Progressive Educational Practices and Environments in Sweden: Preparing Students to Live and Work in the Global Age

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A multi-site case study of three Swedish schools examined the dimensions of trust, responsibility, shared power (democracy), and global workforce competence as required by a decade-old national education reforms. A key finding was the existence of progressive educational practices including constructivist epistemology, evidenced by the schools' organizational structure, the instructional methods employed, and the various roles engaged in by the teachers, students, and administrators. These progressive practices and the mechanisms used to sustain them in one Swedish public school system may be conducive to effective preparation of workers and citizens for the post-industrial economy and to live in a participatory democracy.

For at least a century, progressive educators have advocated for schools that empower students to be self-directed and self-regulated, active participants in their learning and in the governance of their learning environments (Dewey, 1916). This contrasts greatly with the controlling, knowledge-dispensing traditional schooling model that, despite progressives' decades of efforts, remains the dominant model in the U.S. This article describes the findings from a study conducted in Sweden where progressive schooling reforms affected teachers, administrators and, most profoundly, students. The model embraces an egalitarian dissemination of power among children and adults and utilizes the constructivist epistemology while establishing democratic, collaborative learning environments based on a foundation of trust and personal responsibility. The Swedish Education Reform of 1994 (Skolverket, 2000) and the guiding curricula that spawned these schools may also ensure that Sweden fosters in its youth the essential traits and values for success in the post-industrial global economy and to actively participate in a vibrant democracy, the most dominant and prolific form of government in the Global Age (Castells, 2000; Karatnycky, Piano, & Puddington, 2003).[1]

Review of Relevant Literature
Constructivism and School Reform

Many of the real and perceived problems regarding U.S. public education have been combated by reforms that are ostensibly "more of the same," not changing the way schooling is done, merely adding to what is already in place—more standards, course requirements and, of course, high-stakes tests (Kohn, 2004; Meier, 2002). Some scholars (e.g., Delors, 1998; Freire, 1985; Chomsky, 2000) advocate for truly alternative ways of educating, employing methods and developing school environments that internally motivate students to not only learn prescribed content but to "learn how to learn" so as to become life-long learners as well as knowledgeable participants in a democracy. One such alternative that has been the focus of much scholarly writing in recent years is constructivism, an epistemology seemingly embraced by the Swedish school reforms of the 1990's and by the three schools in this study.

Constructivists contend that all learning emanates from the personal experiences of the learner through social interactions with others (Howard, McGee, & Schwartz, 2000). Dewey, Vygosky, and Piaget were early advocates of constructivism, and their work powerfully impacted education theory and, to a lesser degree, practice by focusing classroom activity on the student rather than the teacher and the curriculum. The learning environments in this study were consistently student-focused, strongly suggesting an adherence to, if not an approval of, constructivism.

Keeping students actively engaged in meaningful learning may be the key to resolving disciplinary and motivational problems in U.S. schools (Glasser, 1998; Kohn, 2004). In doing so, direct instructional methods of teacher lecture followed by individual student seatwork, resembling the "banking" model impugned by Freire (1985), must be severely limited. Not only does a reliance on direct instruction force students to become little more than passive recipients of information (Howard, McGee, & Schwartz, 2000; Shapiro, 2000), but also research in learning theory (e.g., Gregorc, 1982; Gardner, 1985) suggests that most students not only dislike direct instruction but also may actually be de-motivated by it. In order for schools to evolve beyond direct instruction, the role of the teacher must change from that of dispenser of knowledge to facilitator of learning who, through an understanding of each student's learning preferences and motivational "buttons," can help students learn from numerous resources (including the teacher) and foster self-directedness that may eventually lead to a love of learning. A strong internal desire for learning is essential for life-long learning, a crucial aspect of "knowledgework" as described later in this article.

To ensure that students are internally motivated, life-long learners, the classroom and school environments must transform from autocracies that are strictly controlled by authoritative adults to more open, democratic settings that more resemble Senge's (1990) learning organization and other organic, flexible structures that can readily meet the changing needs of the environment (Morgan, 1985). When teachers are coerced by outside forces such as site-based and district administrators in addition to mandates from the state and federal levels (i.e., imposed standards and high-stakes tests), their autonomy is lost and their motivation to perform quality work is greatly diminished (Kohn, 2004; Meier, 2002). A learning environment conducive to strategies supporting constructivist beliefs and the nurturing of democratic ideals in children and adolescents is one where all stakeholders share power: teachers, students, administrators, parents, and the surrounding community. Sharing of power demands that decisions directly affecting learning should be made with the learner's input, if not solely by the learner. This type of democratic environment was evident in the three Swedish schools in this study and is at the core of constructivist education (Shapiro, 2000). Students were not only invited to make important decisions affecting their education, they were—ironically—*mandated* to do so. Swedes did not allow their children to escape the civic obligation of learning how to not only live in a democracy but to ensure their democracy remains robust.

Constructivism and Democracy

Constructivism's origins may be traced to Dewey's promotion of experiential learning and his belief that the primary function of education should be the preparation of democratic citizens (1916). Deep understanding of content beyond mere recall or even application, as described in Bloom's Taxonomy of Learning (1956), must be fostered by social interchange, which would require teachers to allow for student interaction in classrooms, rather than force students to sit quiet and motionless. This deep understanding/high-level learning is necessary for critical analyses of the content, the source of the content (teachers, textbooks, Internet sites), and of *all* authority (Goodlad, 2001). Democracies, dependent upon a participatory, well-educated populace that is able and willing to critically analyze (Barber, 1992), will most likely be the dominant form of government in the age of globalization. Preparing students to succeed in the global economy within the Global Village, where national boundaries are blurred and corporations demonstrate no allegiance to any nation-state (Castells, 2000), will require a drastic change from the traditional schooling model that relies heavily on passive recall of low-level information (Reich, 2002; Torres, 2002). Education agencies, therefore, must create environments where students can interact and learn to participate in a democracy, not schools where control is the dominant theme (Sehr, 1996).

