Tidskrift

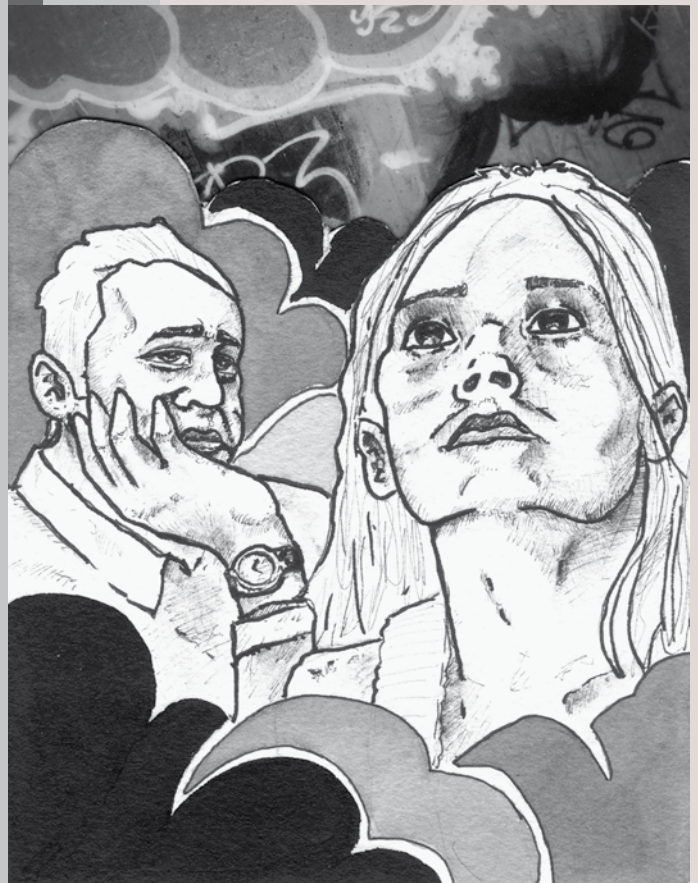## *för lärarutbildning och forskning*

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Editorial

It is a pleasure for me to introduce this issue of Journal of Research in Teacher Education, which concerns a collaboration between graduate students from two institutions-the University of Wisconsin, Madison and Umeå University. The partnership between Madison and Umeå has endured for eleven years. The two campuses have developed a special relationship where scholars have had multiple opportunities to study and research with each other. The collaboration also includes graduate students. The articles in this special issue are a product of two weeklong seminars held in Madison and Umeå in 2004. The contributors to this special issue have made use of each other's knowledge and expertise to sharpen their own research and thinking. The interesting text before you is the result of this work.

The co-editor of this special issue is Associate Professor Christina Segerholm, Department of Education, Umeå University, Sweden.

Gun-Marie Frånberg, Editor

Productive Internationalization in Higher Education: An example

Christina Segerholm

The articles in this issue of the journal are a product of the 2004 activities in the exchange program between the University of Wisconsin at Madison, School of Education and the Faculty of Teacher Education and the Department of Education at Umeå University. Before the articles are presented some words will be said about the exchange program.

The exchange program

The program has been going on approximately 10 years, and the purpose is to advance research activities and relations between postgraduate students and faculty at the two universities. Several postgraduate students, teachers and researchers have crossed the Atlantic Ocean in both directions during the course of the program. Students have participated in seminars related to their dissertation work and faculty members have contributed with their expertise in lectures, seminars and formal and informal conversations. Sometimes these contacts have developed into research projects and networks for longer periods. At other occasions the exchange has been a single visit in Madison or Umeå. Some participants have also established friendships that go beyond the professional sphere.

The exchange during 2004 was arranged as two weeklong seminars for postgraduate students. Six students from Umeå and four students from Madison participated along with two senior faculty members from each university. The first seminar week was held in Madison in April. To the joy of the Swedish participants, spring was in the air. The Madison hosts and coordinators were Dr. Sharon Derry and Dr. Paul Bredeson. On this occasion the students introduced their dissertation work through both oral and written presentations. Each presentation was discussed thoroughly, ideas for improvement were made and a general discussion around philosophical matters emerged. Thanks to the helpfulness

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and generosity of the hosts, the visiting Swedes had the opportunity to individually meet other researchers whose work was of interest for them. Evening time was spent socializing in restaurants, in the homes of Dr. Derry and Dr. Wilsman, and in cafés and bars. By the end of the week, all students had comments enough to continue to improve their texts. This was also the task for them until the next seminar week.

That week took place in Umeå in late May. Unfortunately, Umeå did not show its best face when it came to the weather, so a planned outdoor meal had to be cancelled. Coordination of the Umeå seminars was made by Dr. Christina Segerholm, supported by Dr. Björn Åstrand and the participating Swedish students. Again, seminars concentrated around the students dissertation texts. By now they had worked to improve them and only brief oral introductions were made. All texts were discussed in depth and more comments and suggestions for improvements were made. The possibility to publish all texts in some format was raised. It was thought to be a nice way to summarize and manifest the exchange of 2004. The option to do so arose when the idea was introduced to the editor of this journal at this time, Dr. Per-Olof Erixon, and he gave his support

Opportunities for the American guests to meet with researchers and postgraduate students within their field of research were arranged. Both faculty and postgraduate students who were not taking part of the program benefited from these sessions. Two formal presentations from the American guests Dr. Paul Bredeson and Constance Steinkuhler made an appreciated addition for different people at the university. During the week in Umeå, a mini-course, "Writing for publication", was arranged by Dr. Gaby Weiner and Dr. David Hamilton. The exchange students were invited to take part in the course, and many of them chose to do so.

Even if one week of shared activities in each country is a short period of time, many experiences were made and several things learned. In comparing descriptions of the higher education systems in Sweden and the United States, the state of Wisconsin, we detected several interesting differences as well as similarities. They will however not be accounted for here, but deserve their own space. Other things that were appreciated concern the students' academic work, as portrayed in the following quotes:

> "…the feedback I received on the much earlier draft of my research proposal emphasized the need to narrow my focus, a perennial pro-

blem in dissertation work. The benefit of the seminar was receiving compassionate, yet insightful and specific guidance for doing so." Mary Leonard

"Our paper has been read and criticized from many different theoretical and cultural perspectives that, we believe, have made it more theoretically consistent, systematic and interesting even for an international audience." Ola Lindberg and Anders Olofsson

Overall, presenting ideas and getting a generous amount of critical response during intense seminars, both in Madison and Umeå, in a friendly and supportive dialogue with this group of people, has contributed to challenge my thoughts and consequently taken my research further. Camilla Hällgren

Learning through contact with different cultural perceptions was also a result of the exchange, as the quotes below show:

"For example, during my presentation, I'm not sure whether I was more surprised that social justice ideals guide education in Sweden or if the Swedes were more stunned at the resistance to social justice in certain U.S. contexts." Brad Kose

"And, as a result of our ongoing conversations, I was able to rethink how such globally accessible worlds (multiplayer online games, my clarification) *might function in ways particular to my own country and the youth culture therein,"* Constance Steinkuhler

"Especially since my own study is a country comparison, the exchange was interesting and I think it also has helped me to in getting a better grip on Swedish school and education." Charlotta Edström

The two latter quotes point to the interesting phenomenon that it is sometimes through a foreign culture or country you get to know your own better.

However, learning about academic work or experience cultural differences are not the only advantages attached to an exchange program like this. Forming social relations of different kinds are equally important, since such bonds are what make networks work over time and help keep up our research interest. I believe some of the participants found this aspect of the exchange quite important. One of them expresses both friendship and cultural insight eloquently:

"We have shared our work and profited from our critiques, but more importantly we have developed friendships, to a greater or lesser degree, and have come to profound, embodied realizations that where we come from on the face of this earth affects our vision, our actions, our interactions. Alan Hackbarth

After the two seminar weeks, the students who wanted to have their papers published have worked hard to revise, improve and cut down their texts. It is a pleasure to introduce these texts to a broader audience.

The articles

Eight of the ten participating students decided to refine their texts and to publish them in this journal. All texts were at the time of the exchange parts of dissertation work that was still unfinished. Some of the Swedish students will use their articles as part of a composite dissertation (sammanläggningsavhandling in Swedish), which is a collection of papers. Others use them as a base in a monograph. Some of the texts written by the American students were used as dissertation proposals, meaning that their papers were assessed in relation to a continuation of their dissertation work. Others are examples of work earlier in the dissertation process. This means that the papers are fairly

different when it comes to content and to when they are positioned in each students' research process. No general theme holds them together. Instead we are presented with articles that cover a vast range of subjects. Nevertheless they are all important contributions to education as an academic discipline and to education as practice because they bring forward issues that need to be considered when trying to understand different aspects of how humans are formed by educational/pedagogical activities.

In the first article Constance Steinkuehler discusses multiplayer online games as a new form of "third places", i.e. places for informal life. She argues that these games are of importance for educators since they are sites for identity formation and meaning-making as well as complex problem solving – all processes that educators traditionally has taken an interest in and are part of learning.

