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# What teachers need to know about the struggle for self-determination (conscientization) and self-regulation: adults with disabilities speak about their education experiences

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**Abstract**

The purpose of this paper is to help teachers better understand the struggles that people with disabilities experience in attaining their educational goals and to encourage the development of teaching and learning strategies that help to respect and facilitate the struggle itself. The authors share the generative themes that emerged using a critical pedagogy approach (dialogic interviews) to elicit the voices of adults with disabilities speaking about their public school experiences. In discussing the implications for teachers, the authors show the intersections of educational psychology's concept *self-regulation* and critical pedagogy's concept *conscientization* and special education' s concept *self-determination*. Why the 'struggle' itself is important (from the perspectives provided by conscientization, self-regulation, and self determination) is discussed.

The major question is whether or not teachers can structure the awareness process that results in learners becoming aware enough to verbalize, "I have difficulties". What do teachers do to stimulate the metacognitive thinking processes that makes it possible for students with disabilities to think, "I can monitor myself!"? How can teachers capture the power of the conscientization experience that leads students with disabilities to experience the generative will power "to use the powers that I have to make a difference in my life's situation?" How do adults with disabilities come to these kinds of awareness and how can teachers help facilitate the awareness? © 2000 Elsevier Science Ltd. All rights reserved.

*Keywords:* Adults with disabilities; School experiences; Self-determination

## 1. Key concepts

Teachers can benefit from an understanding of the contributions of educational psychologists, critical pedagogists, and special educators who study the processes of self-regulation (a concept from educational psychology), conscientization

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(a concept from critical pedagogy), and self-determination (a concept from special education).

### *1.1. Key concepts from educational psychology*

The field of educational psychology attempts to solve the problems that teachers face before, during and after instruction. Understanding individual differences, developmental stages, and the role diversity plays in instructional processes can result in improved learning outcomes. For example, Grolnick, Kurowski, and Gurland (1999) suggest that a major goal of schooling is to create a self-regulated learner. Self-regulated learners (according to Cardelle-Elawar, 1995, 1996; Cardelle-Elawar & Wetzel, 1995) have a combination of academic learning skills and self-control that makes learning easier. This results in an increased motivation to learn. Self-regulation thus involves a combination of skill, motivation, and will (to act). Three factors influence skill and will: knowledge, motivation, and self-discipline (or volition).

There is a strong research base for the notion of self-regulated learning. Many studies have demonstrated the effectiveness of teaching self-regulation strategies to increase student achievement. Schunk (1990) and Schunk and Zimmerman, (1998) modeled self-regulated learning within a framework of social cognitive theory. Self-regulated learning combines academic learning skills along with self-control of emotional experiences (both positive and negative) that affect student motivation to learn (Saarni, 1997). Knowledge and motivation are not always enough, as students also need volition or self-discipline to act (Corno, 1993).

Self-regulated learners are aware of the task demands and their abilities or strategies to meet them (i.e., they are metacognitive). They have high efficacy for learning and attribute outcomes to factors under their control (i.e., they are self-motivated). Covington (1992) contrasts self-regulation with an approach to learning referred to as self-handicapping. Students who are self-handicapping typically have low efficacy for learning, avoid failure and damage to self-esteem by seeking easy tasks, procrastinating, or avoiding work all together (Zimmerman & Bandura, 1994; Zimmerman & Kitsantas, 1997).

The development of self-regulated learning for students with disabilities also has a rich research base. Eglert, Raphael, Anderson, Anthony, and Stevens (1991) applied strategies and self-talk for students in regular and special education classrooms. Cardelle-Elawar (1995) studied the effects of metacognitive instruction for self-monitoring on low achievers in solving mathematics problems. Schunk and Rice (1992, 1993) showed how prior knowledge and information about reading comprehension strategies through feedback affected children's achievement. In contrast to feedback that is corrective in nature, the feedback in this study focused on stimulating the children's belief that they can monitor their progress in understanding the content of what they are reading.

### *1.2. Key concepts from critical pedagogy*

Diaz-Greenberg et al. (1999) discussed the characteristics of critical pedagogy that result in changes in classroom teaching. Teachers who embrace a critical pedagogy perspective organize against isolation, make alliances whenever possible, build multiracial/multicultural alliances, actively oppose all 'isms', examine personal practice, commit to social justice and peace, oppose classroom practices that undermine the rights of children of color, hold high expectations for all students, and strive to promote a 'child-centered' curriculum. In other words, teachers focus on the critical pedagogy principles emphasized by Darder (1995): dialogue, dialectic, voice, praxis, and reflection. These principles are defined in Table 1 and compared to key principles from Inclusive Education.