Methods

This multi-site case study focused on the dimensions of shared power, trust, student responsibility, and "global workforce competence" (teamwork, pragmatic technical skills, problem solving, and entrepreneurship). The first three emanated from the Swedish National Curricula, which are value-laden documents, designed to guide pre-school, compulsory, upper-secondary, and adult schooling (Regeringskansliet, 1999) (see Appendix A for excerpts from one of these curricula). Democracy is a dominant theme throughout these documents, but fearing political misconceptions that may surround this concept and its inherent complexities (Barber, 1992), the study concentrated on the sharing of power

within the schools. A search of the prevailing literature on what students should know, do, and be like to succeed in the global economy led to the four categories of global workforce competence. These were, the literature suggested, the most important skills and/or traits for one to succeed in the global economy (entrepreneurship subsumed the traits of creativity and risk-taking)[2]. The research questions asked in what ways the three schools support these seven dimensions.

The three schools in the study were selected for their continuity of service for a large proportion of students in the community. All the students attending the elementary school were scheduled to matriculate on to the middle school and, although high school (or "upper secondary school") is not mandatory in Sweden, approximately 80% of all those leaving the middle school went on to the high school in the study. The schools were located in a small community in Central Sweden of about 35,000 people and, although the community had one local government, it had two school districts: one for pre-schools and compulsory schools, and the other for upper secondary and adult education. The principals of the schools and the superintendent of the pre/compulsory schools were known to the researcher; two principals and the superintendent participated in an international school consortium with the researcher and readily volunteered their campuses for research along with several other principals in the district. The researcher had met and interviewed the two upper secondary school principals during a visit one year prior to this study.

The elementary school was by far the largest in the community, serving about 500 students, the middle school about 800, and approximately 1200 students were educated at the upper secondary school. One other middle school and 14 other elementary schools were also in and around the community, as were two other upper secondary schools. Eleven of the 16 career-focused national programs were located at the upper secondary school in the study; two significantly smaller schools housed the other four programs. A seventeenth program was "individual" in that students having difficulty in other programs could opt to develop their own program of study and be taught by teachers who specialized in motivational techniques, somewhat equivalent to drop-out prevention programs in U.S. high schools. The goal was to eventually motivate these students to re-enter their chosen academic program or attempt another (Skolverket, 2000).

Data were collected through individual and focus group interviews of high school students, and teachers at all levels. The elementary and middle school principals were interviewed individually; the two upper secondary principals were interviewed together. Each interview lasted approximately one hour and consisted of seven to eight base questions. These sessions took place on campus during and after school hours, were recorded and later transcribed. Surveys were administered to every teacher in the schools and to the students in the high school (Appendices B and C). A document search conducted before, during, and after the other data were collected, focused on curricula and decision making at each school and the two school districts. Finally, focused classroom observations and general campus observations were conducted at the three sites, both attentive to student-teacher/adult interactions that may relate to shared power.

Data were analyzed using the constant comparative method (Glaser & Strauss, 1967) in which data collected (interviews and documents) were compared throughout the collection process for themes arising from the seven established categories of shared power, trust, student responsibility, teamwork, pragmatic technical skills, problem solving, and entrepreneurship. These theories were used as conceptual links between and among the seven categories; the findings discussed in this article are divided into the dominant themes found in the analysis (survey results were later included in this analysis). These themes are the following and head each of the subsections in "Findings."

- Students owning their learning
- Standards and national curricula that guide rather than dictate
- Constructivist teaching strategies that empower students
- Trust and adult supervision
- Democracy and empowerment
- Global Workforce Competence: Making schooling relevant to the workplace.

These themes have obvious and subtle connections to the seven dimensions that drove this study; the themes and the connections are described in the next section.

Findings
Students Owning Their Learning

Students in all schools developed their own learning plans, beginning with pre-school children as young as four years old. Although the youngest of the students did not have their learning plans in written form, the evidence suggested that they were deeply involved with the development of these plans. According to teachers, pre-school children sat in circles ("rings") on Monday mornings to decide what

they were to do during the week, the teachers acting as facilitators. On Fridays, they discussed their learning for the week and then completed a self-assessment consisting of smiling or frowning faces for each of the week's activities, followed by more discussion of their progress. This was the earliest example of democratic schooling experiences found in the study and may be indicative of the Swedes' valuing democracy. When a focus group of elementary teachers was asked about democratic activity, one teacher responded

Yes, they need [democracy skills] when they are going out to the society … and when they're six years old that's mid point [of their experience in that school, so] I think to make them secure and think of each other and the social part … it's a part of Swedish society, isn't it? Democracy--to care for each other and not to fight [but] to talk …no fighting to learn from …and you can't fight to have [an] effective democracy.

At the middle school, teams of teachers and students met weekly in a large forum to discuss how they felt their learning was proceeding. One middle school teacher described this forum.

With our 120 pupils we have started something we called "A team." We started [this] pupils' team so that we [can] each discuss what's good and what's bad, and [the students] hand [their comments] into us [beforehand] so we discuss [some of these] at our meeting. We try to see if there's anything we could do to make it better for the pupils, but also have them think about "Is this really good?" or "Is it just a way of making protest?"

In the high school, students agreed that they were involved in most aspects of their learning, from planning to assessment; but insisted that they should have even more power in their schools.