Learning is a keyword for Alan Hackbarth, who links student learning to teacher question practices in classrooms. His concern is to improve teacher professional training in this respect. One step in this direction is taken in this article in which Hackbarth examines two methods for analyzing classroom interaction in relation to their usefulness in teacher professio-

nal development aimed at improving classroom questioning.

The classroom is very much at the fore in Camilla Hällgren's article about the antirasist website SWEKIDS. Here she reports an evaluation of this web-based teaching media where classrooms activities concerned with the use of SWEKIDS are studied. Whether or not this kind of teaching aid may actually influence pupils to be more concerned with issues of social justice is of interest and is paralleled with how this kind of technology is handled by teachers and pupils. A common denominator for this article and the following by Brad Kose is social justice.

Kose focuses on professional development as a means to enhance social justice. He outlines an understanding of social justice that underscores equity as a concept based on the interconnections between "power, privilege, difference, oppression and justice…". Furthermore he discusses professional development in terms of improvement of teaching and learning. In this vein he argues that professional development for social justice needs to take into account the desired nature of student learning and norms, practices and relationships enacted in the classrooms.

A similar interest to social justice, or part of an interest in social justice, is gender equality. Charlotta Edström presents an article on this topic. She analyses national policy on gender equality in the early years in Sweden between 1994 and 2004. In her analysis Edström compares and discusses policy as symbolic (ideology), and as material (actions taken) at a national/ state level. One issue that is of constant importance in national policy is to engage more men in teaching in the early years.

The two final articles share an interest in the significance of different philosophical standpoints in relation to education practice and inquiry. Mary Leonard investigates the epistemological differences between technology & engineering education and science education. She points out that there are different underlying basic assumptions in technology compared to science. Therefore using technology and engineering design as a vehicle in teaching to stimulate learning within the science domain may be questioned. Instead care needs to be given to what kind of questions engineering vs. science can actually answer.

In the last article, Ola Lindberg and Anders Olofsson explore the consequences of an ontological standpoint based on viewing teaching

as praxis. They draw on neo-Aristotelian concepts and elaborate on the concept phronesis. In particular, they propose a notion of teaching as guided by phronesis in the sense of embodied moral.
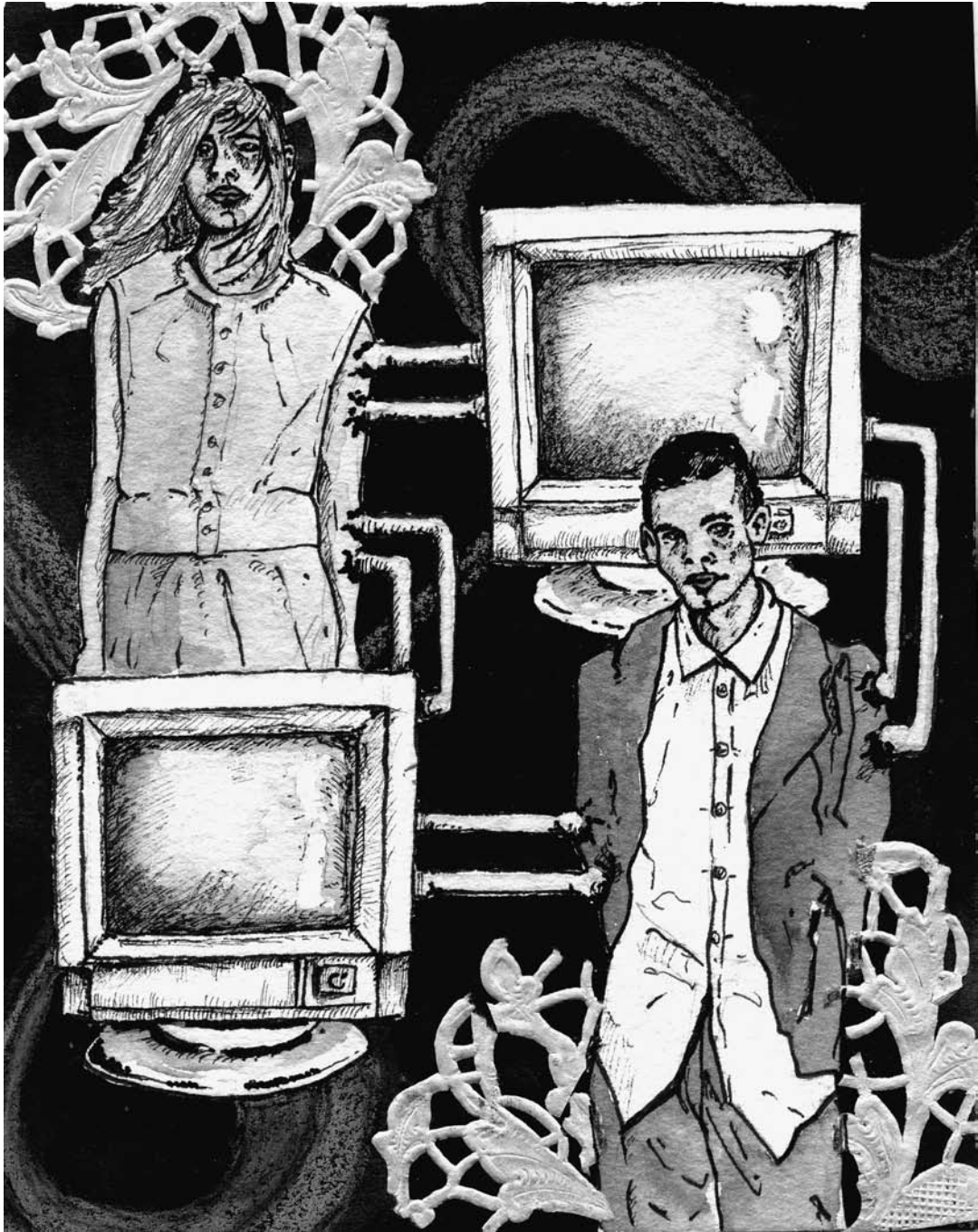
The New Third Place: Massively Multiplayer Online Gaming in American Youth Culture

Constance A. Steinkuehler

Abstract

In this paper, I argue that massively multiplayer online games (MMOGs) function as one novel form of a new "third place" for informal sociability. Based on data collected as part of an ongoing two-year virtual cognitive ethnography of the game *Lineage* (first I, now II), I outline how the features of MMOG digital worlds satisfy Oldenburg's (1999) defining criteria for the very sorts of third places "real world" America sorely lacks. Then, building on this characterization, I discuss why such games matter for educators and researchers interested in cognition and learning not only in digital communities but also in contemporary everyday life in the broadest sense.

"All play means something."

Huizinga, J. (1949).

In his recent book *The Great Good Place*, sociologist Ray Oldenburg (1999) makes the argument that American culture has lost many of its *third places* – spaces for neither work nor home but rather informal social life. "The essential group experience is being replaced by the exaggerated self-consciousness of individuals," Oldenburg argues. "American life-styles, for all the material acquisition and the seeking after comforts and pleasures, are plagued by boredom, loneliness, alienation" (p. 13). Recent national survey data corroborates this assertion, with television claiming more than half of American leisure time and only three-quarters of an hour per day on average spent socializing (Longley, 2004), either in the home or outside it. While editorialists such as Solomon (2004) bemoan the rise in electronic media such as videogames as "torpid" and urge American

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public schools and society to "encourage that great thrill of finding kinship in shared experiences of books," others scholars take a markedly different tack, arguing that online digital technologies such as the Internet (Hampton & Wellman, 2003) and MUDs (Bruckman & Resnick, 1995) are, in both form and function, new (albeit digitally mediated) informal social spaces themselves. "The Web creates a Third Space," writes Stowe Boyd (2004), editor of the technology news column *Get Real*. "People can meet and create those weak ties that make life a richer and more diverse place … we can let off steam, argue about the local politics or sports, and make sense of the world."

If this latter claim is true, then massively multiplayer online games (MMOGs) may very well serve as the most compelling examples of digitally mediated third places to date. As Williams (forthcoming) insightfully points out, such games have kindled a deeply ambivalent attitude in American culture (for example, the media attention given the Internet based gaming habits of the perpetrators of the grizzly Columbine High School shootings), an attitude perhaps rooted in societal guilt over the mistreatment and neglect of American youth, one that again casts them as the source of problems (in this case, violence and crime) rather than the

victims of those oft-ignored risk factors associated with them (e.g. abuse from relatives, neglect, poverty). Despite the ambivalence, however, the online gaming industry continues to boom "with up to four million players worldwide regularly visiting make-believe lands to fight, hunt for treasure, or just sit their characters down for a chat" (Meek, 2004). The MMOG *Lineage* (first I, then II), for example, boasts more than three million combined current subscribers (Woodcock, 2004) and, in the course of a year, *Ultima Online* devours more than one hundred and sixty million man-hours (Kolbert, 2001). With the average amount of weekly gameplay ranging from 12 to 21 hours and nearly 30 percent of MMOGamers spending their in-game time with beyond-game friends (Seay, Jerome, Lee, & Kraut, 2004), researchers and educators interested in the contemporary lives of adolescents – not to mention adults, both young and old – may find themselves in dire need of heeding Turkle's (1995) caveat: "Some are tempted to think of life in cyberspace as insignificant, as escape or meaningless diversion. It is not. Our experiences there are serious play. We belittle them at our risk" (pp. 268-269).