A review of the literature on critical pedagogy and special education yielded three articles: Cummins (1991), Echevarria and McDonough (1995), and Goldstein (1995). Cummins summarized the research on second language learners over the past decades and generated recommendations for special educators (e.g., use the student's cultural and linguistic background for curriculum planning; take an advocacy orientation to assessment of students from linguistically diverse backgrounds). Echevarria and McDonough (1995) documented the impact of an instructional conversation approach, which built on the children's

Table 1
Key principles

| Critical pedagogy | Inclusive education |
|---|---|
| *Dialogue*: creating a 'space' to know what my view/voice is; knowing 'my voice' requires me to be reflective; being willing to enter another's culture and show that I listen. The goal is to "make the soul come out naked" (student quote of how successful dialogue feels (Diaz-Greenberg, 1997). | "*All meaning all*": based on the "zero reject principle" first described in the Education for All Handicapped Children Act (EHA) of 1975 and reiterated in the Individuals with Disabilities Education Act (IDEA) of 1990 and its reauthorization in 1997; no student is refused services in the neighborhood school because personnel are "not able." |
| *Dialectic*: creating a 'space' to take an opposite point of view AND provide the self and others with tools to go against the establishment. | *Empowering language*: "people first, disability second" references (e.g., student with mental retardation rather than mentally retarded student) and focus on ability (e.g., wheelchair mobile rather than wheelchair bound). |
| | *Self-determination*: the notion that the student with a disability has the right to participate actively in the development, implementation, and evaluation of the programs being offered. |
| *Praxis*: action, reflection, action cycle that leads to new perspectives. | *Invention of supports in natural environments*: a philosophy that appropriate and effective support for learning within the classroom environment or playground or neighborhood can be created by collaborating with people from multiple disciplines. |
| *Conscientization*: becoming aware that "I" have a voice; "I matter"; "I" can/do impact others. | *Valuing* as the preferred response to diversity; in contrast to stereotyping and rejecting people because of their differences, or tolerating people with individual differences, or requiring people with individual differences to become rehabilitated before entering 'normal' society, the preferred response is to value each person for their uniqueness. |

ethnic backgrounds to increase the reading comprehension of students with learning disabilities who are also learning English as a second language. Goldstein (1995) applied the principles of critical pedagogy in a bilingual special education classroom, finding that the children's oral language interactions indicated that "even young children with the added challenges of learning disabilities and language differences are aware of the economic and social barriers that education often cannot bridge" (p. 472).

### *1.3. Key concepts from the inclusive education movement*

Villa and Thousand (1995) describe the key principles involved in moving from a segregated separatist perspective to an inclusive perspective for education of students with disabilities: zero reject philosophy, self-determination, empowering language, invention of programs to support appropriate education in classroom environments, and valuing as the preferred response to diversity. These principles are defined in Table 1 and compared to principles from critical pedagogy.

Self-determination is the notion that the student with a disability has the right to participate actively in the development, implementation, and evaluation of the programs being offered. Wehmeyer and Schwartz (1997) conducted a follow-up study of youth with mental retardation or learning disabilities to determine the extent to which self-determination outcomes were achieved after leaving school. Data on self-determination had been collected prior to exiting high school. Data regarding adult outcomes for these students nearly 1 year after exiting were collected. Using a self-report measure and a parental report measure to assess adult outcomes, the resulting analysis showed that self-determined students were more likely to have achieved more positive adult outcomes (e.g., being employed at a higher rate, earning more per hour)

compared to peers who were not self-determined. Chi square analyses determined statistically significant differences in favor of students with high self-determination. These results provide preliminary empirical evidence that self-determination is an important educational outcome if youth with disabilities are to achieve positive adult outcomes upon exiting high school.

There is some evidence that students with disabilities who are encouraged and taught to manage their own Individual Education Plans (IEPs) experience the increased personal efficacy described by researchers in self-regulation (Breck Imel and Athena Hapner, special educators in the Student-Led IEP project, personal communication, Tolleson [Arizona] Elementary and High School Districts, 6/10/99). VanReusen and Bos (1990) describe a 5-step strategy for IEP participation of students with disabilities. The I-PLAN system incorporated many aspects of self-determination (I = inventory strengths, areas to improve, goals and interests, choices for learning; P = provide your inventory information; L = listen and respond; A = ask questions; N = name your goals) was implemented over a 1–2 week series of lessons (45 min/day). In an evaluation field test, junior high students with learning disabilities who learned I-PLAN made an average of 109 contributions during their IEP conferences, compared to students who did not learn it who averaged only 31 contributions.

## 2. The research process to elicit voices from adults with disabilities

Within a naturalistic inquiry framework, the critical pedagogy researcher establishes a dialectic (a reciprocal dialogue) between the participants and the researchers. In this study, an interview process was initiated to establish a dialogue, which was reciprocal in nature. Lincoln and Guba (1985) encourage the use of interviews to obtain current constructions of people and their lives (including how they feel about issues, what their concerns are, and what motivates them). Similarly, Bogdan and Biklen (1982) embrace interviews to gather data that is descriptive in nature and in the participant's own spoken form. Thus, the design of this study relied on an interview process that would empower participants to create their own narrative.

Narratives can provide a way to bring experience into a dialogue with the self and with others. An emancipatory narrative is a specific form of story that allows the telling, affirming, questioning, and challenging of the interests represented in unique voices, permitting the expression of unique personal and social histories in their fullest and most transformative form (McLaren, 1998). In addition to creating narratives from the field, the authors applied an emancipatory narrative process to their own lives in order to determine the nature of the authors' subjectivity and bias.

Each researcher interviewed an adult with a disability who agreed to speak about experiences and understandings of the concepts associated with critical pedagogy (e.g., voice) and inclusive education (e.g., disability). Individual interviews were conducted at convenient, centralized sites.

### 2.1. Data analysis and interpretation

The resulting narratives were analyzed for generative themes across all participants for each question. In addition, individual narratives were analyzed for generative themes. The concept of generative themes comes from Freire (1970), elaborated by Heaney (1995). The complex experiences of a person's life are "charged with political significance and are likely to generate considerable discussion and analysis" (Heaney, 1995, p. 1). As noted by Freire (1970; 1992), the method of the identification of themes must be "dialogical, affording the opportunity both to discover generative themes and to stimulate people's awareness in regard to these themes" (pp. 78–79). Freire considers themes generative because "however comprehended and whatever action they may evoke, they contain the possibility of unfolding into again as many themes which in their turn call for new tasks to be fulfilled" (p. 83).