Upper secondary student: Well, I just think you need to let the students decide more by themselves, especially [in upper secondary school]. …I can decide on my own likes in Sweden so then the teachers and the administrators decide for me…[long pause]. [Students] should have a bigger… influence in everything and [teachers and administrators] should let students be part of everything.

As part of a focus group, another upper secondary student replied, " … the teachers and principals *and* students should be a part of the decisions, of course, otherwise it's not a democracy."

A survey administered to 300 students at the upper secondary school (154 respondents) (Appendix B) revealed that students were mildly negative regarding their position of power (see Table 1). The items pertaining to the shared power dimension in the student survey were 3 through 5 and 8 through 15

and this grouping's mean score was 2.35 on a 1 to 5 scale, with 5 corresponding to their perception that they were greatly empowered. All teachers at each school were given similar surveys (Appendix C) (rate of return was a disappointing 48 out of 231[3]). (Table 3 and teacher empowerment will be discussed shortly.).

Table 1

Teacher and Student Survey Data (by Dimensions)

Dimension	Number of Items	Mean	Median	Mode	Standard Deviation	Skewness	Kurtosis	Variance	Coefficient Variation	Cronbach Alpha
Shared Power-teacher survey	9	3.44	3.40	3.40	0.36	[0.44]	0.44	0.13	10.52	0.65
Shared Power-student survey	11	2.35	2.25	2.25	0.58	0.14	0.84	0.34	24.73	0.59
Trust-teacher	5	4.40	4.25	4.25	0.52	0.73	2.10	0.27	11.90	0.22
Trust-student	2	3.66	3.50	3.00	0.72	0.77	2.21	0.52	19.74	0.00*
Student Responsibility-teacher	8	4.06	4.00	3.75	0.50	0.91	2.81	0.25	12.27	0.41
Student Responsibility-student	6	3.68	3.67	3.33	0.48	[0.09]	0.70	0.23	13.03	0.56
Global Workforce Competence-teacher	4	3.89	3.88	3.50	0.64	[0.35]	2.28	0.41	16.39	0.66
Global Workforce Competence-student	4	3.56	3.50	3.75	0.71	[0.32]	0.42	0.50	19.85	0.69

Table Notes:
Score was calculated as a negative but is reported as "0."
Teacher Survey: N = 48, Cronbach Alpha for survey = 0.60
Student Survey: N = 154, Cronbach Alpha for survey = 0.78

Standards and National Curricula that Guide Rather than Dictate

Although, students were required to reach the academic standards developed by the Swedish Department of Education (Skolverket) for each of the seventeen upper secondary programs offered in all of the 278 Swedish communities, the standards (referred to as the "Syllabuses") were found to be sparse in comparison to American state standards[4] and the means to these ends were decided by negotiations between the students and the teachers. The standards were passed down from Skolverket through the local school boards and on into each school building, changing often along the way. Upon being asked about the influence state and local government has on her education, an upper secondary school student stated

… Certain rules that they [Skolverket] has to loll through and then the community can look at them and [determine] what they think about [the standards] they have to follow … but in their own way, so all communities don't have the same thing.
Interviewer: So your school and maybe even the students interpret what the politicians give you?
Student: Oh yea, we can … I don't know … we can, we look at it; all the schools are looking at in different ways, and that's … that's what we do.
Interviewer: Do you think that's good?

Student: Yes! … [the Skolverket] just has, ah, this map you have to go after … just you don't have to fold it exactly all the same way.

In essence, standards were not ironclad statements, but malleable guidelines that could change according to local and even individual needs.

Despite the existence of academic standards found in the Syllabuses, the guiding force for each level of schooling was the three Swedish National Curricula that were developed in the mid-to-late 1990's (Skolverket, 2000). These documents (see Appendix A for excerpt of the compulsory school curriculum) were value-laden, not content-focused as were the Syllabuses. These curricula were mentioned again and again by teachers and administrators throughout the study.

Interviewer: In what way does the national curriculum [as translated by the school] affect the curriculum and the instruction in your classroom?

Middle school teacher: A lot because the curriculum status for the students [what we think they should be able to know and do] by the end of the year [is developed] at the beginning of the year, so we are following that schedule... the program, what the curriculum says about…what they should know … so we are looking at it, and [the students] read it, and then they can … we can discuss how we are going to work with this…

In an interview with the two upper secondary principals (both had equal power in the school), they described the aforementioned evolution of the Skolverket's "mandated" curricula from the state to the local levels, emphasizing how little impact they felt they had on their jobs at the school.

Principal 1: I would say that the national curriculum in the upper level, if I can say so, [is like a] chain. First [link] is at the national level … and then on our district level we have a certain plan, which should be matching the goals in the national curriculum. And then we have our plan for our … school, and in our school we have our two principals, and we have our own plan for our … areas [or programs].

Principal 2: Yes and it should be [that] the goals match each other in a sort of chain. So … I wouldn't say that the national curriculum has very much to do with how we work here.

But conversely, the second principal stated the importance of the values found in the curriculum for upper secondary schools.

… All these words which you have in your study democracy, trust--all these kind of values-- they are very important as they [guide us]…

But this principal is quick to point out that the curriculum is to be individualized to meet the students' needs.

… The whole system is a mixture of different ambitions, I would say different intention; we want to have structure but also … say [we have a] national curriculum, but every pupil, every student should be able to choose her or his own plan.

