The second group of students I convened for the project attended Broadway High School, an urban, high school in Massachusetts serving approximately 2,000 students, where over 40 languages are spoken. Broadway is a comprehensive high school that includes both academic and vocational/technical programming under one roof. At Broadway, I worked with three young men (Esteban, Tony, and Matthew) and one young woman (Tina). The last group of students to participate in the project included two boys (Tim and Andrew) and three girls (Helen, Emily, and Carla) from Weston High School in a suburban/rural community in southern Maine, which serves approximately 780 students.

Each of the participating students had identified disabilities and received special education services. Their disabilities ranged from mild to moderate specific learning disabilities and mental retardation. Most of the students attended at least some general education classes with their peers who do not necessarily have disabilities and received additional supports in learning centers or resource rooms. More important than the identified disability of these students was the type of educational programming they received and the setting in which it was delivered (Bauer & Brown, 2001). Two of the students received their educational program in a self-contained classroom, which focused on a functional, life-skills, and vocational curriculum. Seven

of the students across two of the schools attended classes in vocational programs. The "inclusion classes" attended by Broadway High School students are classes in which 50% of the students have Individual Educational Programs (IEPs) and 50% of the students do not. Nevertheless, the students who do not have IEPs in these inclusion classes are from what is called the "skills" level, or lowest track in the hierarchy of educational programming in this high school (See Table 1). In the context of this project, when a student has more significant educational needs, he or she is more likely to spend a greater amount of time in special education settings.

Two special education teachers, one English-as-Second-Language teacher, and three graduate assistants from the University of Southern Maine and the University of Massachusetts at Boston also participated with us on the project. The teachers identified the students on the basis of their willingness to participate, their interest in visual arts and the likelihood that each student would participate in the project over time. The author emphasized to the teachers that it was important to have students from a range of backgrounds, who experienced a range of disabilities, and whose educational placements were varied. Ultimately, the teachers invited students, with whom they thought the author would be able to communicate, would physically be able to take pictures, and whose engagement might benefit from participation in a special project. The teachers also helped by arranging interviews and meetings between the students and myself. The graduate assistants helped the students take pictures, write accompanying narratives, and assemble their exhibits.

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[2] The names of the schools have been changed.

Table 1: Participating Students

School	Student*	Year	Educational Program Settings				
			Self-contained Special Ed.	General Ed.	Voc.	Inclusion Class	Resource Room
Theo. Grand High School	Ashley	Junior	50%	50%			
	Sarah	Junior	50%	50%			
	Kayla	Senior	50%	50%			
	Melissa	Senior	50%	50%			
Bdwy High School	Esteban	Soph.	30%		40%	30%	
	Tony	Senior	30%		40%	30%	
	Matthew	Junior	33%		33%	33%	
	Tina	Senior	33%		33%	33%	
Weston High School	Tim	Soph.		70%			30%
	Andrew	Soph.		70%			30%
	Helen	Junior		30%	40%		30%
	Emily	Soph	50%		50%		
	Carla	Soph	50%		50%		

*pseudonyms

Inquiry

The inquiry process that accompanied the implementation of the Photovoice process involved the collection of data from interviews, the students' pictures and text, and observations in classes chosen by each student. Each student participated in a one-to-one interview with the author at the beginning of the project. These interviews lasted from 30-50 minutes, were tape recorded, and were guided by a semi-structured protocol designed to help the student describe him or herself and think about engagement in school. I stored the pictures and text generated by the students and then organized them into tables in which each picture and its accompanying text could be easily viewed for analysis. For the last step of the process, each student identified two settings in the school into which he or she invited the author for an observation. With permission from the teachers, I observed the participating student's engagement and/or disengagement and kept a running record of what I saw.

Data analysis involved two primary steps. First, the students in each setting came together to view, discuss, and organize their pictures and text according to themes that they saw emerging. This analysis is described later in the article (in the section entitled *"Analyzing the pictures through talking and writing")* as are tools and strategies that we used to help students think about and communicate the meaning of their pictures to others. In the second analytic process, I used the data from the interviews, observations, as

well as the pictures and text to formulate emerging understandings. This analysis involved coding and sorting the data to reveal themes related to engagement (Bogdan & Biklen, 2003) and writing memos (Strauss, 1987) in order to clarify the nature of overarching themes that emerged.

What is Photovoice?