In this paper, I argue that massively multiplayer online games (MMOGs) do indeed function as one novel form of a new "third place" for infor-

mal sociability. Based on data collected as part of an ongoing two-year virtual cognitive ethnography of the game *Lineage* (first I, now II) (Steinkuehler, 2003, 2004a, 2004b, 2004c), I outline how the features of MMOG digital worlds satisfy Oldenburg's (1999) defining criteria for the very sorts of third places "real world" America sorely lacks. Then, building on this characterization, I discuss why such games matter for educators and researchers interested in cognition and learning not only in digital communities but also in contemporary everyday life in the broadest sense.

Massively Multiplayer Online Games: The Case of Lineage

Massively multiplayer online games (MMOGs) are highly graphical 2- or 3-D videogames played online, allowing individuals, through their self-created digital characters or "avatars," to interact not only with the gaming software – the designed environment of the game and the computer-controlled characters within it – but with *other players'* avatars as well. Conceptually, they are part of the rich tradition of alternative worlds that science fiction and fantasy literature provide us (e.g. Tolkien's *The Hobbit*, 1938); technically, they are the evolutionary next-step in a long line of social games that runs from paper-and-pencil fantasy games

(e.g., Gygax & Arneson's *Dungeons & Dragons*, 1973) to main-frame text-based multi-user dungeons (e.g. Trubshaw & Bartle's famous first *MUD*, 1978) through the first graphical massively multiplayer online environments (e.g., Andrew and Chris Kirmse's *Meridian 59*, 1996) to the now-common, high-end 3-D digital worlds of today (for a complete history, see Koster, 2002). The virtual worlds that today's MMOGamers routinely plug in and inhabit are persistent social and material worlds, loosely structured by open-ended (fantasy) narratives, where players are largely free to do as they please – slay ogres, siege castles, craft a pair of gaiters, barter goods in town, or tame dragon hatchlings. They are notorious for their peculiar combination of designed "escapist fantasy" yet emergent "social realism" (Kolbert, 2001): in a setting of wizards and elves, dwarfs and knights, people save for homes, create basket indices of the trading market, build relationships of status and solidarity, and worry about crime.

Lineage, the MMOG context of this research, is now in its second incarnation. *Lineage I: The Blood Pledge* was first released in Korea in 1997. After 3 years of domination in the Korean gaming sphere, it expanded to America to currently boast roughly 2.7 million global subscribers (Woodcock, 2004). Set in medieval times,

this 2-D game features not only the regular cast of fantasy characters (elves, knights, magicians) but also a royal cast of prince/esses, each claiming to be the legitimate heir to the throne and therefore forced to compete with one another to recruit other classes of characters into their clan or "pledge" as both protection and armed forces for castles siege. Its 3-D sequel, *Lineage II: The Chaotic Chronicle*, released in Korea in November of 2003 and expanded to America in April of 2004, currently claims nearly 1.5 million concurrent subscriptions globally (Woodcock, 2004). Set 150 years earlier than *Lineage I* but situated in a similar virtual landscape, *Lineage II* captures the period of strife before any legitimate bloodline to the virtual throne has been established. Within the game, members of all races (human, orc, elf, dark elf, dwarf) and classes (fighter, crafter, mage, etc.) again join forces in the form of clans to compete for castle control in server-wide sieges and clan battles. In both incarnations, the *Lineage* clan system is tightly coupled to both the guiding narrative of the game and the virtual world's economic system, resulting in a complex social space of affiliations and disaffiliations, constructed largely out of shared (or disparate) social and material practices (Steinkuehler, 2004a).

Methods

Lineage constitutes a robust social and virtual-material world, one that warrants full investigation in its own right, much as a new country or culture in the tangible geographic world might. As an educational researcher, I am keenly interested in the intellectual substance of such virtual worlds: What do people learn through participation in such spaces? And how is it that this learning happens? Toward answering these questions, I conducted a cognitive ethnography (Hutchins, 1995) of the game that incorporates both (a) traditional "thick description" (Geertz, 1973) ethnographic methods such as participatory observation, unstructured and semi-structured interviews with informants, and the collection and analysis of community documents (e.g. player-authored user manuals, fan sites, fan fiction, game-related discussion boards), and (b) strategic data collection and analysis methods borrowed from traditional distributed cognition studies (Steinkuehler, Black, & Clinton, 2005) in order to better understand specific socially and materially distributed cognitive practices of interest. In total, this virtual cognitive ethnography was conducted for a period of over 28 months. In what follows, I analyze *Lineage* as a third place for informal sociability, based on my participation in the daily life of the game and critical reflection on my observations during

this time in light of interviews and discussions with my informants.

Lineage II *as a Third Place*

In arguing for the value of third places, Oldenburg (1999) points to the particularly stifled circumstances of the American adolescent. Citing Sennett's (1973) dire conclusions on American homelife in the early seventies, Oldenburg makes the case that, if any population suffers most from America's "automobile suburb" life and "leisure… perverted into consumption" (p.11), it is our *middle class youth*. Left behind in the suburbs while parents work, stifled in homes kept safely isolated from the novel, and regimented into frantic schedules that shroud the loneliness of suburban existence, the American adolescent, Oldenburg argues, is cut off from the necessary benefits of participation in third places. In so doing, Oldenburg succeeds in rebuking the problem (today's adolescents' stifled daily circumstances) rather than the victim (the adolescents themselves); he fails, however, in unpacking the relationship between "gadgetry" and third places by conflating the Net-generation's use of technology with that of its parents: "The home entertainment industry thrives in the dearth of the informal public life among the American middle class," Oldenburg (1999) argues. "Demand for all manner of electronic gadgetry to substitute vicarious watching and listening for more direct involvement is high." (p. 12)

This indictment of today's digital entertainment media as a substitution for "informal public life" and "direct involvement" fails to acknowledge the informal social spaces being constructed, inhabited, and maintained behind the home computer screen. Today's youth (and many adults) use online digital technologies as a way to, among other things, socialize. Providing interstitial spaces for social interaction and relationships beyond the workplace (or school) and home, virtual environments such as MMOGs function, by definition, as new (albeit digitally-mediated) third places much like the pubs, coffee shops, and other hangouts of old. A review of Oldenburg's (1999) own eight defining characteristics of third places, in the context of MMOGs, demonstrates.

I. Neutral Ground. First and foremost, third places are neutral grounds where individuals are free to come and go as they please. As Sennett (1977) argues, "people can be sociable only when they have some protection from each other" (p. 311). Because MMOGs are played online, interaction within them is mediated by the game world avatars. Few places beyond the web afford

such anonymity, providing a safe haven beyond the reach of work and home that allows individuals to engage with others socially without the entangling obligations and repercussions that often accompany, for example, socializing with workplace peers. After all, in MMOGs, the player can always simply log off for the time being, start a new character entirely, or, if worse comes to worse, move to a wholly new game. Thus, MMOGs are digitally mediated, autonomous neutral grounds that allow interaction and engagement without the sorts of entanglements Oldenburg argues are deleterious to informal sociability.

II. Leveler. Second and equally as important, third places are ones in which an individual's rank and status in the workplace or society at large are of no import (Oldenburg, 1999). Acceptance and participation is not contingent on any prerequisites, requirements, roles, duties, or proof of membership. On this issue, MMOGs are an excellent case in point. The only entry requirements for participation are the costs of purchasing and then subscribing to the game, typically costing the individual, if we ignore the computer hardware requirements, somewhere around USD50 (one-time retail purchase) plus a monthly expense around USD15. Such spaces are inclusive, serving to "expand possibilities,

whereas formal associations tend to narrow and restrict them" (Oldenburg, 1999, p. 24). Emerging research on MMOGs suggests their similar function. Even within the "lackluster social environment" of *Asherons Call II*, media effects researcher Dmitri Williams (2004) found that playing MMOGs, which tended to displace television viewing as a primary leisure activity, generated positive social "bridging" effects of improving players' real-world community outlook. His research findings, however, were mixed: "In the language of social capital, game use appears to negatively impact local bonding, but not faraway bridging. This pattern supports the general Internet results... in which the Internet was shown to be a good facilitator for meeting new people, but not a good means of securing vital personal support. This game magnifies that general effect." (p. 239).