Constructivist Teaching Strategies that Empower Students

Teachers in the middle and upper secondary schools were difficult to identify upon entering the classrooms as they blended well with the students. They dressed casually and rarely began their classes by standing in front addressing the students. Instead, students typically entered classrooms nonchalantly (there were no bells at the schools), began working on a project, usually collaboratively but sometimes individually, with their teachers sitting amongst them at tables or even on the floor. In addition, all teachers were addressed by their first name only--even the two superintendents were known to students and teachers by their first names. This casual environment may have positively affected trust within the schools and of the schools within the community (Kramer, 1999; Kramer, Brewer, & Hanna, 1996).

Teachers' instructional strategies and the classroom environments they developed with the students were greatly influenced by the seemingly constructivist reforms of 1994. Individualized instruction, a crucial aspect of constructivism (Shapiro, 2000), was evident during the observations and supported by an upper secondary student in an interview and who, perhaps unknowingly, also criticized the banking model of instruction.

I like to decide … I always like to do that, and I think [making my own decisions is] important because if all the teachers decide everything, we maybe not learn properly. We may not learn everything we have to learn [without the teachers' deciding what we learn] but [if they did decide everything] maybe we just learn it for one day and then do the test … the day after we don't know it...

A middle school teacher spoke about how she worked to individualize instruction based on her knowledge of the students and from their input about what they want to learn and how they learn, determining each student's learning style; a strategy used in a university course she had taken a few summers before.

[I have students] who like writing [when] they use their eyes [and I have] those who use their ears, and we try to make a list of the group ['s preferences]. We try to find many different ways

[they could learn]… I sit in a ring [with students] and I talk about ... How did it work for you? …Some said it was good--it was very good. And I would start a discussion [about] what's good for you maybe is not good for others, and that's where they have to make their own decisions how to learn…

She went on to describe how students in her class are required to develop and teach one lesson a week to other students, requiring them not to use a textbook so as they might then depend on the prescribed lessons published in it. This, the teacher felt, required the students to be more creative, to think about the learning preferences of those in the room based on the circle conversations they routinely had. She asked them to bring in material from other classes (she taught English) such as art so that they could see that "you don't have to leave art when you come into [the] English classroom." After each lesson, they were to write a reflective piece on what went right and what they would change, a practice she and her colleagues do on a daily basis, she said. She referred to these teacher reflections as "diaries."

Trust and Adult Supervision

At the elementary school, children played outdoors on an icy hill and on a skating rink between and during classes. Usually a teacher was in the vicinity, but sometimes not. One day the researchers walked across the skating rink and were shouted at, in Swedish, by a boy who appeared to be about six years old. Once they arrived at the other side of the rink, an apologetic teacher said that the boy was simply stating the rules about not going onto the rink unless you wore ice skates—a rule, she said that was developed by the students themselves. At another elementary school in the community but not in the study, the researchers participated in a mid-morning tea planned and presented by two eleven year olds in appreciation for all the adults at the school. When asked where the other 200 students were, the principal pointed out the window where they were sledding down a rather large hill and skating on a frozen pond at the bottom of the hill. No adults were outside. When asked what would happen if a child were to get hurt, the principal replied, "Oh, another child would let us know, I suppose." Upon hearing the researcher's concerns about litigation, a teacher at a nearby table responded laughingly, "Oh, you Americans!"

With the possible exception of the students' development of their own learning plans, the lunchrooms may have been the best place to see how responsible Swedish children could be in these trusting learning environments. At all three schools, students ate and socialized without formal adult supervision, even at the elementary school where teachers did eat with their students in a small cafeteria, but only because the principal said he would provide them lunches if they ate with their students. His explanation was that he wanted them to have more informal time with their students; indeed, it was informal as no teachers were witnessed giving directives to the children during the several hours of lunches observed there, simply eating and socializing with students who were eight to ten years old. Students ate their meals while conversing with friends (students *and* teachers) then cleared their tables, dropped off their metal utensils and ceramic plates and cups with the dishwashers, then disposed their waste in appropriate recycling bins. The same scenario was repeated during three days at the middle school except that there the adults did pay a nominal fee for their lunches. At the high school, adults ate separately in a small room adjoining the cafeteria, leaving the students adult-free except for the lunchroom servers. During formal interviews and lunchtime conversations, no adults or students could recall a problem stemming from this lack of adult supervision. In fact, they seemed puzzled by the researchers' concern for this.[5]

At the middle and high schools, students were found in snack rooms and recreation areas with little or no adult supervision. In fact, the only adults consistently in the vicinity were those who worked the snack counter. At the middle school, the students had sofas and stereos in one snack room while at the other they had a volleyball court, table tennis, billiards and other games at their disposal. Administrators and teachers, as well as the adults working the snack bars, insisted no problems ever arose from these relatively unsupervised rooms. In fact, the middle school principal noted how startled the students were in one snack room when he and the researchers "intruded" upon their snack time. He led the researchers out of room after only a few seconds saying he wanted the students to have their privacy.

When asked in interviews, "What happens when students do not do what they are supposed to do?" several times teachers gave a puzzled look and replied, "Why wouldn't they?" Apparently, the students were not simply obedient[6] as there were no directives from teachers or other adults that were witnessed in the observations; instead, students simply went about their business of learning. Elementary teachers reported that they concentrated on social skills rather than academics in the early years, yet international studies suggest that by upper secondary, Swedes outperform students from most industrialized nations, including the U.S (NCES, 1999). One Swedish teacher said that their first intention is for the children to learn to get along with others adding, "What good is it to teach them to read and write if they're only going to end up in prison?"

Further discussion found that this statement was a commentary on the difference in crime and incarceration rates between the U.S. and Sweden, and America's recent intense focus on academic standards and subsequent high-stakes testing rather than the learning of values necessary for good citizenship.