We relied on the dialectic process as we shared the results with the participants and continued in an interactive process to ensure that the participants agreed with the representation of their

responses. In this paper,[1] we share those aspects of the participants' education experiences related to their struggle for self-determination.

### 2.2. Thumbnail sketches of the interviewees

Each of the five participants (adults with disabilities) is described briefly using their own words.

*Denise Labrecque* is the coordinator of Outreach Education for the Disability Resource Center at Arizona State University West. She describes herself as "an independent thinker, a strong-willed woman, a sensitive person that is compassionate and empathetic to other individuals in society". She was schooled by a teacher who came to her home during the elementary years because the school was inaccessible. Later she attended private school and transferred to a large high school where, as she explained, "I was allowed to go only a half day so that I would not be a threat or a hazard to the students during lunch". During her college career, Denise decided to learn more about her disability, muscular dystrophy, and became aware of the disability culture. Today, with her position authority, she uses her life experiences to empower others to successfully manipulate systems to help them gain access to education and services. She is passionately committed to creating situations where people with disabilities can be valued for their contributions and abilities. When asked, "What does the word 'disability' mean to you?" she states with fervor, "Oh, I hate that word. But also I hate it when people try to make our situation cute and make our situation acceptable like "physically challenged". I also hate it when people try to ignore what it is we're living, by covering it over. You know, a disabled car doesn't run. There's an implicit meaning that there something is non-functional. And that is not good to me, either. We all function in one way or another". [Edited by D. Labrecque, December, 1998].

*Ron Glass* describes himself as "first, a son, a father, a brother, a husband. I am grounded in my sense of who I am within my family, as sort of my starting place. You would describe myself (sic) as Jewish, as a philosopher, as an educator, in terms of my roles. From a political point of view, I would describe myself as a radical". Ron is a professor in the College of Education at Arizona State University West who was a student at Harvard when he first discovered that he had a hearing loss. In Ron's words, "My educational experience was defined from the very beginning as the 'Jew'". We stood out in many ways. Politically, we stood out. Culturally, we stood out. (My dad was the town physician.) Just in terms of how we operated as a family stood out from all the others in my school. So you know, from the beginning of when I started in second grade all the way through, I had a sense … my schooling experience reinforced my religious identity, in a very intense way since most of the recognition of my Jewishness was not positive, except from my family and the small Jewish community in town". He began his academic career at a young age and as a high school student who was admitted to advanced science classes at Indiana University. Ron explains his role as a university educator, "You know, I have two degrees from Harvard, a degree from Berkeley, and two degrees from Stanford that give me a lot of power especially in institutions like this. I have a lot of power to teach what I want, to require people to read certain things; so I use my power not to get people to think in a particular way but to force them to confront certain kinds of issues as teachers. I also discuss my power directly with my students, discuss the power that I have as a teacher, discuss the power that I have to shape the curriculum and why I make them write about the things that I do. Deconstructing my power is a way to both having power and giving it over at the same time". [Edited by R. Glass, 12/14/98].

*Michelle Mooradian*, a 23 year old Jewish-Armenian woman from Southern California, is

[1] For a report of those aspects of the participants' responses related to two other major concepts: one from critical pedagogy—the term 'voice'—and one from inclusion—the term 'disability'; please see Diaz-Greenberg et al. (1999).

a recent graduate of a program leading to a special education teaching credential. In her own words, "I am very interested in horseback riding and skiing and I like artsy stuff. I think I'm a really giving person. I often times rely too much on what other people think of me to govern my behavior. And my family is also really important to me; I'm really close to my family. I am a third generation American; half of my family is Armenian and the other half is Russian Jewish. I got really confused growing up because I was told that half my family was Jewish, but I was Christian". When asked when she first became aware of her hearing loss, her type of disability, Michelle said, "I've had it for as long as I've known. I was always having to move to sit on the left side of people. I was either born with it or I got it at 1 1/2 years old from encephalitis. When I was in elementary school, there was a special class of kids that no one ever saw and they were the "special education kids". I think that's why now I'm such a proponent of inclusion. Really, the only way that people are going to learn that this [range of individual difference] is normal and accept it is by seeing it on an every day basis and learning what people can do for themselves, what they need help with". [Edited by M. Mooradian, 12/16/98].

*Gena Wellstone* (a pseudonym) is a 19 year old Norwegian Irish-American woman and a university freshman majoring in English secondary education. Some high points in Gena's life include: "When I got accepted into college. Because I got a GED, I was pretty surprised and quite pleased. When I was in an actual teenage drug abuse program for a few years and when I graduated from that. And my grandparents; they're like the highest point of my life". At fifteen, Gena states she was given the diagnosis of bipolar disorder: "First I was diagnosed with just basic depression. Then I was diagnosed with bipolar, and then I was diagnosed with alcoholism and drug addiction. They put me on loads of medication, Prozac and Lithium. Looking back, it's the most detrimental thing you can do to a person because you are teaching them that numbness is the solution". She explains, "I value honesty and being true to myself. I am a person who questions, I don't know if authority is the right word, but just questions things". One reason Gena feels motivated to become a teacher is to listen to students in a way that she was not listened to. "[In high school], I made certain cries for help that were quite large. I was not fooling around. I gave my suicide note to my English teacher, and she just said, "Why did you give this to me?" I think [my] teachers had a habit of ignoring my voice or voices in general. But I don't think school has shown me who I am. I guess a big thing that school did for me is it showed me that I want to be a teacher, because when I have real bad teachers, I don't want to be like them. I don't want to talk down to kids. The same as when I have excellent teachers, I see qualities [in them] that I want to have". [Edited by G. Wellstone with Ruth Reese as scribe, January 1999.]