Such mixed findings may stem from the nature of third places themselves. As Oldenburg (1999) argues, the "golden circle" drawn around the third place relegates not only rank and status beyond the purview of the third place but also one's personal problems and moodiness. In MMOGs, troubles-telling is often met with a playful response, tacitly signaling that such material is not fodder for in-game activity per se, although the ways in which clans and other

in-game social groups serve as informal emotional support networks for individuals who purportedly encounter real-world tragedy has been fodder for much discussion (for example, see Koster's (1998) famous "A Story About a Tree" and Spaight's (2003) expose of the feigned death on Salon.com). Consider the excerpt below taken from *LineageII* in which a group of gamers responds to one individual's conversation initiator of complaints about recent ill health.[1]

Liadon	*how are things coming along for you soul?*
Soul	*i think im gonna die*
Adeleide	*no dont die. death is bad*
Liadon	*If I were so mortally wounded that I thought I was going to die, logging on lin [Lineage] would be on the*
Liadon	*top ten list, but after calling 911 [emergency telephone number in America] for sure*
Soul	*i feel like shit*
Liadon	*are you sick?*

Clan member Zara has logged into the game.

Duncan	*hihi Zara*
Soul	*my nose is stuffy my ear hurts and my throt is really sore*
Duncan	*sorry man, that stinks*

Soul	*my gf [girlfriend] cousin kissed me and she had streped*
Adeleide	*well there u go. off to the doc[tor] with u*
Soul	*on monday*
Adeleide	*er... why u kissing ur GFs cousin?*
Liadon	*... did you just say you are dating your cousin?*
Duncan	*Thats an interesting story already*
Soul	*idk [i dont know]*
Soul	*it was weird*
Duncan	*It sounds weird.*
Liadon	*I heard about a porno like that once*
Zara	*i was 16 once*
Duncan	*Liadon – lets please not even go there. :P [grin]*
Soul	*i wasnt kissing my gf cousin she kisses me on the cheek*
Zara	*so, for clarification*
Zara	*is this like gf/cousin*
Liadon	*ah... the plot thins*
Soul	*thats just wrong guys*
Zara	*hey i'm not kissing my cousin's gf*
Liadon	*I thought it was his gf's cousin*
Soul	*i didnt tho*
Duncan	*My gf once kissed my cousin's gf*
Adeleide	*my cousin had a gf once*
Liadon	*I have a cousin*
Soul	*wow this is weird*
Duncan	*What sense of "had" are we using here?*

Zara	*eeewww*
Adeleide	**gulp**
Duncan	*Feeling better yet Soul?*
Soul	*no*
Liadon	*This is why I game... the interesting conversation*

During this exchange on clan chat, a chat window shared by fellow clan members allowing social interaction regardless of members' in-game virtual location, clan members playfully run not with the initial claim of suffering a recent mild illness but rather the explanation given for how that illness was possibly acquired. In this exchange, clan members collectively transform a troubles-telling incident into a conversational ruse using "lively, scintillating, colorful, and engaging" (Oldenburg, 1999, p. 26) interaction, a defining characteristic of third places to which we now turn.

III. Conversation is Main Activity. As the excerpt above demonstrates, "third places are veritable gymnasiums of Mother wit" (Oldenburg, 1999, p. 29). In the words of MUD-Dev guru J. C. Lawrence, "The basic medium of multiplayer games is communication." (cited in Koster, n.d.) Conversation is a core activity, often enriched by and centering around gameplay of another sort:

"Conversation is a game that mixes will with many other games according to the manner in which they are played…. The game and conversation move along in lively fashion, the talk enhancing the card game, the card game giving eternal stimulation to the talk. Jackson's observations in the clubs of the working-class English confirm this. 'Much time,' he recorded, 'is given over to playing games. Cribbage and dominoes mean endless conversation and by-the-way evaluation of personalities. Spectators are never quiet, and every stage of the game stimulates comment – mostly on the characteristics of the players rather than the play…'" (p.30–31)

MMOGs are virtual environments for gameplay: leveling one's character by slaying monsters that pepper the countryside, bartering goods in virtual villages as a way to improve one's equipment, holding formal and informal competitions of strength in the form of arena duels, clan wars, and castle sieges, completing quests for items and virtual cash, even venturing off into yet untravelled territories in search of lovely vistas and fantastic creatures of every sort. MMOGs feature multiple text-based chat channels, including *public talk* visible to all in the current vicinity, *clan chat* enabling fellow members' constant communication, *party chat* for members in a temporary party to commu-

nicate during their adventures, *trade chat* where those buying and selling can advertise their wares at a distance, and *private chat* between two people. This multiplicity of communication channels facilitates ongoing commentary on players' individual or shared hunts and exploits as a mainstay activity. Multiple conversations occur in tandem with individuals' oftentimes engaged in several conversational threads simultaneously – sharing a laugh over clan chat about someone's recent untimely online death, haggling over the price of some sorely needed item on trade chat, arguing in party chat about how to distribute the spoils of the hunting groups' current escapade, privately catching up through private whispered talk with a good friend who has been offline the day before. MMOGameplay is constituted not only by joint in-game activities but also and overwhelmingly by constant conversation around the game and beyond, ranging from theoretical debates over what constitutes the most efficacious hunting to in-game gossip about the latest "who did what to whom and why" to social banter over today's latest real-world headlines to discussion of the weather, politics, recent real and/or virtual events, girlfriends, food, the Iraq war, movies, music, and even other games. MMOGs are, in fact, so thoroughly social in nature that game designers and theorists debate the value of cate-

gorizing them with other videogames at all: "It's a SERVICE. Not a game. It's a WORLD. Not a game. It's a COMMUNITY. Not a game. Anyone who says, 'it's just a game' is missing the point." (Koster, n.d.)

IV. Accessibility & Accommodation. According to Oldenburg (1999), third places must be easy to access: "One may go alone at almost any time of the day or evening with assurance that acquaintances will be there" (p. 32). MMOGs are again a case in point: They are perpetually accessible and played in real time, meaning that individuals can log on and off as they see fit. Barring the occasional server update, such virtual worlds are continually available social spaces where people enter, stay for as long as time (or parents) allow, and leave of their own accord. Given time-zone differences, the average MMOG server population fluctuates as students and workers in different areas of the world return home from school or work and logon to visit with friends and participate in joint activities. Most in-game activities remain impromptu as a result, depending on who is online when and what the general mood happens to be. Unlike bricks-and-mortar third places, MMOGs are most commonly accessed directly from one's home and remain available on a daily basis for whoever cares to join in. Social mores in the

game support this: Though the typical salutations and farewells are used, sudden appearances and departures are rarely made a noteworthy event (see above transcript as an example).

V. The Regulars. "What attracts a regular visitor to a third place is supplied not by management but by the fellow customer," notes Oldenburg (1999). "It is the regulars who give the place its character and who assure that on any given visit some of the gang will be there." (pp. 33–34) Such regulars dominate not in a numerical sense but in an affective sense, setting the tone of conversation and the general mood of the place. In the MMOG *Lineage II*, two types of game-regulars shape the social impression of the game: (a) clan members and (b) squatters in specific virtual territories (for an interesting discussion on the proper unit of analysis for analyzing MMOGs as third places, see Ducheneaut, Moore, & Nickell, 2004). For the 78% of MMOGamers who join a clan (Seay, Jerome, Lee, & Kraut, 2004), fellow clan members set the tone of sociability by remaining ever-present within the clan chat window. Clan members depend on one another's strengths and exploits for their own individual success in the game by cultivating a shared clan reputation, sharing riches, and engaging in joint activities of mutual benefit. Regulars within the clan set the daily

mood through their ongoing interaction with others. While clan regulars travel with you in the form of ongoing banter in the ever-present clan chat window, the second group of regulars, squatters in specific virtual territories, provides a social context specific to various areas in the game. Virtual hunting grounds vary not only in terms of level of difficulty but also in terms of who hangs out there and therefore can be heard on public chat. For example, an area in *Lineage II* called Cruma Tower is marked by maximum leveling efficiency – the percent experience an avatar gains over time for killing computer-generated monsters – but also by off-color and precocious (if not somewhat offensive) public parlance. As one informant satirically commented about Cruma Tower, "You go for the experience, you stay for the enlightening conversation." Moreover, regulars of both types largely determine which newcomers are accepted within the group, functioning as the "oldtimers" of the community of practice (Lave & Wenger, 1991) be it clan- or territory-based.

VI. A Low Profile. Oldenburg argues that third places are characteristically homely. Here is the first point on which MMOGs and Oldenburg's definition of third places differ. MMOGs vary widely in quality of graphics and territorial "décor," ranging from the old school retro type

2-D graphics found in *Lineage I* to the high-end 3-D splendor of contemporary titles such as *Lineage II*. Yet, regardless of their position on the timeline of technical innovation, MMOGs are characteristically fantastic, both literally and metaphorically, including a regular fanfare of spectacular characters and creatures that ranges, for example, from delicately drawn elves to frightening ogres and insects. In other words, MMOGs, even in their earliest incarnations, are extravagant settings for informal sociability rather than plain ones. Why this disparity, if MMOGs are indeed third places?