Democracy and Empowerment

The creation of empowering democratic learning environments was a desired outcome of the 1994 school reforms (Skolverket, 2000) and is evidenced by the wording in the three National Curricula (see Appendix A). Teachers were to be given more autonomy to make decisions about their jobs and, it was desired, this autonomy would be passed down to the students. It is not clear from the date collected that teachers were in fact autonomous. When asked about this new empowerment in an interview, one upper secondary school teacher stated

During the last five years, we are rather used to be[ing] free to take care of our own planning to take care of our own economics--even so, we want the administrators to be responsible for their logistics, so to speak, so we can do the work. But you know we have these teams … and we are responsible for planning … different subjects and economics and the status of courses-- [what] we want to see, [the] results [that may coincide with the national plan].

Interviewer: Do you think this is better or worse than the old way?

Teacher: This is, of course, much better … because it's possible for us to make … find new solutions for new problems. We meet different students and different classes and then we can relate to them instead of following the instructions [from the formerly-used prescribed curriculum].

Teachers and administrators were reluctant to talk about the transition from a relatively autocratic leadership (or the "British style that Americans seem to like," as one upper secondary teacher said) to an egalitarian, democratic style. One of the upper secondary principals simply smiled and said the transition was "painful." A focus group of middle school teachers laughed uncomfortably at the question of this change, and one veteran suggested that if not for the teachers' unions supporting the reforms, then they would not have been enacted. Two younger teachers stated that they could not imagine having schooling any other way. "It's best for the children … they need to be able to [function] in the new economy … the new world."

An interesting finding from a teacher interview was the existence of a children's 'parliament' in the community in which students from the middle and upper secondary schools were asked to participate in meetings with local government officials. The two upper secondary principals commented on the parliament

Principal 1: [The community leaders] ask for feedback or what … young people think about … different issues.

Principal 2: I think it started years ago by one of the youth leaders in the community.

Principal 1: Yes, and our politicians … listen quite eagerly to what the young person says and … how would it be possible for the students to get better marks [and be prepared for life] after school has finished.

The person in the community who led the Children's Parliament confirmed the principals' remarks that the community leaders did want to know what the children learn in school, and what their views are about local issues. Three students were chosen by their peers from the middle level and three more from the upper secondary schools to serve in the Parliament and, although the ultimate decision-making was left to the elected and appointed government officials, the students' input often influenced the decisions made by the adults. For instance, two community centers were opened in the past several years due to the discussions with adolescents, and the governing of these centers was based in part on the feedback the adults received from the students in the Parliament.

According to survey data, students agreed or strongly agreed to statements pertaining to the importance of their empowerment (items 4, 9, 11, 14, and 15) ranging from 73 to 87% (bolded in Table 2). But their agreement to how much they were actually empowered ranged only from 19 to 48%. Their disagreement to these statements was generally not as strong as their agreement to these items, ranging from 14 to 36%. As will be noted in the teacher survey discussion, high percentages of neutrality were found.

In an interview with the upper secondary principals, it was apparent that despite observations suggesting that the teachers were accepting of the constructivist changes, there still was some concern about teachers continuing to hold on to teacher-centered, traditional methods. Prior to the 1994 reform, curriculum was much more structured, ostensibly prescribing to the teachers just what they were to teach and how the content was to be *transmitted* to the students.

Principal 1: [Teachers] are pretty free as long as they fill the goals.

Principal 2: I think they are more free now than some years ago when the curriculum told them how to do and what to study in each subject. Now they can choose what to study and how; but we say, and the school … says you must discuss with your students [what is to be taught and how]. Students must have real influence … of … planning the studies together with the teachers.
Principal 1: And that's in the curriculum … in the laws.
Interviewer: You said it was more rigid in the past, more structured before '94?
Principal 2: Yes, it was before '94, the last national curriculum for the secondary school [prior to '94] was in … 1970.
Interviewer: Are teachers generally happier at your school to make their own decisions or would they rather have you make most of the decisions?
Principal 2: They would [rather] make their own decisions, I think.
Interviewer: You think they would be happier doing that?
Principal 2: Yes.
Principal 1: That depends.
Principal 2: Yes, it depends … Some teachers are very conscious and aware of what the national curriculum says and try to do like the intentions are written in it. But I think some teachers want to do as they always have done, they are quite traditional in the way of working … some [of] the teachers are in front of the students and deciding what to read and how to read and what to…
Interviewer: Teacher centered?
Principal 1: Yes, and it varies quite a lot.
Principal 2: Yes, it varies quite a lot.
 The principals went on to discuss how they manipulated the environment to discourage traditional teaching. In particular, they replaced individual desks with tables so that students would be more inclined to work together. The principals felt they were winning the battle to get all teachers to accept constructivist practices.
 Principal 2: I think the number of traditional teachers [is] declining, but there are some left. But many people they …
Principal 1: They are tired now.
Principal 2: Yeah, they are tired.
Interviewer: You've worn them down?
Principal 2: Yes, they are waiting for their pension.
 Results of the teacher surveys bring into doubt whether or not teachers truly believe that they are empowered by authorities. As noted earlier, only 48 of 231 (21%) of the teacher surveys were returned making generalizations made from these surveys for all teachers in these three schools suspect. Regardless, what can be culled from these data is an overwhelming feeling that teacher empowerment is important as evidenced by items 6, 9, 12, and 19 (bolded in Table 2) which ask teachers to respond to the importance of shared power (between 84 and 100% of respondents agreed or strongly agreed to this importance). Yet when asked about their actual empowerment as it relates to their involvement in school decision-making, the teachers were less emphatic. Items 5, 10, 11, and 20 referred to teacher empowerment and if they believed their administration encouraged their involvement. Those responding favorably (agree or strongly agree) ranged from 52 to 79%, but very few responded negatively. For item 20 which had a favorable response of only 52%, the other 48% responded "neutral."