The approach used for this project is called "Photovoice" and was originally developed by Wang and Burris (1997) in the field of public health. Photovoice is a strategy often used for needs assessment and evaluation, which puts cameras into the hands of people who are considered or feel disenfranchised from decision making that affect their lives. According to its' developers, Photovoice builds on the power of the visual image, the tradition of documentary photography, the theory of Freire's literacy building techniques, and continues the growing practice of participatory action research. Typically a group process, Photovoice, presents participants with opportunities to engage in "*v*oicing *o*ur *i*ndividual *a*nd *c*ollective *e*xperience [notice the acronym VOICE]" (Wang & Burris, 1997, p. 381). Photovoice processes have been carried out with groups as diverse as women in rural China (Wang & Burris, 1997) and African American women (Killion & Wang, 2000). Photovoice, and other similar techniques, are now being extended into the field of education with students with disabilities (e.g., Dyches, Cichella, Olsen, & Mandlesco, 2004). The Photovoice process, as developed by Wang and Burris, leads groups of participants through a series of stages. These stages include conceptualizing a problem to investigate, identifying a potential audience of policy makers, learning to use cameras, planning themes for taking pictures, going into participants' environments to take pictures, conducting group discussions, engaging in critical reflection and dialogue, documenting stories in the pictures and words, evaluating the process, and sharing findings, pictures, and texts with an audience of policy makers (www.Photovoice.com)[3].

The first phase allows participants to define the focus, goals, and audience of the process for themselves. During this phase, participants conceptualize the problem to be addressed, define broader goals and objectives, and recruit policy makers as an audience for findings. The second phase prepares participants to take pictures and look at their environment with a critical eye. This phase involves training the trainers and participants and conducting Photovoice training with those who will take pictures and devise initial themes that will guide picture taking. The culmination of this phase is the process of picture taking. Once pictures are taken, the process enters a phase of sharing, examining, writing about, and analyzing the pictures and text. This phase involves conducting group discussions about the process and the products, engaging in critical dialogue and reflection about the process and the products, and documenting and writing the stories that accompany the picture. During the final phase of the process, stakeholders presenting find and become actively involved in evaluation of policies and practices that effect the lives of the participants. This phase involves the evaluation of the process itself, presentation of the pictures, text, and themes to policy makers, and consideration of policy and program changes that result from the Photovoice process. Despite the fact that this process, as outlined, is complex, Wang and Burris (1997)

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[3] This web site has been created by Wang and Burris and contains more information on Photovoice.

emphasize flexibility and encourage those who engage in Photovoice to adapt it to the needs and goals of the group.

Our Process

The Photovoice projects I implemented gave students opportunities to create powerful images and text to describe their educational lives. Our process, however, varied from those conducted by Wang and others in a few critical ways. First, I identified the central purpose of the inquiry and presented it to the students as a way for them to share their experiences, understand who they are as learners, and possibly influence their teachers and other school personnel to adjust and modify learning environments to meet their needs more effectively. I also engaged the students in steps that made our process a blend of group and individual work. For example, each student began the process with a one-to-one interview with me, we worked together as a group to organize and write about our pictures, and in two of the schools I concluded the process by observing in settings into which individual students invited me. This process also differed from the earlier work of Wang and Burris (1997) in that our Photovoice projects were not directly linked to policy and practice evaluation. The intentions of the processes in which we engaged were to open students' minds, hear their voices, and share their perspectives with others.

Getting to know each other

After I secured the agreement of students to participate and obtained informed consent, I sat down for an initial interview so that we could get to know each other and he or she could begin to think about what is engaging or not so engaging about school. These interviews became the basis upon which we built our picture taking in later steps. I told the students about my two children and my job at the University. Students talked about things they were good at, things they liked, and activities and classes that stood out in their minds. Andrew talked about a Hacky-Sack, which he tossed and kicked with friends or practiced by himself. Esteban, Tony, and Tina all loved to draw and showed me notebooks filled with detailed and highly skilled "doodles" of tattoo ideas, abstract images, and calligraphy (See Figure 1). Emily described an activity in health when each student was given an egg, which they were to treat like a baby in order to understand the responsibilities and challenges of having children, and remarked how much she had to think about in order to take care of the "egg-baby."