Perhaps the answer lies in the *function* Oldenburg argues such homeliness serves: "Not having that shiny bright appearance of the franchise establishment, third places do not attract a high volume of strangers or transient customers…. When people consider the establishment the 'in' place to be seen, commercialism will reign." (p. 36–37) Woodcock's (2004) analysis of subscription growth indicates that MMOG populations follow a parabolic curve, typically attracting a high number of transient customers only immediately after launch: "Large numbers of customers try the game out in a short period of time, and some of them sign up to become subscribers, but within a few short months the growth starts to slow appreciably."

It may be that, once the initial wave of gamers moves through a given title and onto the next new release, those who stay behind become the basis for a sustained community. My observations on the everyday culture of first *Lineage I* then *Lineage II* support this interpretation, with a core audience remaining on the former, some shifting to the latter to be joined with gamers from such titles as *Star Wars Galaxies* or *Shadow-Bane*, only to eventually coalesce into a sustained population of gamers who stick with *Lineage II* as their title of choice. As a result, a more-or-less stable in-game culture took several months to emerge from the combined collective practices imported and adapted from the smattering of previous games individuals played. By the time the latest "in" game was released (i.e. *World of Warcraft*), *Lineage II* shared the same fate as its predecessors, becoming, by all technical definitions, "homely" by comparison.

VII. The Mood is Playful. The fact that the general mood in MMOGs is playful hardly requires discussion. In essence, while Oldenburg argues for recognition of the playground character of the third place, I argue for the third place character of the new digital playground. He cites play scholar Huizinga, who writes, "the feeling of being 'apart together' is an exceptional situation, of sharing something important,

or mutually withdrawing from the rest of the world and rejecting the usual norms, retains its magic beyond the duration of the individual game." (cited in Oldenburg, 1999, p. 38) If one theme emerges from the data corpus of my virtual ethnography of *Lineage*, it is one of abundant playfulness. Gaveldor, a girl dwarf, constantly emoting handstands and giggles in the midst of grand battles. Liadon, a male human fighter, making jokes about the way the heavy armor on his avatar look like knickers. Zara, a female orc, teasing about how she will slay huge monsters wearing little more than a decorative thong. Constant capers and cavorting become the yarn from which clan and server stories are woven, with numerous fansites featuring a plethora of screenshots that document the antics, creating a rich shared history for those who participate.

VIII. A Home Away from Home. In arguing for the home-like quality of third places, Oldenburg (1999) builds on Seamon's (1979) five defining traits of "home": rootedness, feelings of possession, spiritual regeneration, feelings of being at ease, and warmth. An argument can be made for how MMOGs can function in all these capacities; to save space, however, I will discuss only the first two most tangible ones. First, third places function as a home away from

home by *rooting people*, providing a "physical center around which we organize our comings and goings," (Oldenburg, 1999, p. 39), where we expect to see familiar faces, and where exceptional absences are quickly noted and queried. MMOGs, although virtual, root individuals who play them in much the same ways. Participation becomes a regular part of daily life and unusual absences (i.e., prolonged or unforeseen ones) are queried either within the game, by email or other means (e.g. internet relay chat, telephone). For example, upon returning from a three-day game studies conference on the west coast, fellow clan members inquired about my unannounced absence from *Lineage II*, with one fourteen year old advising me, "Next time, just let us know in advance."

Second, third places function as homes away from home by evoking a sense of "possession and control… that need not entail actual ownership" from those who attend them (Oldenburg, 1999, p. 40) In MMOGs, such feelings of ownership run so strong that court cases have emerged in which gamers claim legal rights to their virtual avatar, equipment, and cash despite the fact that the game company owns the code and software. Academic blogs such as *Terra Nova* (http://terra-nova.blogs.com/) and conferences such as *State of Play* (New York Law School) are testaments

to the economic, legal, and societal importance of the issues such gamer-versus-designer ownership debates raise, including intellectual property issues, end-user license agreements, virtual world property rights, and the ramifications of real world exchange of virtual currency earned online.

Such feelings of rootedness and possession over the virtual worlds within MMOGs combine to create a shared sense of home, and with it, the sense that support and warmth that some folks simply lack in their own "real world" households, work places, and schools. Player-generated fan films such as Doasa Arsim & Javier's (2004) "True Colors" music video perhaps sum it up best: With a mix of playful campiness and sheepish sentimentality, *Star Wars Galaxies* gamers collaborated to create an in-game video of entertainer avatars dancing in a virtual cantina to heal the "mind wounds" of players of another class, all set to the beat of the Cyndi Lauper lyrics, "If this world makes you crazy and you've taken all you can get, you call me up because you know I'll be there." The plethora of fan websites, fictions, videos, digital art, and blogs, are a testament to how MMOGs, beneath all their fantasy and gore, are often places of solace and rejuvenation for those who regularly log in.

MMOGs & Learning: Why Such Games Matter for Educators

In this paper, I have argued that MMOGs indeed function as a third place for informal sociability for those who inhabit their virtual worlds and make them part of their regular leisure activity. Oldenburg (1999) dismisses such gameplay, stating that, "A room full of individuals intent upon videogames is not a third place." (p. 31) I disagree and would argue that such a conclusion completely ignores the thoroughly social nature of what it is such gamers are, in fact, so engaged in and intent upon. It is all too easy for traditional "bricks and mortar" sociologists to ignore the activities that occur behind the computer screen. But, then, it is also all too easy for researchers and educators to ignore the personal, social, and intellectual value of participation in third places altogether. In the end, Oldenburg missed the boat regarding the capacity of online virtual environments for retribalizing people across time and place (Steinkuehler, 2004a). My sincere hope is that education does not make a similar error of underestimation when it comes to the capacity of such spaces to profoundly shape the cognition and culture of the net-generation of kids.

As I have argued elsewhere (Steinkuehler, 2003, 2004a, 2004b, 2004c), more is intellectually at

stake here than the informal social life of adolescents and adults. Videogames such as MMOGs are sites for socially and materially distributed cognition, complex problem solving, identity work, individual and collaborative learning across multiple multimedia, multimodality "attentional spaces" (Lemke, n.d.), and rich meaning-making and, as such, ought to be part of the educational research agenda. For the K-12 millennial generation of youngsters, videogames are a – if not the – leading form of entertainment, despite their complexity and the considerable cognitive investment they exact from those who play (Gee, 2003; Squire & Barab, 2004; Squire & Jenkins, 2004; Squire & Steinkuehler, in press). Students who are disengaged and failing basic coursework in school spend substantial time outside of class playing, sharing, discussing, and mastering the latest videogame title release. And, yet, to date, educators know little if nothing about these sectors of kid culture, let alone how they operate as sites for socialization, enculturation, and learning. And we ought to.

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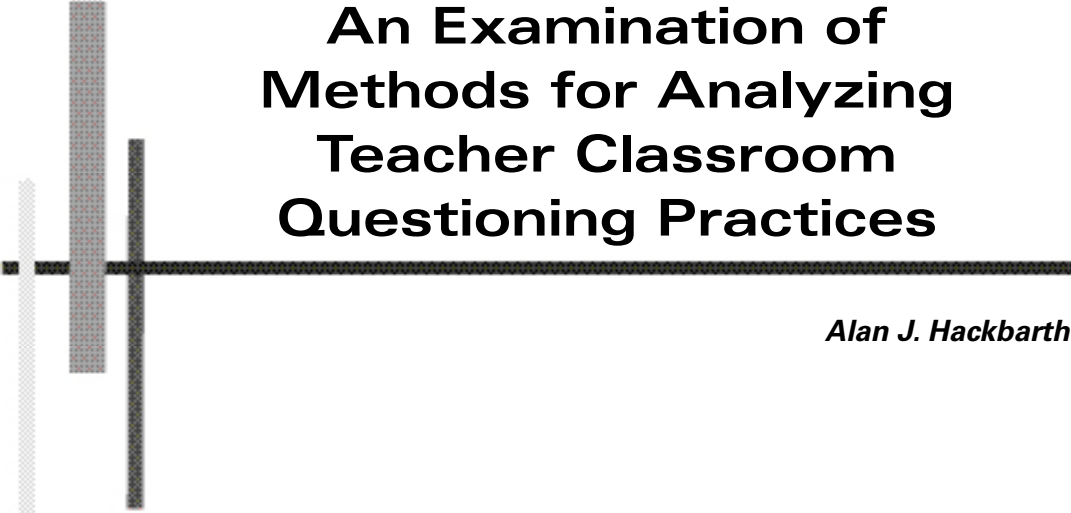
Endnotes

[1]   The transcript excerpts are verbatim save changes for ease of reading, such as expansions of truncated words, typographical corrections, and supplementation of dietic references with appropriate referents [in square brackets]. I am using pseudonyms in place of all actual avatars names in order to protect (virtual) confidentiality, save my own virtual name Adeleide.