Table 2

Student Survey Responses for Items Regarding Empowerment

Item Number	% Strongly Agree or Agree	% Neutral	% Disagree or Strongly Disagree	Item
3	19	45	36	I help to set class goals, procedures, and policies.
4	79	19	2	**Teachers should allow students to set class goals, procedures, and policies.**
5	41	29	30	All students help to influence the way we work in our classes.
8	41	45	14	Teachers encourage students to make their own decisions.
9	87	12	1	**It is important that students are allowed to make their own decisions.**
10	48	37	15	Teachers encourage students to develop their own goals and objectives.
11	73	26	1	**It is important that students participate in planning classroom activities.**
12	36	49	15	Teachers encourage students to develop their own goals and performance objectives.
13	34	50	16	I participate in the planning of my own learning as much as or more than my teachers do.
14	79	18	3	**Being able to sometimes influence my teachers is important.**
15	75	21	4	**It is important that students help to develop their own goals and performance objectives.**

Table 3

Teacher Survey Responses for Items Regarding Empowerment

Item Number	% Strongly Agree or Agree	% Neutral	Item
5	79	8	Teachers help set school goals, procedures, and policy.
6	92	6	**It is important that administration allows teachers to influence school goals, procedures, and policies.**
9	84	6	**It is important that teachers are allowed to make their own decisions.**
10	63	29	Administrators encourage teachers to participate in making decision affecting the school.
11	60	31	I am able to influence my supervising administrator in making decision about the school.
12	88	10	**It is important that I am able to influence my supervising administrator in making decisions about the school.**
13	98	2	It is important that teacher help administration make decisions about the school.
19	100	0	**It is important that decisions affecting the school be influenced by everyone affected by these decisions.**
20	52	48	Administration encourages teachers to make their own decisions.

What is not clear from the both the survey and interview data is the degree to which teachers are empowered, performing as autonomous and active participants in democratic settings. Some of the remarks by the teachers and administrators suggest that the reforms of 1994 were exacted upon teachers; those who did not accept these changes may have been counseled out of the profession (wearing them down). The following questions arise: Does a democracy exist when it is imposed upon the people? Is forced autonomy truly autonomy? Those who designed the Swedish National Curriculum, laying out the vision for Swedish schools, apparently felt that democracy and autonomy were important (see Appendix A), but what if teachers were happy with the way schools were previously operated, even if they did not have significant power in this operation? Were their opinions taken into consideration or did the sponsors of the national reform use "eminent domain" to ignore or even squelch dissent? Further research is needed to gain a better understanding of teacher autonomy and empowerment in these three Swedish schools and all Swedish schools considering the effects of the 1994 reforms.

Global Workforce Competence: Making Schooling Relevant to the Workplace

In addition to the social dimensions of democracy, trust, and responsibility, this study was designed to find if the schools were preparing the students for the global economy. The first three dimensions—shared power, trust, and personal responsibility—may assist students to participate in a democracy and perhaps live peaceably in the "Global Village" (a term first used by Marshall McLuhan in the 1960's when he described the shrinking world due to advancements in communications technology). But were these students gaining the skills and knowledge necessary for them to endure and ultimately succeed in the every-changing world of globalization? Studying recent workforce skills literature including the seminal SCANS report (1991), the four areas of teamwork, pragmatic technical skills, problem solving, and entrepreneurship were developed for use in this study. Indeed, the lower levels of schooling concentrated on social skills, yet the upper secondary school was set on preparing the students for the workforce in the spirit of Conant's (1959) comprehensive high school. As mentioned previously, each Swedish community must offer all 16 of the career-centered programs of study. These programs were treated as schools-within-schools where teachers usually worked in only one program, and the program's teachers were given significant

autonomy within that program. The Skolverket set the academic guidelines for each program, but these were scant in content, similar to the Syllabuses of the compulsory schools, and the department's mandate to follow these was rather flexible, essentially allowing students and teachers to decide amongst themselves what would be learned. All main subject areas (Swedish, English, Math, Social Studies, and Science) were mandatory in each program, but these subjects were learned through the lens of the career area of that particular program (Skolverket, 2000). Two programs did not appear to be as career oriented as the others, but rather college preparatory. Teachers, however, were quick to point out that students in every program theoretically could be accepted into a university (university admission in Sweden is quite competitive with only about one in three students gaining admission) (Sandahl, 1997).

In the 11 programs offered at the upper secondary school in this study, evidence suggested that the four dimensions of "global workforce competence" were supported. These teen-age students, as students of all ages in the study, usually worked collaboratively. The few who did work individually did so at their own request but this, they said, was only a temporary situation, eventually everyone learned in collaboration. Marketable technical skills were to be gained in the various programs, and critical analysis was inherent in the project-based curricula developed by the students with the help of the teachers. The community had a committee of local leaders from government agencies and businesses who addressed the economic needs of the *kommun* including how the schools, especially the upper secondary schools, prepared its students for the workforce. The upper secondary school principals spoke of trying to balance the committee's desires with what they felt, as professional educators, was sound education for the students. All in all, they felt satisfied with the arrangement as local businesses often donated equipment such as computers to the school and even better, held employment slots open for graduates. When asked if the businesses funded any part of the school's programs, the principals were quick to say that they received all their funding from the government, adding that funding all of the schools' needs was the obligation of the various levels of government.