*Diane Smith* (a pseudonym) is an elementary school teacher studying to receive her English as a Second Language endorsement who describes herself as "a forty-something woman, a risk taking adult wanting to try new things, cross new horizons. As a professional (teacher) I look at myself as good at what I do. I have a lot to offer. There's nobody like me… My father is Cherokee Indian and my mother is Irish. I left my parent's house when I was fourteen and I actually had my own home by the time I was sixteen. I took legal guardianship of my younger sister and raised her…. I have been a police officer, an insurance auditor, and now I'm a teacher…. I've had to balance between my different careers with each their own different culture, and my home culture that I live when I'm away from work, when I'm at my church, those kinds of things. I have a real hard time with that because in the home culture I use a different vocabulary, different way of saying things, different way of explaining things… Being labelled as learning disabled identified me and gave me some privileges that some other children did not have. But those privileges allowed me to succeed. That's where the cultural differences come in… the disability culture is very structured" [Edited by D. Smith].

## 3. Results

In the following section the adults with disabilities speak about their education experiences. For each interview, themes related to the struggle for self-determination (conscientization) and self-regulation are indicated in an accompanying Figure.

*Denise Speaks*: "I went to a private school for disabled kids for two years and that was a very exclusionary kind of education. Then even when I was allowed to go to a public high school, I was allowed to go only half a day so that I would not be a threat or a hazard to the students during lunch, that kind of thing. So that early education was an education for me but not in a cognitive sense. It was much more holistic [than] that; it was an education in understanding my exclusion and understanding that you have to fight for a lot of what you think is worthy.

I was a strong willed woman. A lot of that comes from self-determination. When I was thrust into this 2000-student high school that was very large for me and I was very lost, I spent the first couple of weeks really struggling. Some students were afraid of me; they didn't know what to make of me. I was not making friends. I was hating the experience and I remember the day that I went home and I said that if I am going to survive this I need to make the effort to be outgoing.

I was not aware of my disability and what else was out there. So in my senior year (of college) I decided to go looking and went to find out more accurately what my medical diagnosis was. From that point I started looking into this movement that was coming about through the country called independent living. There is a cultural and linguistic reality that is a struggle that we're fighting right now in the disability communities … to be understood as a culture.

I am constantly fighting against, you know, that power to be heard, that power to be understood, that power to get what it is we need in our society for people with disabilities. But I'm coming to see my power, you know, and that I am not powerless to counter these situations.

We are finding our power; we are gaining our power to educate, you know. We are finding our power to educate people. We are finding our power to demand that our physical needs be taken care of but I think there's so much more of it. [Interview with Maria Cardelle-Elawar, Phoenix, Arizona]

*Diane Speaks*: Not until I was a junior in high school … when I was diagnosed with my learning disability. I felt very worthless before that. I am a perfectionist when I come to myself. If I can't do my best, then I don't want to do it at all.

I started at a much later age than a lot of others as far as teachers are concerned. Because of my learning disability I was always told that I could never teach. It wasn't until I was in my late thirties that somebody convinced me that I would make a good teacher. So when I first started at it, I was thirty-seven years old and I was very guarded, very particular because if I couldn't be the best, I didn't want to be it. And that is the way I view it now. If I can't be the best then I don't want to be here.

When asked how can we preserve cultures and prevent discrimination, Diane is very committed to "allow people to be themselves. Allowing them to not hide who they are. Growing up a Native American, my dad's generation were ashamed: they were not allowed to be who they were … .it has taken me forty years to get what is rightfully mine because they buried so much of who they were when we were growing up. He has finally admitted and he finally has asked for what he deserves. We are now registered with the tribe. We have been all of our lives. It wasn't until five years ago that we were given the opportunity to claim that … It's a sense of belonging, a sense of belonging, a sense of something that's mine, that no one can take away from me".

When asked what the word "disability" means, Diane responded, "What it meant to me before was that I can't do this and I can't do that … I can't, I can't, I can't. When I was thirty-two years old, I met a man named Rick Sheets from PV Community College. He taught me that disability doesn't mean I can't; it means I can with some help. Now I look at disability as a chance to

prove myself. And that's what I want to instill in the people". [Interview with Carol Beckett, Phoenix, Arizona]

*Michelle Speaks*: I always sit on the left side of people. I know that it's [my hearing loss] made me really frustrated at times, to have to accommodate and to have to explain to people why I have to accommodate: "I'm sorry I just can't work hard and listen at the same time. I just can't do it". I feel like I need to over-apologize for myself, like I am really sorry, I feel "less than" sometimes, you know.