An Examination of Methods for Analyzing Teacher Classroom Questioning Practices

Alan J. Hackbarth

Abstract

Questioning is an important skill for scaffolding student learning. However, research has found that the majority of teacher questions are on the lowest cognitive level, emphasizing facts, not higher level thinking. Missing from many classrooms are true questions – requests for unique new information, initiations of mutual inquiry, assessments of student understanding. How can teacher professional development programs scaffold teacher learning of classroom questioning practices that effectively improve student learning? As a first step to answering this question, this study examines two methods – use of questioning taxonomies and use of interaction analysis- for analyzing samples of classroom interactions, and makes recommendations for how either may be integrated into teacher professional development programs to improve questioning practices.

Introduction

Questioning makes up a significant portion of the interactions that take place in classrooms between teachers and students. In most cases, however, that time is being squandered on low-order questions that fail to improve student thinking. Over thirty years ago Meridith Gall (1970) noted that about 60% of teachers' questions require students to recall facts; about 20% require students to think; and 20% are procedural. Twenty years later Wilen (1991) reported little had changed; the majority of teacher questions are at the lowest cognitive level, emphasizing facts, not higher level thinking. If history is an indicator, little has changed in today's classroom. This despite research that shows increasing the use of higher cognitive questions produces superior learning gains for students above the primary grades and particularly for secondary students (Cotton, 2001).

How can a program of teacher professional development influence teachers to use more

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productive questioning practices in their classrooms? This study takes a first step to answer this question by examining two methods – use of questioning taxonomies and use of interaction analysis- for analyzing cases of classroom interactions. In "Going Beyond The Information Given", Jerome Bruner (1973) said, "Learning often cannot be translated into a generic form until there has been enough mastery of the specifics of the situation to permit the discovery of lower order regularities which can then be recombined into a higher-order, more generic coding system." If use of taxonomies or video analysis can help teachers see the 'lower order regularities" in illustrative cases of other teachers questioning practices, and samples of their own interactions, I believe teachers will then be able to construct useful generalizations that will have the power to transform their classroom questioning practices.

In this paper I will first review the procedures and results of an informal study of questioning taxonomies, and then a more theoretically grounded study of Interaction Analysis. I will conclude with a discussion of the implications of the findings for teacher professional development.

An Informal Study of Questioning Taxonomies

Theoretical Framework

Studies of classroom questioning have produced a number of questioning taxonomies, tools which categorize the types of questions teachers ask in classroom discourse. As a tool for study, taxonomies tend to classify questions in terms of:
- the asker's intent,
- the type of thinking the question elicits, or
- linguistic features of the utterance.

The "Linked Learning Taxonomy", (See Table I) which was developed incidentally from the Linked Learning in Mathematics Project in the Milwaukee Public Schools is an example of an "asker's intent" classification. (Driscoll, 1999) The basis for the classification of each question is, what did the asker *intend* to happen as a result of asking the question?

TABLE I: Linked Learning Project Taxonomy. Derived from the "Linked Learning in Mathematics Project" in the Milwaukee Public Schools (Driscoll, pp. 5-6)	
Question Type	Example
Managing Intended to help set students on task, get their work organized, etc.	Who's in charge of writing it down? Are you guys working? What are you doing now?
Clarifying Intended to request information from the student when the teacher isn't clear about what the student means or intends.	Do you know what *perimeter* is? How did you get 2?
Orienting Intended to get students started, or to orient and/or motivate the student toward the correct answer or away from the incorrect answer.	Who went first (during a mathematics game)? What's the problem asking you to find? Have you thought about using a table?
Prompting Mathematical Reflection Intended to ask students to reflect on and explain their thinking; or to have them understand others' mathematical ways of thinking.	How do you explain that? Can you explain how you got the values in the table? Why did the two of you reach different conclusions?
Eliciting Algebraic Thinking Intended to ask the students to undo, to build rules for describing functional relationships; to abstract from computations they have made; about finding patterns and looking for what changes; to work forward and backward, to justify generalizations.	How could you use the formula? In x years, how much does it go up? Can you look for a pattern? Find out how the rule works.

The "Operations of Intellect Taxonomy", (See Table II) which was developed by Gallagher and Aschner (1963) based on Guilford's Structure of Intellect model is an example of a "type of thinking" classification (Edwards & Bowman, 1996).

TABLE II: Operations of Intellect Taxonomy	
Routine Thinking	…involves miscellaneous classroom activities. This category includes **classroom management** (questions about due dates, assignments, grading, etc), **attitudinal dimensions** (questions that communicate attitudes, especially praise or criticism), and **structuring** (prefatory remarks).
Cognitive Memory Operations	…represent the simple reproduction of facts, formulae, or other items of remembered content. To answer this kind of question, the student has only to select the appropriate response from his/her memory.
Convergent Thinking	…represents the analysis and integration of given or remembered data. Students use this kind of thinking when they solve a problem, summarize material, or describe a sequence of steps in a process.
Divergent Thinking	…represents intellectual operations wherein individuals are free to generate their own data within a data-poor situation, or to take a new direction or perspective on a given topic. The student is able to "take off" from established facts and see implications or associations not requested by the teacher.
Evaluative Thinking	…deals with matters of judgment, value and choice, and is characterized by its judgmental quality. In evaluative thinking, students give their opinions or make judgments about value, worth probability, agreement or disagreement, and the like.

A "linguistic features" classification (See Table III) works from the assumptions that:

- there are four major syntactic categories – statements, questions, commands, and exclamations – that are sufficient to describe simple sentences,

- a question is any sentence that has an interrogative form or function,
- an interrogative sentence may be further divided into two major subcategories and, depending on major type, five minor categories (Blanchette, 2001).

TABLE III: "Linguistic Features" Taxonomy	
Major Categories	
Yes-No Questions	These polar interrogatives begin with a verb (be, have, or do) or a modal verb followed by the subject. *Are we meeting after class?*
Wh- Questions	These generally begin with an interrogative word (who, what, when, where, why, how). They are commonly known as information questions because they ask the responder to provide particulars. *When is the meeting? What is the meeting about?*
Minor Categories	
Alternative or Disjunctive Questions	These can take either the verb-subject form or the Wh- form. Disjunctive questions offer a choice of answer. *Do you want to meet before class or after?*
Tag Questions	When a particle is added to the end of a declarative sentence, the entire statement becomes a question. *We're meeting after class, right?*
Declarative or Indirect Questions	These are questions that appear on the surface to be statements but the underlying form is that of a question. *…assume we're meeting after class* is interpreted as *Are we meeting after class?*
Moodless Questions	These nonclausal forms have neither a subject nor a finite verb. *Questions?*
Echoic Questions	These consist of a repetition of a portion of a preceding utterance and usually are a request for clarification. (a) *We're meeting after class*; (b) *After class?*

Conceptual Framework

Questioning taxonomies generally list question types in ascending order with respect to the type of thinking they invoke – lower order thinking is required for classifications such as Clarifying or Cognitive Memory Operation while Eliciting Algebraic Thinking or Divergent Thinking questions require higher order thinking. Classi- fying the question types a teacher uses during a classroom interaction, or over a series of interactions, using any taxonomy (note that the Linked Learning Taxonomy is specific to mathematics, but could potentially be abstracted even further to apply to a broader range of content) would provide data about the types of thinking the teacher was soliciting. This data could be ana-

lyzed for frequency of question types (and the level of thinking they invoke), how the questions align with the goals of the lesson, comparisons could be made between teachers with different levels of experience teaching the same lesson, etc. Potentially, outcomes from these kinds of analyses could be used in teacher professional development to create awareness of teachers actual practices and improve alignment with the goals of the curriculum.

The Study

Participants

To explore how these taxonomies might be used to classify classroom questioning, a simulation was conducted with six members of the STEL-LAR Lab research group – five Educational Psychology graduate students and one associate researcher. The graduate students backgrounds/area of interest included:

- A former teacher and school administrator with twenty years of experience in K-12 education,
- A student who focused on the relationship between science and engineering principles in science education classrooms,
- A student who focused on scaffolding pre-service teacher learning,
- A student who studies what makes a case a case,
- A dissertator studying how contrasting cases scaffold learning.

In addition, the associate researcher's background included thirty-plus years of teacher professional development experience.

Subject

A two and a half minute video clip from a Learning By Design middle school science classroom was used in the simulation. Learning By Design (LBD) is a project-based inquiry approach to science whose aim is for students to learn science content deeply and at the same time develop the skills and understanding needed to undertake solution of complex, ill-structured problems. (What Is LBD? n.d.) This is accomplished by having students learn science in the context of trying to achieve design challenges. For example, in the clip viewed by the research team students were building and modifying balloon cars that would meet specified performance goals to learn about forces and motion. The LBD model basically has six phases:

I. Messing About: Students in small groups "mess" with materials and devices to understand what they need to learn to achieve a specific design challenge.

II. Design Questions: Students share experiences and ideas for solving the challenge and decide on the most important design questions.

III. Design Experiments: Students break into small groups, each assigned a specific experiment to test designs aimed at answering their questions.