It should be noted that about 40 Swedish principals, superintendents, and university professors visited 14 Florida schools prior to this study, hoping to find ways to increase creativity and risk-taking among their students, what they believed to be the core of entrepreneurship. The Swedish educators did

not find entrepreneurial skills being learned in Florida schools but instead reported that these schools emphasized control and obedience (School Management Institute, 1999), neither compatible with the fostering of entrepreneurs. The assumption was made for this study that if the Swedes were looking to the U.S. to help increase entrepreneurship in their schools, then this must be almost non-existent in Swedish education. But, alas, creativity was quite evident in all the schools of the study. By the instructional methods used and the structures of the schools, creativity was a natural by-product--as was risk-taking. Developing their own learning required students to be both creative and risk-takers. Two programs observed in the upper secondary school offered classes in entrepreneurship where students were allotted money to open actual businesses in the community, usually in the form of on-line services. Students were required to obtain personal loans from a local bank, loans that were secured by the school board. It was rare, however, that these businesses lost money, according to the programs' teachers; the loans were repaid by the student prior to his/her leaving the school.

Only the last four items in the teacher and student surveys pertained to global workforce competence and the mean scores (Table 1) suggest that the 154 student respondents and the 48 teacher respondents mildly to strongly supported that these skills were learned in the schools. What was surprising is that, although it may be assumed that the primary responsibility for teaching these skills would fall upon the upper secondary school with its 11 career-focused programs, the elementary and middle school teachers strongly supported the existence of these skills in the overall curricula.

Discussion
Possible Implications for U.S. Education

Of course, progressive, democratic schools like the Swedish schools in this study do exist in other parts of the world including the U.S.[7] Yet, from the results of this study which examined the impact of the National Curricula and from other U.S. educators' findings in schools in Sweden, these constructivist learning environments may be nationwide (School Management Institute, 1999). Only ten to fifteen years ago, according to some Swedish teachers and administrators, their schools resembled the U.S. in their British-style, autocratic approach to how school was conducted (instructional strategies, classroom and school management styles). How could this transformation be accomplished at such speed and seemingly be widespread? Asking teachers and administrators to share power with children, literally changing the roles they play in the schools must have indeed been painful, but it

appeared to be working. One veteran teacher said that he had his doubts about the new system when it was implemented at his school following the 1994 Education Reform Act, but he could now see that his students were much better prepared to live and work in a democracy. The structure of the each school's management and the instructional methods used promoted the skills deemed necessary to succeed in the global economy. All schools had teams of teachers that shared power with the principals, and this sharing of power was evident among teachers and students. Can this progressive, democratic schooling model be extensively replicated in the U.S.?

First, it should be noted that the Swedes do not encounter what is, with the possible exception of teacher quality[8], the one consistent indicator of school success—poverty (Giroux, 2003; Payne, 1996). The social democracy that prevails in Sweden does not allow for great economic differences due to deliberate efforts by the federal government to implement an egalitarian economic system, and to provide for a "workfare" as compared to a welfare system that gives equalizing benefits for all who are employed, even if only part-time (Bjorklund & Freeman, 2005). Therefore, the differences in lifestyle between someone working the counter at McDonald's and a medical doctor are not nearly as overwhelming as they would be in America due in part to the relative lack of strong social supports, at least relative to the Swedish system. The result of the Swedes' efforts is a relative (to the U.S.) elimination of poverty in their nation, but poverty remains the destructive mediating variable that U.S. school reforms cannot universally overcome (Anyon, 1997; Giroux, 2003; Rothstein, 2002).

Another mediating variable was *horizontalindividualism* described by Triandis (1995) who notes differences between Scandinavian culture and the U.S. in that, although both are individualistic rather than collective, the Norwegians, Finns, Danes, and Swedes do not readily accept the existence of great chasms of wealth in their societies, making their individualism horizontal. Each citizen is primarily responsible for his or her own development, as is expected in an individualist culture, but it is embarrassing for Swedes to be too rich or allow for others to be too poor. Americans, conversely, accept these chasms (a *vertical* individualism), and acceptance that is evident in their unwillingness to create and sustain the type of social safety nets that exist in the Nordic countries. The Swedes' egalitarian individualism may originate from a Viking tradition dating back a millennium where a bowl of mead was shared with comrades, each man being careful not to take more than his share, a cultural norm now known

as *lagom*. In addition, a 19 th century novel *A Fugitive Crosses His Tracks* by Aksel Sandemose has guided Scandinavian culture specifically toward embracing the values of modesty, humility, and self-restraint. This novel is the origin of Jante's Law named after the fictional town that was the setting of Sandemose's story (Dewitt, 2003). A related Swedish tradition is that "no one blade of grass can stick out higher than another, for that blade will be the first to be cut down" (Sandahl, 1997). In other words, be wary of those who seek attention to themselves.

Even if Americans were to eliminate poverty and embrace *lagom*, they would still not be able to develop and sustain the Swedish style of schooling without first restructuring the schools and school systems in such a way that power can be shared. The bureaucratic organizations that exist at the state and local levels in the U.S. would have to give way to flatter, more responsive systems (Morgan, 1985). With the implementation of state and national standards in recent years, the U.S. school bureaucracies have ballooned, further removing the local stakeholders of education from relevant decision making (Johnson, 2004; Kohn, 2004; Meier, 2002). The U.S., with 49 different state standards (at the time of this study, only Iowa did not have state-mandated academic standards), does not have a national system of education, despite the efforts of the so-called "No Child Left Behind" initiative. Although the Swede's system is nationalized, it is set in a myriad of "free schools," as the elementary principal called them, where all the standards are malleable at the local and even the classroom levels.