Figure 1. Doodles
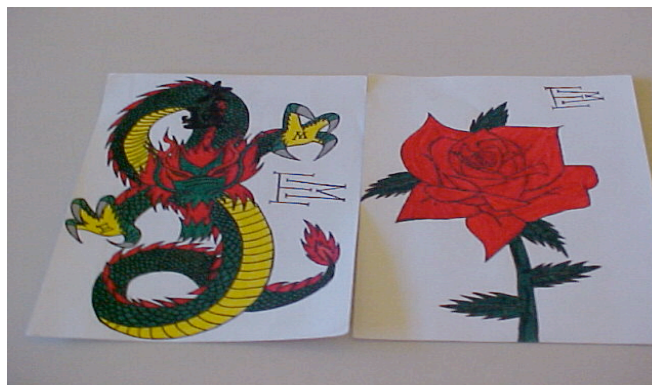
"This a picture I [Esteban] drew. I like this picture. I like to draw and doodle."

During these interviews, students talked about things they found difficult in school and a strong theme around reading, writing, and memory tasks emerged. Andrew, for example, admitted, "My spelling is really bad." Emily described feeling lost in math class, "Math. Like some stuff that I kinda know but I just get confused, just get lost…. I remember then I just forget like I just get lost." Some of the more abstract tasks of school presented considerable challenges to some of these students as illustrated by Tim when he said, "I can't remember anything I read." Even at this early stage in our project, however, students sometimes suggested strategies and supports that helped them, as did Tony when he said, "Sometimes I don't understand what I am reading. So someone will have to tell me what like help me understand about it…Explaining what the story is about."

Some of the students, however, had a difficult time telling me about themselves in the interview. Carla giggled a lot and responded, "I don't know" to many of my questions. Kayla sat in a defensive position during the interview: tucked into a corner and challenged me to guess her name as we began. Tina and Tony gave me short answers to my questions about classes they liked and those they didn't; when I probed for more detail, they often just said, "yeah" or "I guess." I left these interviews hoping that the full Photovoice process would help bring out the personalities of each student and give them ways to communicate about themselves and education.

Learning how to take pictures

The second phase of the project involved learning to use cameras. At each school, we held meetings in which we talked about how to take pictures successfully and addressed issues of "photo ethics," or responsible and respectful ways to take pictures while still capturing the essence of what the students wanted to communicate (Wang & Redwood-Jones, 2001). Students practiced asking each other if he or she could take one another's picture. For the initial practice, we used digital cameras so that the students could have immediate feedback on the quality of their pictures in terms of focus, light, and distance from their subjects. At the end of the session, each student was given a disposable camera to practice with at home, school, and in their community for a week. The resulting rolls of film showed mostly pictures of friends, pets, and family members.

When the students' practice pictures were developed, we met again to look at them and considered which of the photos worked visually and which did not. One picture, for example, helped Andrew realize that he had to explain that he had hung upside down over his bed to take a picture of his kittens, since this particular point of view wasn't apparent in the picture itself. Tim found that the use of the flash outside at night didn't really do justice to his dog, although he rather liked the glowing red eyes!

Embarking on a mission

Our next step was to plan "photomissions," or structured time for each student to take pictures that related to our project. From the interview transcripts, the graduate assistants and I developed a check list that we discussed with each student. Most students spent an entire day with one of us taking pictures of images on their checklist and others that arose as the day went on. The missions took place, with permission, in general and special education classrooms, in vocational settings; and in common spaces around the school such as cafeterias, hallways, and bathrooms.

An example of how the interview fueled the photomission can be seen in this vignette about Kayla. In her initial interview, she described not liking her computer class.

> All the kids there are stuck up in that classroom, so I just don't even bother. I just shut the computer off and walk away like I did two days ago…its really hard for me, because I've never like done stuff like that…you show me once, like how to do it, and then four weeks later you want me to do the same thing and remember exactly every-thing he did and that is hard…there are tons of steps."

As we moved through the school on our mission, we passed an empty computer lab. Kayla took the camera into the room and said that she wanted a picture of the rows of unused stations. We talked about how this image would help demonstrate her frustrations with the difficulties of navigating the computer and fellow students who offered no help. In fact the picture presents a cold, uniform, uninviting environment in which help and support is not readily apparent (See Figure 2).

Figure 2. Kayla's Computer Room at Theodore Grand High School

Analyzing the pictures through talking and writing

After the students completed their photomissions, we developed or printed all of the photos. Each student then filed their pictures in binders and we talked about them individually and as a group. The students were asked to present to the group the reasons they took individual pictures and what they were trying to capture. At this point we talked about how well the picture represented our major theme. Carla shared a picture of herself wearing her boyfriend's sweatshirt. She explained that wearing his sweatshirt helped her focus in school. Although we could see that this sweatshirt was important to Carla, she was not able to clearly articulate how the picture related to engagement or disengagement in school in ways that we could understand. During this discussion, the students themselves began giving each other feedback and assistance related to our central theme by asking questions such as, "Yeah, but what does that [picture] have to do with school?" Gradually, and with project staff coaching, the students became increasingly focused on the themes of the project.