IV. Design Rules: Students report to one another and develop design rules from investigative results, then develop ideas for solving the design challenge.

V. Design Decisions: In small groups, students make a first pass at achieving the challenge. They share their ideas with the class, reporting why they think their design is a good one and predicting outcomes.

VI. Construct/Test/Explain/Modify: Students test their designs, which almost never work as expected, then go about sharing ways to fix problems. The design-test-explain-present cycle is repeated until everyone has reached an appropriate degree of success.

The teacher's role is quite different than in the traditional classroom. She acts as a "facilitator" sometimes, guiding students to ask good questions of each other and to see the similarities and differences and draw conclusions from their experiences. At other times, she acts as a "modeler", engaging in scientific skills aloud in front of the class in ways that show students what is expected. Sometimes she is expected to lecture, but in small chunks when needed. It is as a facilitator and a modeler that the teacher uses and demonstrates effective questioning practices in the classroom.

In the video clip viewed by the group, the classroom teacher is introducing the "Messing About" phase of the unit in which students will become familiar with the structures of balloon powered cars. In the clip the teacher asked approximately twenty questions – fourteen were addressed to the entire class and six were in a small group (2–4 students) interaction.

Procedure
The simulation took place during a regular two-hour meeting of the team.

Group members were given a primer on the taxonomies listed above, then asked to view the two and a half minute video clip. After viewing the video, group members were directed to use any or all taxonomies and a transcript to classify each question used by the teacher during the lesson. Field notes were taken on members reactions to the simulation.

Results

Group members did not complete classification of the teacher's questions using the taxonomies. Reasons included:

- The taxonomies seemed restrictive because:
- the focus of a classification was often too narrow to capture the potential scope of the question.
- many questions seemed to have overlapping confounding classifications.
- The context of the teacher's questions was too difficult to determine;
- For example, the thinking required to answer a question could be convergent or divergent depending on previous class interactions (which investigators were not party to).
- Group members had difficulty envisioning meaningful, generalizable results from the analysis.

Summary

Primarily, without knowledge of the broader contexts (i.e. curricular goals of the lesson, classroom culture and history, experience of students) it proved difficult, if not impossible, for researchers to classify questions with confidence, much less draw generalizations about questioning practices.

An Interaction Analysis

Theoretical Framework

Interaction Analysis is a particular method of analysis developed by Brigitte Jordan and Austin Henderson, first through research at Michigan State University and later as a joint venture between Xerox Palo Alto Research Center and the Institute for Research on Learning in Palo Alto. The roots of Interaction Analysis lie in ethnography, socio-linguistics, ethno methodology, conversation analysis, kinesics, proxemics and ethology. The analysis focuses on human activities such as talk, nonverbal interaction and the use of artifacts and technologies, to identify routine practices and problems and the resources for their solutions (Jordan & Henderson, 1995).

Practitioners of Interaction Analysis hold a common set of assumptions which ground the analysis process (Ibid.). One basic assumption is that expert knowledge and practice are situated in the interactions among members of a particular community engaged in the material world, rather than in the heads of individuals. As a consequence, basic data for theorizing about knowledge and practice is not found in interview or survey data gathered from interaction participants, but in the details of their

social interactions. Artifacts and technologies set up a social field within which certain activities become very likely, others become possible and others become improbable or impossible. The goal of analysis becomes to identify regularities in the ways in which participants utilize the resources provided by the object of their interaction. A second shared assumption is that verifiable observation provides the best foundation for analytical knowledge of the world. This assumption implies a commitment to grounding generalizations, and theories of knowledge or action that may arise from those generalizations, to empirical evidence. A final assumption is that how people make sense of each others' actions as meaningful, orderly and projectable (next, or likely next occurrence) interactions is seen as a collaborative achievement of participants. As a result, part of the work of the analysts lies in specifying the ways in which participants make this social orderliness and projectability apparent to each other.

Applied to the learning process, Interaction Analysis studies see learning as "a distributed, ongoing social process in which evidence that learning is occurring, or has occurred, must be found in the ways in which people collaboratively do learning and do recognize learning as having occurred. (Jordan & Henderson, 1995)

Conceptual Framework

According to Margaret Smith, "The goal of a practice-based approach is to help teachers develop the capacity to see specific events that occur in the practice of teaching as instances of a larger class of phenomena." (Smith, 2001). Analyzing the interactions of teachers making "noticings" from viewing video of a classroom interactions is an example of building (at least partially) a larger class of phenomena from specific events, which they can then use to reflect on and change their own classroom practices.

The Study

Participants

To investigate the potential of Interaction Analysis as a method for studying teacher classroom interactions, the STELLAR Lab research group – a collection of graduate students and researchers under the direction of Dr. Sharon Derry – was videotaped performing the specific tasks associated with Interaction Analysis. Nine members participated, including four of the five educational psychology graduate students and the associate researcher who participated in the taxonomy study, In addition the group included:

- A videographer with extensive experience working in classrooms,

- A conversation analyst,
- A dissertator who focuses on how educational systems support learning,
- A university professor with interests in how contrasting cases and use of video scaffolds learning.

Subject

A five minutes video clip from a <u>Learning By Design</u> middle school science classroom was used in the study. The class was engaged in the process of reporting results of design experiments and developing design rules. In the clip, a student team had just reported their results of an experiment investigating the effects of changing the straw length on car performance when the teacher takes over to assess/develop understanding of a particular science principle. Over the course of the clip, the teacher asks twenty-nine questions, nearly all of them directed to all students in the class.

Procedure

Two days before the scheduled analysis group members received a packet of preparatory materials which included:

- A CD that contained an 11 – minute video clip of the class they would view in the analysis. This provided a broader context for the analysis clip.

- A transcript for the CD clip.
- A primer on "Learning By Design".
- Reproductions of diagrams displayed in the analysis clip that the teacher used to explain specific concepts.
- Three examples of questioning taxonomies.

To begin the analysis, group members were first given the specific procedural steps of the interaction. These are:

1. The group watches the complete video without interruption. They watch it a second time and perhaps a third noting points that are interesting to them and drawing their focus there. Members may request to see a particular segment several times in order to clarify their understanding of their noticing.
2. After everyone has been satisfied viewing the video, the group takes ten minutes to write down their noticings. At this time the only questions should be about discrepancies in the transcript; if something is unclear or incorrect.
3. At the end of ten minutes one member states his/her noticings. There is no per person time limit on this step. Other members do not interrupt or add on to

what the person is saying. They may include observations about previous noticings when it is their turn to give their own.

4. It is important that members' noticings are pointable to – that they are supported with evidence from the video clip.
5. After everyone has stated their noticings, the session is opened for group discussion.

The group viewed the complete video clip a total of four times. The first two times the clip was viewed with the lights turned down. After the second clip there was a request by the university professor for a clarifying demonstration of the science principles present in the clip to understand if the teacher was correct in her explanations. Between the third and fourth viewing one of the dissertators in the group asked for a clarification of the process, specifically what he was being asked to write about from the clip. He was instructed to look for instances of interest and to focus on describing how these instances were occurring. After the ten minute period in which participants organized their noticings into written notes, each in turn reported to the group, citing evidence from the clip in support of their observations. Participants followed the ground rules put forth at the start of the session.

After all participants had reported, an exchange took place for approximately fifteen minutes in which participants used evidence from the video clip to challenge, support, elaborate on, or clarify other participant's observations. The entire interaction session lasted slightly less than two hours and was captured on videotape by a single camera.

Results

From the analysis of the interaction of the nine researchers who participated in this study five themes emerged. Particular noticings were abstracted into a theme if they recurred in the noticings of at least five of the participants, observed from repeated viewings of the video of the interaction and from color-coded correlation of its transcript. In other words, the transcript was marked where participants spoke of a particular noticing with a particular color which indicated the recurrence of particular noticings. The emerged themes were labeled: I. What Was The Teacher Trying To Do?; II. Attempting To Scaffold From Previous Knowledge; III. Rhetorical, Or Right Appended Questions; IV. When The Trouble Occurs; and V. Deferring Until Later. The analysts supported these five themes through their noticings and, in summary, saw in the video clip a failed attempt on the teachers' part to try to clarify a troublesome physics

concept that was beyond the scope of the students ability to grasp.