School reform in the U.S., especially since the publication of *A Nation at Risk* in 1983, has been a movement advocating "more of the same." Bracey proffers that schools are doing a better job at what they have been asked to do than ever before; that is, educate as many children as possible in the most efficient yet, rudimentary, manner (1998). The concern is the term "educate." Is education merely a regurgitation of often useless facts (the ability to perform well on standardized tests)? Or is it the gaining of skills necessary to flourish in the future as espoused by Chomsky[9] (2000)? Toffler (1970) noted over 30 years ago that schools primarily prepare students to be 1) on time, 2) obedient, and 3) able to perform repetitive tasks; all skills, he contended, necessary for success in the Industrial Age. Toffler (1980) claimed that the Industrial Age ended in 1955 when white-collar workers first outnumbered blue-collar workers in the U.S. Why should local and state governments, and especially the federal government,

support an education system that prepares citizens to live in the past?

At a school board meeting in Sweden observed in this study, a principal made a presentation about why her school and the schools in her district conduct schooling in a constructivist manner. She began her presentation by telling all the adults in attendance (mostly parents) that their experiences in school had no relevance to what their children were experiencing. The adults in the room, the principal explained, were schooled for the Industrial Age, a time that had long since passed in Sweden. She insisted that the audience understand that her school's and her school district's educators were preparing the community's children for both the present and the future: the Global Age, as she called it.

The findings of this study may have important implications on U.S. schooling as it presumably prepares students to be successful workers in the global economy and capable participants in a democracy as the No Child Left Behind legislation would indicate. Swedish students were trusted to make important decisions regarding their learning and their behavior, freeing adults to concentrate on facilitating learning rather than controlling children and dispensing low-level knowledge. Reich (2002) describes the successful workers of the post-industrial economy as "symbolic analysts" or "knowledgeworkers" who shun so-called "dumbed-down," systematically routinized work (Dobbins & Boychuk, 1999), and the direct supervision that this work requires. In effect, autonomy (the marrying of trust and responsibility) is the necessary trait to be mastered if one is to find a satisfying and financially rewarding job in the global economy; otherwise a worker who requires direct supervision reminiscent of that found in U.S. schools, will be relegated to low-wage, little-or-no-benefits job, toiling in the lowest echelons of the service industry. Knowledgework requires self-regulated and self-directed personnel who can be trusted to accept the responsibility of work and be relatively unsupervised, and responsible for their own actions (Delors, 1998; Reich, 1991; 2002). Swedish educators and policy makers may understand this and have somehow implemented a system that is designed to foster a responsible worker while also preparing students to actively participate in a "public" democracy where the populace is required to be able to critically analyze their micro and macro environments (Sehr, 1996; Goodlad, 2001). If America is to compete in the post-industrial global economy and fashion itself as the beacon of

democracy for rest of the world, its political and education leaders must develop educational settings and opportunities that promote the type of worker and citizen that is responsible and trusted to operate collaboratively in a self-regulated environment and to question the authority of those in power. The continued proliferation--perhaps the veritable existence--of democracy may depend on how the U.S. educates its citizens.

Footnotes

[1] As of 2003, 121 of the world's 192 nation-states (63%) were technically electoral democracies, up from 28% in 1950 (Karatnycky et al, 2003).

[2] Swedish educators visited Florida schools in 1999 to find how entrepreneurship was fostered in U.S. schools. They instead came away with the belief that these schools were infatuated with control rather than risk-taking and creativity (School Management Institute, 1999).

[3] This poor rate of return surprised the principals and pre/compulsory school superintendent. Completed surveys were returned to the central office at each school and mailed to the researcher. This collection method was problematic but necessary due to time constraints. The researcher acknowledges that follow-ups for non-respondents and/or interviews of a random sample of non-respondents would increase the generalizability of the teacher survey data across the three schools (see Gall, Borg, & Gall, 1996, pp.302-4).

[4] The Syllabus for all Swedish compulsory schooling (Regeringskansliet, 1995) is 103 pages as compared to 1196 total pages found in four volumes (mathematics, science, social studies, language arts) for K-12 schooling in the state of Ohio.

[5] In post-Columbine America, it is uncommon for school cafeterias to allow for metal utensils as these can be used as weapons, plus the U.S., relative to Sweden, chooses to dispose of products rather than reuse them. When this was mentioned to teachers and administrators, they asked how U.S. students could possibly eat without utensils. Mostly with their hands, it was explained, but they were given plastic "sporks" that were both forks and spoons--and relatively harmless. This so amused the Swedes that the spork story leaked to the local newspaper which interviewed the researchers about violence in American schools and the ridiculous-sounding spork.

[6] Blind obedience is often conflated with democracy according to some scholars (e.g., Goodlad, 1998; Sehr, 1996; Soder, 2001). Instead, a strong democracy must depend upon a populace willing to be skeptical of rules and laws and accept them only if they can rationalize their existence or that by not following policy, they would disrupt the greater good of the environment (Barber, 1992; Soder, 2001).

[7] See David Sehr's case studies of democratic schools, Deborah Meier's descriptions of The Mission Hill School [2002] or Dennis Littky's "The Met" High School [2004]).

[8] Several recent studies seem to contradict the 1960's Coleman Report that contended school success is predicated on family circumstances rather than school qualities. Studies by both Ronald Ferguson and William Sanders suggest that teacher quality may be a stronger indicator of success than socio-economics.

[9] Chomsky contends that the majority of U.S. citizens depend on others to "analyze, execute, and run" important matters. By understanding the world around them through the gaining of information available and analyzing this information, the majority can truly participate as citizens of a democracy rather than allow those in power to replicate society. Chomsky advocates for the requirement of higher-order thinking skills in all public schools (*analysis, synthesis, evaluation* to use Benjamin Bloom's terms).

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