After talking about the pictures as a group, students were asked to write about what we were doing and how their pictures related to the themes of engagement and disengagement. An unedited example of Andrew's first work on an Alphasmart shows that he has a clear grasp of the focus of the project, is looking forward to the more tangible rewards, but continues to struggle with writing and spelling:

> Hi my name is Andrew. You have the chose to showe the progect. This is about stodens getting to expres you fealins. And how you feal about school. You have to parints cosent to do this project. You get a 25.00 doller to the mall. You have your oune chose to do this or not. Every thing is confidenchil. This is teel people about what you are lerning. Also if you pay atenchin or not. It is up to you whate you want in this preazin tation.you will lern how to lern how to ouse all sorts of camras.

Andrew was not alone in his need for support in the writing process. Many students needed help and we used strategies such as transcribing dictated thoughts and high and low tech tools for writing (e.g. Alphasmarts, spelling and grammar checks, adapted pens, Franklin Spellers, wide lined paper, etc.). This support paid off in the quality and quantity of students' writing. Here is an example of Andrew's writing about nine months after the first writing sample. In this instance, he was focusing on a picture in front of him. He was given more time and occasionally took advantage of the grammar and spell check options built into Microsoft Word:

> The person in this picture is my old gym teacher Mr. Myers. I took this picture because I think he was one of my faveret [sic] teachers. Jim is my favoret class out of all the classes I take in school. Per.3. It is more active than my regular classes, I get to move around. I don't know how people fail gym. All you have to do is change your clothes and do what he asks and run around.

Most of the writing that accompanied the pictures was short, usually not more than a few sentences. The meaning and power of the pictures and short text could be expanded, however, by combining a couple pictures into a series. Matthew accomplished this when he had us take two pictures of him and then elaborated on our purpose with just a few sentences.

Invitations into classrooms

At Broadway and Weston High Schools I made observations in the students' classrooms. I asked each of them to invite me into a class that they felt really engaged in and one in which they felt they were less engaged. The purpose of these observations was to provide me with additional information about what the students were telling me and showing me in pictures. My first-hand visits to places of the students' choice provided them with yet another way to communicate to me about the nature of their high school experience. I visited each student in at least two settings (one exception included Tina whom I was only able to see in one class due to time constraints and lack of permission from teachers). These classroom visits allowed me to see content classes, vocational classes, and resource room services.

My observations of the classrooms gave me insight into the pictures, stories, and writing that the students shared with me. I saw students moving through the school practicing their CPR skills on rescue dummies in

a Medical Occupations class. I observed the simulated "drunk driving" session in a Health class. I watched as students silently sat in front of blank computer screens and listened to a lecture. I observed students who typically struggle in academic classes, helping each other with hands-on learning in a computer graphics class (See Figure 3). The observations helped me suggest examples of engagement and disengagement as we sorted and wrote about the pictures they had already taken and others they might want to take.

Figure 3. Tim Helping Another Student in Computer Graphics

Presenting the projects to important people in the students' lives

As a culmination of their work, each group of students presented their pictures and text to people to whom they wanted to show their work. At Theodore Grand High School, the process was integrated into the student's academic requirements and their presentation demonstrated completion of the course content for the third grading period of the year. In the other two schools, the presentations served as a way for students to show their families and teachers what they had accomplished and learned.

The exhibits took a different form in each school. Most of the students invited their teachers and family members, although one student invited only a group of his friends. While the girls at Theodore Grand High School read their PowerPoint presentation to their audience, the students at the other two schools chose to not orally present. Rather, they wanted to have the pictures and text posted for people to look at individually and a PowerPoint slide show to run automatically explaining the process. The students at Weston had tri-fold posters that displayed each of their work individually. This exhibit was held in a large meeting room on the University campus as the students wanted to make it clear that this project was a collaboration between the high school and the college. I took their posters to school and displayed them for other students and teachers to see during the last week of the spring term. The students at Broadway High School categorized their pictures and hung them and the text on portable bulletin boards in the school library.