I think of evaluation and analysis [as when] you are taking a stand. I think [it involves] deciding in one way or the other that something is so. And I know that for me, I really needed to be less [emotional]. That's been my struggle for many years, because I get really melodramatic, like in my classes. [Interview with J. Thousand, San Marcos, CA]

*Gena Speaks*: I think that teachers have a habit of ignoring my voice … I know that I made certain cries for help that were quite large. I mean I was not messing around. I actually attempted suicide on the school campus. I gave what was my suicide note to my English teacher, and she read it. And you know, she obviously was made very uncomfortable, and she just said, "Why did you give this to me?" You know, no phone call was made to my parents, and (now) I am completely over it and it's like, whatever, but … I get really upset, I mean if it's that serious. I even take to, like shaking, and I will get hot. It is anger, as opposed to just passion. I will end up crying because I've found that's the healthiest way for me to let go of any sort of range (of emotions), to just cry.

First … [when she was on drugs] … I was diagnosed with just basic depression. And then I was diagnosed with bipolar and then I was diagnosed with alcoholism and drug addiction. I think labels at any age or place in your life hurt you. But I think sometimes you have to have them. I think about, like as cool as I thought it was to be bipolar, I was fourteen. And there was something scary about that. I don't ever remember being told what it really meant. I know now because I have taken (classes in psychology) … I was also hospitalized for a period of time and they had me doing things like taking the MMPI [Minnesota Multiphasic Personality Inventory], looking at ink blots and talk about feeling crazy. I mean I truly thought I was a crazy person until I was seventeen or eighteen years old. I thought that I could never not be crazy. I was just crazy. I think you drive yourself crazy, too! By thinking about yourself and thinking about everything too much". [Interview with Ruth Reese, Flagstaff, Arizona]

*Ron Speaks*: So when living in that kind of uncertainty [referring to partial knowledge] and dynamic sense it's hard, you know, it robs you some more. The more I learned the more I don't know. It always seemed like a distressing experience for me until just recently I realized it is liberating because everybody is in that same boat.

It is hard to be different. It is hard to be, to not be part of the mainstream, and I can remember struggling over those things and I don't know that I ever felt ashamed of being Jewish. There were many things I just couldn't tolerate and fought against and spoke out continuously against racism. [I had] major confrontations with teachers in school who openly said racist, and anti-Semitic things.

I think that the way in which people internalize their own limits is something very important to fight against as a teacher. Some people assume that if you are in a wheel chair, you must be stupid … or if you can't hear, you must be stupid …

Because the disability, just like with race, is itself a marker of being degraded, or being demeaned, of being not worthy, or being not as valued as the norm, as the white norm or as the able-bodied norm. To call attention to it at all is to embarrass the person who is that way, rather than them being able to experience themselves as just who they are. The wheelchair just becomes part of them just like someone walking, a blind person walking with a cane. [Interview with Ann Nevin, Phoenix, Arizona]

## 4. Discussion

In this section, the authors first discuss the results and then suggest limitations.

The concepts of self-regulation, self-determination, and conscientization are more complex than may be evident from these interviews. In fact, none of these adults experienced an explicit curriculum or instruction in self-regulation, self-determination, or conscientization during their schooling. Our study is a post hoc analysis in the sense that the adults with disabilities we interviewed were not taught explicitly about self-regulation, self-determination, or conscientization in their respective school curricula. However, we have derived from their interviews some evidence (see the Venn Diagrams) that each of these adults indeed showed up as self-regulated, self-determined, and consciously aware. In fact, it appears that these theoretical concepts instead were grounded in and emerged from well-carried-out life experiences of the interviewees.

However, each adult with disability had a unique experience with the educational system. This uniqueness may be pictorially represented in the Venn diagrams shown in Figs. 1–5. For Denise (Fig. 1), the struggle shows up as being aware of her exclusion, becoming aware. Self-determination shows up as deciding to actively search for more information about the nature of her disability (muscular dystrophy) and to affiliate with the disability culture/independent living movement. The result was a heightened appreciation for what people with disabilities bring to the larger culture, a conscientization about how she can, through her role as a Disabilities Resource Coordinator at a local university, advocate for people with disabilities by manipulating systems that help them gain access to education and services.

For Diane (Fig. 2), the struggle can be seen in her early youthful separation and alienation from her family and their social/cultural context in addition. Self-determination is evident as she established her own home and adopted and raised her sister. She is clearly self-determined about her decision to "be the best" and in her sense of belonging. Self-regulation can be seen in her understanding of how she has balanced the demands from various cultures

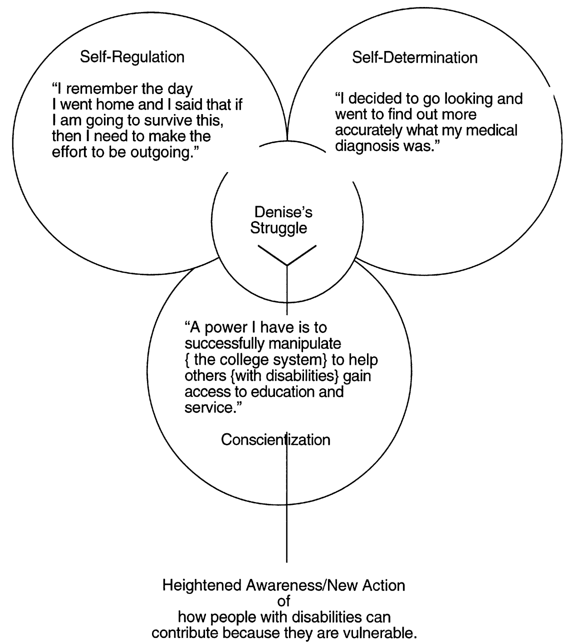


Fig. 1. Venn diagram for Denise showing distinctions for self-regulation, self-determination, and conscientization.

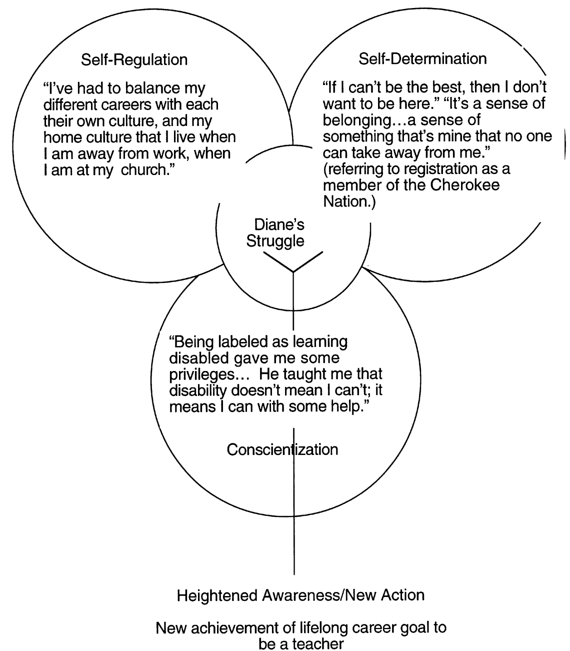


Fig. 2. Venn diagram for Diane showing distinctions for self-regulation, self-determination, and conscientization.

(home, work, church). The conscientization process led to an awareness of her own learning disability through the eyes of her community college professor (who taught her to say "I can with support" instead of "I can't".) The combination of these struggles led her to her awareness of how her disability itself can help students in her 5th grade classroom who are struggling to learn to read.

For Michelle (Fig. 3), the struggle related to self-regulation (choosing to sit on the left side of people so that her "good ear" would be oriented to the speaker). As she struggles to accommodate her hearing loss, she shows a determination to receive the accommodation, although frustrated about having to explain herself. The conscientization process is evident in her awareness that her struggle itself may explain why she is "such a proponent of inclusion". The result of these combined struggles is increased commitment to advocate for students with special needs by becoming a special educator.

For Gena (Fig. 4), the struggle shows up in the tension of having a teen life crisis, being labeled, having the label changed, and feeling forced to accept the label. Self-regulation shows up as a form of assertiveness (e.g., questioning authority and soliciting feedback) and a personal decision to stop referring to herself by the label after taking a Psychology 101 class. Self-determination is evident by her decision to be a teacher so that what happened to her (in her English class) would not happen to the students who will teach. The conscientization process resulted in a new awareness about her emotional well being as she states, "I thought I could never not be crazy". The combined impact of the struggles is a heightened awareness of the power of knowledge itself.

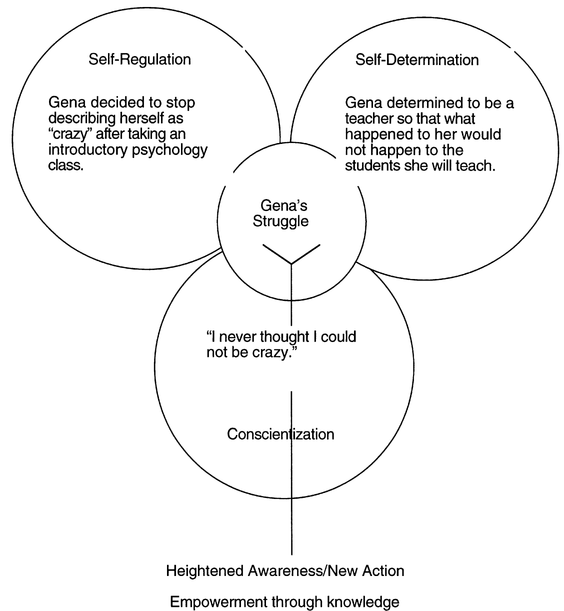


Fig. 4. Venn diagram for Gena showing distinctions for self-regulation, self-determination, and conscientization.

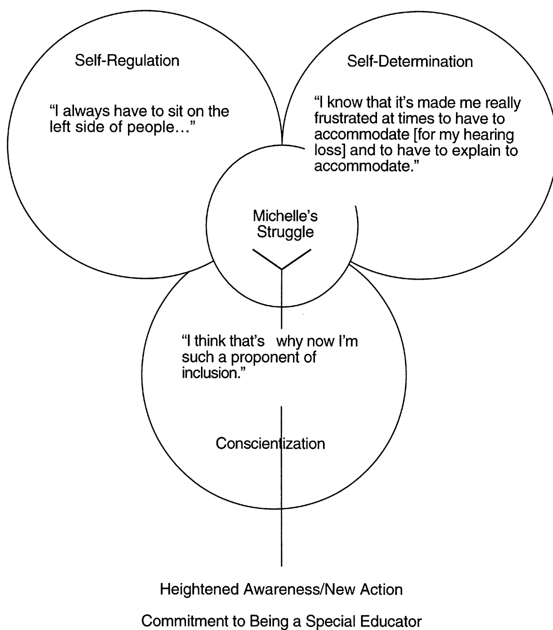


Fig. 3. Venn diagram for Michelle showing distinctions for self-regulation, self-determination, and conscientization.