Lessons Learned about Engagement and Disengagement in School

  The students demonstrated, through their pictures, writing, and in their classes, that there were many times during any given school day that they struggled not only with the tasks given to them but also with their ability to stay engaged in their work. Whether or not they remained engaged in their work seemed to depend on their feelings of <u>comfort</u> with the challenges they were presented, the <u>supports</u> provided to them, and their own sense of <u>self-efficacy</u> in dealing with difficulties. Qualitative analysis uncovered themes that emerged from the pictures, text, interview transcripts, and observation notes. Analysis involved careful reading and viewing of all the data, coding and sorting data according to recurrent ideas, and writing summaries, with examples, to flesh ideas into themes. This section will use examples from the students' pictures, words, and observations to illustrate these points.

Comfort

  A number of Helen's teachers acknowledged that she was one of their hardest working students and that she was focused on her goal to be a nurse. Many of them, however, shook their heads and expressed concern that this was unreasonable. Helen's medical occupations teacher even went so far as to call Helen's mother and tell her that Helen needed a more realistic goal. When I observed in the class and witnessed fellow students failing to conceal their laughter as Helen told a guest speaker that she wanted to be a nurse, it was clear that this message reached beyond Helen and her mother. Although Helen loved her Medical Occupations class, her discomfort in this setting was becoming a factor in how much she engaged in class. I saw Helen shrink away from whole group discussions and fail to ask questions in front of other students. She also told me that she was having trouble concentrating and studying.

  Andrew clearly described the relationship between engagement and comfort in class well when he told me, "When I like that subject I'm more prone to do the homework, and when I do the homework, I am more prone to get an A in the class, and the more prone to get an A in the class, the better I feel." Students also felt more comfortable and found it easier to engage in classes that related to their goals or dreams for the future. This was true for Esteban in Auto Body Shop and for Helen when she worked with real patients in the field-based components of Medical Occupations. In these situations, the students saw a clear connection between their own goals and those of the class.

  It is not surprising that a theme of "comfort" in particular school environments emerged. There is a growing body of literature that highlights the importance of students' levels of comfort and belonging to their engagement, motivation, and positive attitude toward school in general and individual teachers specifically (e.g., Anderman, 2003; Kortering & Braziel, 2002; McDougall, De-Witt, King, Miller, & Killip, 2004; Whitney, Leonard, Leonard, Camelio, & Camelio, 2005). Anderman defines the sense of belonging as a "sense of psychological comfort, social acceptance, and support" (2003, p. 6). Students feel a greater sense of belonging when they have greater control over decisions made in school and personal connections to other students and teachers (Stefanou, Perencevich, DiCintio, & Turner, 2004) when caring teachers offer individualized help (Kortering & Braziel, 2002; Whitney et al., 2005; Youngblood & Spencer, 2002), and when they work in cooperative group struc-

tures (McDougall et al., 2004). The experiences of students in this current project reflect the findings in the broader literature.

Support

One of the most important features of the caring classroom environments is the provision of adequate supports. In Tim and Andrew's social studies class, the teacher used printed notes, writing on the board, and a video to support their learning and engage the students in discussions about Prohibition. Tim also described hands-on learning as essential for keeping his interest and engagement. He told me, "I love doing labs…when we made a barometer and we had to use clay and whatever and we had to get it just right for the whole thing to work…. you get to actually do it with your hands." I observed active learning in Broadway High School's Medical Occupations class as Matthew and Tina traveled through the school and practiced resuscitating CPR mannequins in various settings and under various conditions. During one of my observation, Helen took a test in the student services office of the vocational high school, where she said she could concentrate better. After she completed the test, the student service coordinator sat with her and read through the items and answers on the test. The coordinator did not change anything, but encouraged Helen to think through her responses. When he calculated Helen's score to be 93% correct, she felt proud. I observed Andrew, who talked about his disengagement with school with what sounded like pride, working diligently with the support of his teacher in the learning center.

The students in this project describe the same kind of support structures that other students have in previous research. In their interviews with students who have learning disabilities and have dropped out of high school, Kortering and Braziel (2002) found that students felt their needs would have been better met through more opportunities to connect with their peers and to engage in active, experiential learning. As was the case for a number of the students in this project, tasks that are immediately relevant to the student are more inherently supportive than those that are more loosely connected to future visions (Anderman, 2003). Students need supports that not only engage them in the academic environments of their schools, but to the social milieu as well. Kortering and Braziel (2002) suggested that students, especially those at risk for dropping out, need access to social capital. Likewise, McDougall and colleagues (2004) recommended that schools can better support students through clear expression of a positive and inclusive school ethos. The students in this project reported tools, people, and classrooms that felt supportive to them not only academically, but socially as well.