For Ron (Fig. 5), self-regulation shows up as a specific role for teachers (i.e., to fight against the way in which people internalize their own limits). Self-determination, for Ron, is deciding to take actions (such as confronting racist teachers during high school) even though it is "hard to be different". Conscientization is evident in Ron's experience of "the more I learned, the more I don't know" as liberating because "everybody is in that same boat". The outcome of the combined struggles is evident in knowing that as a teacher, "I use my power not to get people to think in a particular way

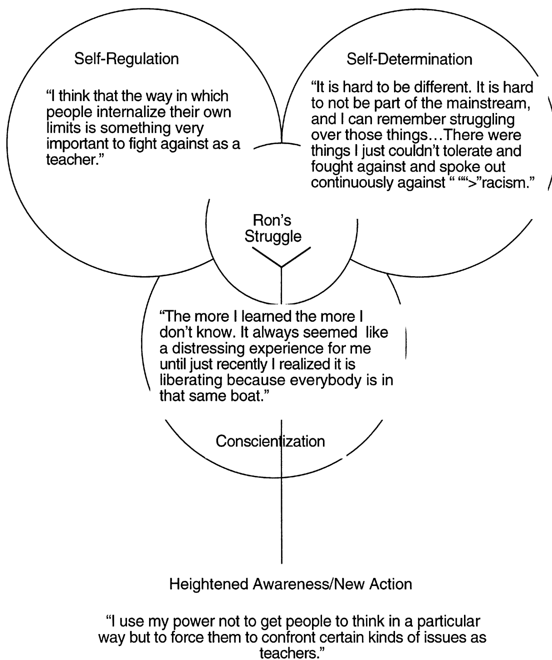


Fig. 5. Venn diagram for Ron showing distinctions for self-regulation, self-determination, and conscientization.

but to force them to confront certain kinds of issues as teachers". It's important to Ron to break the connection that we [teachers and students alike] have with regard to individual differences—those that are actual in our physical bodies versus those that are real or socially constructed. Schools lead people to think that social rewards are deserved, rather than reflecting social power and status.

### *4.1. Limitations*

The adults with disabilities we interviewed appeared to behave like the self-regulated learners Zimmerman (1998) speaks about when he says, "Self-regulated learners, whether historic or contemporary, are distinguished by their view of academic learning as something they do for themselves rather than as something that is done to or for them" (p. 1). Although the adults we interviewed may be considered mildly handicapped by virtue of their achievements as adults, it must be emphasized that the adult with muscular dystrophy is moderately to severely impaired, requiring the use of an electric wheelchair. The attempted suicide of one of the interviewees suggests a moderate to severe disability which was unrecognized. The hearing impairments and learning disabilities of our interviewees were admittedly of mild to moderate intensity.

## 5. Implications

In this section, the authors suggest implications for teachers. Why should teachers listen to the voices of adults with disabilities? What advice can be gleaned from their experiences of struggle for self-determination, their realization of the power of self-regulation, their 'conscientization' of how they can change their life circumstance? What new actions and new curricula should teachers be encouraged to take as a result of listening to these voices?

### *5.1. Advantages of eliciting and listening to student voices*

One task that all teachers face is to take a learner who is dependent and teach that learner to become independent. The skills and knowledge offered by educational psychologists, critical pedagogists, and special educators may help teachers achieve that task. Through self-regulation, self-determination and conscientization students and students with disabilities can become aware of their own skills, can learn to monitor their progress towards self-initiated goals, and can create the space of knowing where they can make a difference in their own lives. However this task is further complicated for teaching students with learning challenges. Although the controversy over deciding how best to help these students will persist, a promising approach seems to be to elicit their voices. By using interviews, for example, to elicit and listen to students' writing or talking about their challenges (i.e., disabilities), the teacher can observe that learning "difficulties" are often defined in part by difficulties with particular activities valued by the culture.

At the heart of self-regulated approaches is the notion of individual perception. If students believe they lack the ability to deal with higher

mathematics, for example, they will probably act on this belief even if their actual abilities are well above average. Just telling students to "try harder" is not particularly effective. Students need the evidence that their effort will pay off, that setting a higher goal will not lead to failure, that they can improve, and that their competence actually does change. At the heart of self-determination approaches is the concept that the components can be explicitly taught. Direct data-based instruction such as that employed in Durlak, Rose, and Bursuck (1994) shows that students with learning disabilities can acquire competencies related to naming their disability, explaining and asking for appropriate accommodations, although with limited generalization to other settings (e.g., regular classrooms, IEP meetings). At the heart of a critical pedagogy approach, however, there is a subtle but important shift of attention to the student and the student's culture. Some advice from Goldstein (1995) might be helpful here. She writes that teachers who take a critical pedagogy approach to their work must know when and how to "problematize based on classroom events" (p. 472) and use it for teaching. This means that teachers know how to modify an activity to make it possible for students to grasp the larger issues of social justice (such as inequities) at work in their own lives.

Ovando and Collier (1998) illustrate this ability to problematize when comparing a critical pedagogy approach to a traditional approach in teaching an instructional unit on American Indians. The instructional objectives for the traditional unit state that students will "identify reservations in their state, name the tribes, list geographical features of the state that have American Indian names, and appreciate local American Indian art and literature" (Ovando & Collier, 1998, p. 155). When using a critical pedagogy approach, the instructional objectives are transformed to "identify areas of good and bad agriculture on a state map, analyze distribution of land to whites and American Indians and the consequences of that distribution, make bar graphs from numerical data, differentiate between institutional racism and individual prejudice, and appreciate the potential of their own actions against institutional racism" (Ovando & Collier, 1998, p. 155).