Self-efficacy

Students were also more apt to remain engaged in challenging situations when they had a sense of their own self-efficacy. That is to say, when students felt that they could rise to the occasion, their hard work would pay off, or when they were being asked to do something at which they were good. Helen illustrates this point by the fact that she stuck by her goal to become a nurse and won awards at state and national competitions. Now she and her mother are actively exploring post-secondary schools with nursing programs and strong disabilities support services. Tony's hard work in his computer graphics courses and the Print Shop won him an award given to only one senior in the vocational program each year who demonstrated exceptionally hard work. Tim thoroughly enjoyed

hands-on learning, and demonstrated his feelings of self-efficacy in classes by being a resource for technical support to other students in his computer graphics class.

Disengagement was often seen in classes that students felt their efforts were futile. Kayla gave up in computers and print shop because she felt she simply couldn't learn how to navigate in cyberspace or use the printing machines. Melissa often failed tests in general education classes because she felt she could not do well and did not know where or whom she could ask for help or modifications when needed. Both of these instances in which students had low expectations for themselves and disengage from their work are remarkable in that solutions and supports are, to me, readily apparent. Kayla's feelings of success could be increased with a simple, step-by-step navigational guide that she uses or creates when searching the world-wide web. When Mrs. D. found out that Melissa failed tests for not trying, she helped Melissa advocate with her general education teachers for help in the resource room.

Self-efficacy has been defined as a context and task specific construct (Klassen, 2002). Klassen goes on to explain that Bandura's definition of self-efficacy includes "the degree to which individuals believe they can control their level of performance and their environment" (p. 174). In the current project, the students' pictures, texts, and our conversations revealed their own sense of what they were good at and could accomplish in specific classes and under certain conditions. This understanding of what one is capable of, the supports one might need to accomplish desired outcomes, and the ways to express these strengths and needs are essential if students are to engage in self-determined behavior. Wehmeyer puts forth an updated definition of self-determined behavior as, "volitional ac-

tions that enable one to act as the primary causal agent in one's life and to maintain or improve one's quality of life" (2005, p. 117). In this definition, we can see the connection between self-efficacy and self-determination in terms of self knowledge, the power to be the primary decision maker and shape the direction of one's life.

The Photovoice methodology, as used in this project, gave the students a unique perspective not only on their education, but on themselves as well. They were able to document what they were good at, what they enjoyed about school, what they struggled with, and what helped them learn. Margolis and McCabe (2004) suggest that greater self-efficacy for any number of tasks can be enhanced by supporting students to be more aware of their own successes and struggles. In this way, the Photovoice project itself may have served to highlight to the students the content and learning situations in which they succeeded and those in which they required more support. The project may have also served to help students identify their own power to seek out the supports they need and the people in their school who can provide them. While outcomes such as these were not documented in the current project, they would be worthwhile to explore in future efforts.

Recommendations for Photovoice Projects with Students with Disabilities

Photovoice is a promising practice for students with disabilities because it provides multiple modes for communication and can open our eyes to the forces behind students' engagement and disengagement in school. It is important that Photovoice projects in schools be aligned with standards and contribute to students' grades and assessment systems. The principles of Universal Design for Learning (UDL) (Meyer & Rose, 2002)

provide a framework to consider when building a Photovoice process with tools and techniques designed for maximum flexibility. The principles of UDL include considering multiple ways for students to receive information, engage with content, and express their knowledge. In addition, educators and those planning Photovoice processes would do well to consider universal access to not only physical and learning environments, but to social environments as well (Curry, 2003). Presenting student visions in this way can be a powerful expression of self-advocacy and self-determination (Dalun, Wehmeyer, & Li-Ju, 2005). Finally, the lessons learned and personal discoveries that result from the Photovoice process can be used to give individual students and teachers examples of environments, content, and strategies that are comfortable; provide support; and build self-efficacy. The following ideas will be helpful for teachers interested in implementing Photovoice with their own students (See Table 2).

Table 2. Ideas for Implementation

Implementation Goal	Ideas and Tips to Consider
Integrate Photovoice projects into the curriculum and align them with academic standards	• Incorporate into academic units (e.g., career development) • Align with state standards (e.g., use of technology, writing, reading, communication)
Use tools and strategies that are flexible and facilitate universal design	Use technology that spans a spectrum from: • Low tech (e.g., Disposable cameras—point and shoot; highlighter pens, various styles of paper and writing tools) to • High tech (e.g., digital cameras, scanners, Alphasmarts, PowerPoint, Inspiration)
Use Photovoice to build empowerment and self-advocacy	• Student opens IEP meetings • Present poster at a person-centered planning meeting

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