The differing instructional objectives represent a very important change, a subtle change but one that results in students learning about power issues within an historical context and also exploring possible social actions that might be taken. Goldstein (1995) advises teachers to resist merely replicating lessons and instead, "create a classroom environment in which students develop their confidence in their legitimate right to voice their honest reactions to the world where teachers listen and respond to students in ways that encourage dialog that validates, challenges, analyzes, and critiques assumptions, ideas, and conclusions without silencing voice" (p. 473). Remember that she was able to implement a critical literacy approach to teaching reading and language arts in a special education classroom for students with learning disabilities who were also learning English as a second language. In her view, teachers can recognize their students as decision makers and can build lessons based on meaningful events that emerge from a dialog with them.

### *5.2. New curriculum for self-regulation, self-determination, and conscientization*

Our interviewees had the characteristics to become self-regulatory.

What happens to those who do not emerge as self-regulatory in the way that our interviewees did? The research promise is that with explicit curricula in self-regulation and/or self-determination it is possible to increase the number of students who are capable of being self-regulatory and self-determined. Based on the above citations, we believe that teachers and teacher educators can benefit from the research and practice literature in educational psychology, critical pedagogy, and self-determination.

Teachers and teacher educators can capitalize on a multi-dimensional teaching process that borrows from each of these emerging constructs (self-regulation, self-determination, and conscientization). For example, self-regulation theorists explain the process of self-regulation in three phases: forethought, performance or volitional control, and self-reflection (see summary by Schunk & Zimmerman, 1998). The forethought phase refers to beliefs that

precede efforts to learn. The performance or volitional control phase involves processes that happen during the actual learning activity, processes that affect concentration and outcomes. The self-reflection phase refers to processes that occur after learning activities are completed which influence a learner's reactions to that experience.

In the critical pedagogy concept of conscientization, similarly, there is the action, reflection, new action cycle known as praxis. As a result of the experience of this cycle, the learner becomes aware of his or her power (e.g., voice) to influence his or her own learning experiences. Moreover, researchers and practitioners in the inclusive education movement for people with disabilities have identified key elements for self-determination. Three common elements of the self-determination curricula cited above include choices for students that result in their increased self-awareness and self-esteem, increased goal setting, improved decision making and assertive communication skills. Students therefore have more experiences of the cycle involved in actively participating in making choices and living with the consequences (See for example, Diaz-Greenberg, 1998).

There is a growing research literature in explicit curricula to teach children to become self-regulated. Schunk and Zimmerman (1998) included a decade of self-regulation studies of "large-scale interventions whose effects were broad in scope and assessed over lengthy periods of time" (p. 227). Five common elements of these curricula include strategy teaching, practice of self-regulatory strategies, feedback on strategy effectiveness, monitoring, and social support from others. In addition to these commonalties, researchers diverge on the role of will, social models for transmitting skills, and self-reflection in the development of self-regulation.

Similarly there is a growing body of literature on the impact of explicit curricula to teach self-determination for students with a wide range of disabilities. The types of disabilities for which self-determination has been studied include learning disabilities, mental retardation, autism, and other developmental disabilities (cerebral palsy, Down syndrome, neurological impairment). In addition, students at risk for school failure have also been studied with regard to self-determination.

A wide range of research methodologies include measures representing the dependent and independent variables, population sampling techniques, and data analysis techniques used by researchers who study self-determination. Durlak et al. (1994) used the multiple baseline experimental design, where each student with learning disabilities served as his/her own control, to assess the impact of a curriculum and direct instruction of self-determination knowledge and skills. Nowak, Laitenen, Stowitschek, and Affleck (1995) used a survey method to assess the impact of self-determination opportunities for adults with developmental disabilities (e.g., cerebral palsy, mental retardation, Down syndrome, neurological impairment). Abery, Rudrud, Arndt, Schauben, and Eggebeen (1995) conducted a statistical analysis based on the pre/post self-reports on rating scales for teenagers with mental retardation. Hoffman and Field (1995) conducted statistical analysis based on post-test only measures of self-reported self-determination knowledge and observations of self-determination skills. Wehmeyer (1997) used a quasi-experimental design in a follow-up assessment of self-determination skills of high school graduates, with those who had self-determination curriculum showing greater scores on quality of life variables, higher likelihood of employment, and higher wages than those graduates who did not have self-determination curriculum in school. Qualitative research methods to study curriculum impact were used by four researchers. Case study approaches were used by Kaiser and Abell (1997) and Serna and Lau-Smith (1995), who assessed the impact of curricula for students with learning disabilities and students at risk for school failure, respectively. Descriptive approaches were used by Martin, Marshall, and Maxson (1993) and Martin, Oliphint, and Weisenstein (1994) to describe self-determination curricula for youth with moderate-to-severe handicaps in one school district.

## 6. Conclusion

We appreciate the evidence that the adults with disabilities we interviewed have successfully achieved self-regulation, self-determination, and

conscientization. Indeed, for Gena and Denise these achievements may have occurred in spite of the educational systems they experienced, whereas for Ron, Michelle and Diane the achievements may have come *as a result of* the experiences with the teachers they encountered. We look forward to the possibilities that new curricula based on critical pedagogy principles may provide, so that all students with disabilities might be assured of becoming consciously aware that they are self-regulated, self-determined individuals.

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