<u>What Was The Teacher Trying To Do?:</u> In this first segment, researchers are trying to determine what are the goals of the teacher's lesson. The teacher is not explicit as to what she is trying to accomplish when she interrupts the students' presentation. Researchers contributed the following observations:

> *M: Well, it took me awhile to decide what her topic was...from what I could gather from the script and the video, she was trying to talk about the various variables that caused the data that they observed....what she's trying to do is get kids to talk about relationships between variables.*
> *C: Alright, the, the teacher at six twenty two indicates that what's gonna follow is going to be an act of analysis, uh, that other classes have been doing an analysis and that's what they're going to do with this interaction. So that's what I took her to be doing...*
> *J: ...one of the things that occurred to me is what she was trying to do was engage a class in a form of analogical reasoning...*

<u>II. Attempting To Scaffold From Previous Knowledge:</u> Researchers noted that when the teacher drew another figure on the overhead – a car without a balloon propulsion system that she calls a coaster car – that she was attempting to scaffold from the students' previous knowledge. This is supported by these statements:

> *M: ...and then she started drawing a new car, and at the last sentence in 6:56 she says, if this is a coaster car what is –, that is coasting, what forces are acting on it?...what I think she is drawing out from the kids is some sort of cognitive memory...*
> *S: But she did, uh, model a strategy that I thought was interesting which was to compare and contrast with the coaster car. They had worked with coaster cars before...and there is a much simpler situation with the coaster car and she had gone back to that, which they understood...*
> *ML: ...she was trying to link their knowledge of 'what is the effect of friction?', she's trying to link that to the car they saw in motion...*
> *A: ...and so she would ask a series of questions about the coaster car, which the kids were familiar with, and she would try to it to converge with this idea...*

<u>III. Rhetorical, Or Right-Appended Questions:</u> Researchers noted that the teacher asked a number of questions that do not seem to require

an answer. She creates an environment where all questions can be interpreted as rhetorical because she never selects a specific student to provide an answer. Correspondingly, there is a lack of engagement by the students and the teacher ends up answering many of her own questions. Researchers' statements that support this are:

> M: She said, 'Right, right, right? And she goes, that's quite frequent in her type of questioning...But then, it seems in 9:59 she gets back to answering her own question...So she's kind of rhetorical here again...
>
> C: ...these questions don't select a speaker... they're directed at no one specifically...uh, from a turn-taking perspective, this is problematic, cause it doesn't necessarily direct who's to speak...there's a relative lack of response on the part of the students...
>
> S: ...she does ask these, ah, um, 'do you agree', 'right' kinds of questions, and my note about that is it's not really a question...
>
> AG:...she asks a series of questions that she basically just answers herself, and turns the students, in my opinion, into just ah, a classroom full of, ah, ...yes men.

IV. When The Trouble Occurs: Nearly all analysts agreed that the flashpoint in this discourse occurred when she initially agreed with a student's assessment of what was happening regarding net force in the balloon, and then disagreed. From that point on she appeared visible less confident, her explanation becomes more and more vague, and appeared to be bluffing her way through the conclusion of the activity. Researchers noted:

> S: Um, oh, then at 10, about 10:19 she starts getting in trouble. Her reasoning strategy has not worked for her. She's reasoning through this and she starts getting in trouble and she doesn't admit that...I think kind of hiding the fact that she doesn't understand it...
>
> J: ...and then at 9:59 where she was agreeing with that student and then realizing the student was wrong, or she thought the student was wrong, um, she didn't really, I mean she did kinda-, she didn't explain why. She just kinda said, 'No, that's not it. It's this way, isn't it?'.
>
> ML: Um, 9:59, um, she starts out degreeing-, agreeing with the student, but, um, then goes on and says no, that didn't change...I think that's where the teacher really starts getting into trouble, and by 9-, or 10:19, ... she realized that it would take more physics than the students know to describe what was happening exactly.

V. Deferring Until Later: While the teacher never explicitly states that she needs additional time to develop her own better sense of the physics in the design experiment, there is a sense that she is "buying some time" to figure out how to clearly explain the principle at work. While she does acknowledge the principle is confusing, she places the locus of the confusion on the students and does not take any of the onus for the confusion on her part. This theme is supported by the following statements:

> B: ...then she alludes to the fact that all of this is really much more complicated than their investigation seems to be bringing out right now, at 10:19. She says there's really a lot more going on here but we'll discuss it later.
>
> C: ...T tends, uh, T at lines 10:19 and 10:51 places the locus of confusion or lack of inter-subjectivity on the students. Uh, she, she says it's confusing, but says it's confusing in a way that acknowledges that it is confusing for them, and therefore does not necessarily take responsibility for any of the confusion on her part.
>
> S: So, um, she's, I think, um, not understanding it, her reasoning process isn't working and she's not admitting that to the students, and her strategy is 'Lets revisit that'.
>
> ML: ... at the end, I wondered how she, how

> she finally figured out that it was confusing to them... she found it confusing herself... and kind of projected that on the students, 'I know this is confusing' and, and so on.

Statements from participants after all had reported their noticings were a mixture of cautions about analyzing the data, speculation on teacher pedagogical content knowledge, and noticings about the session itself.

Cautions About Analyzing Data:

> S: I think it's important to, um, in your analysis of our analysis that...you be aware when people are having opinion and interpreting as opposed to ...things are happening in a bigger frame, a bigger context. So, um, I think that we don't know all of the, the surrounding context to be able to make some, some kinds of evaluative judgments.
>
> C: Ya, no, it's true. What we're looking at is just this session, this segment right here with what we know and bring to it, so there are limitations to what he can say about it.
>
> Teacher Pedagogical Content Knowledge:
>
> C: I think, I think she did understand a lot of the underlying concepts. And she maybe just did get sort of tripped by a couple of details that rendered the whole thing less clear.

A: Well, I felt like she knew the science as long as-, to follow the particular stream, but as soon as you bent the stream a little bit then, then she wasn't so sure. Then she kept trying to bend the stream back to the way that she understood it.

M: Well, that's usually referred to as a lack of depth of understanding of the knowledge. Cause she can't take the students' perspective, what they were saying about the cars. So she really doesn't have any deep understanding of the science.

Noticings About the Session:

J: I thought it was interesting though, just the interaction analysis, like thinking about it. I managed to bring up analogical reasoning. You managed to bring up design issues. You managed to bring up, you know, kind of pedagogical teacher moves. Yours were empirical, I mean I guess that's the point of the whole thing is the lenses we had to looking at it...the recognition that there are all these different perspectives that can be applied through it.

C: But I think it is interesting that, I mean, people do hit on commonalities... I find those commonalities surprising as much as the, you know, the variety....

M: ...So, I wrote down what kind of analysis was being generated by all of us, and it was, to me it was very interesting, and as you said reflective of our own ways of looking at a situation, our own background. But I was kind of left with, well what did I really gain about understanding the questioning?

C: Well, a lot of, a lot of people noticed the sort of the, I want to say the rhetorical mess of the questions, or sort of that-

M: Yes, alot of people did.

C: -these questions being asked that were not genuinely being asked. I think that's a common sort of a noticing that people had here that bears on the nature of the questioning in class. And how it pertains to the students understanding.

M: That's to me a solid outcome, that we all kind of-. So, when you do the analysis now, I guess I'm asking about the method, do we look for commonalities?

C: We can. The data session is a, ah, you know, it's a pretty general tool....

D: This is a process that we're trying to kick, kick-start in our own little professional development practice here, of getting, getting a group of people that could be in-, basically instructional designers, to think about, what would we try to do with professional development now?

Summary

The STELLAR Research Group was able to actively participate in the generation of data for analysis. Data was substantive enough to support five generalizations about the observed classroom and provided addition insights about the use and utility of the instrument. Interaction Analysis seems to show promise as a method for analyzing classroom interactions, including teacherquestioning practices.

Conclusions

The purpose of this study was to examine two methods for analyzing cases of teacher classroom interactions for their utility in informing the development of teacher professional development to improve teacher classroom questioning. From an informal study, the use of questioning taxonomies did not appear to be a good method to inform the design of teacher professional development activities. Researchers reported it was too difficult to classify questions according to a taxonomy without a more thorough understanding of the context of the classroom interactions. The second study was an interaction analysis of the STELLAR Research Group reporting interesting noticings from repeated viewing of a video of a middle school science classroom. In a way, the analysis of the group interactions produced a taxonomy from the recurring common noticings of group members. Generalizing these common noticings into themes and giving the themes label was akin to affixing labels to types of questions in a taxonomy. The advantage of interaction analysis was that participants were not restricted to those labels in speaking about their noticings. As a result they were able to have richer conversations. A second advantage of the method was it allowed participants to apply their different areas, or different levels, of expertise to the data. All participants had the opportunity to see a situation from a new perspective and to potentially re-examine their own perspective. While it is prudent to be cautious about the power of generalizations that can be produced from one five minute video clip of one content area classroom, many of the themes that emerged from this session seem to be generalizable over many classroom (i.e. scaffolding from previous knowledge, use of rhetorical questions). And they are generalizations – the kind of thing teachers can accept or reject as they reflect on their own practice.

It is interesting to think how a community of content area teachers might use an interaction and the resulting analysis of their noticings about classroom questioning in their own con-

tent area to examine their own practices. That will be the next step in attempting to answer the larger question – how can a program of teacher professional development influence teachers to use more productive questioning practices in their classrooms? Specifically, we will conduct interaction analyses with a community of twenty middle school mathematics teachers using video samples from middle school mathematics classrooms. If successful, these teachers will generate a taxonomy, of sorts, of the larger class of phenomena of their practice, from which they will then develop the capacity to see their own practice as specific events within that larger class.

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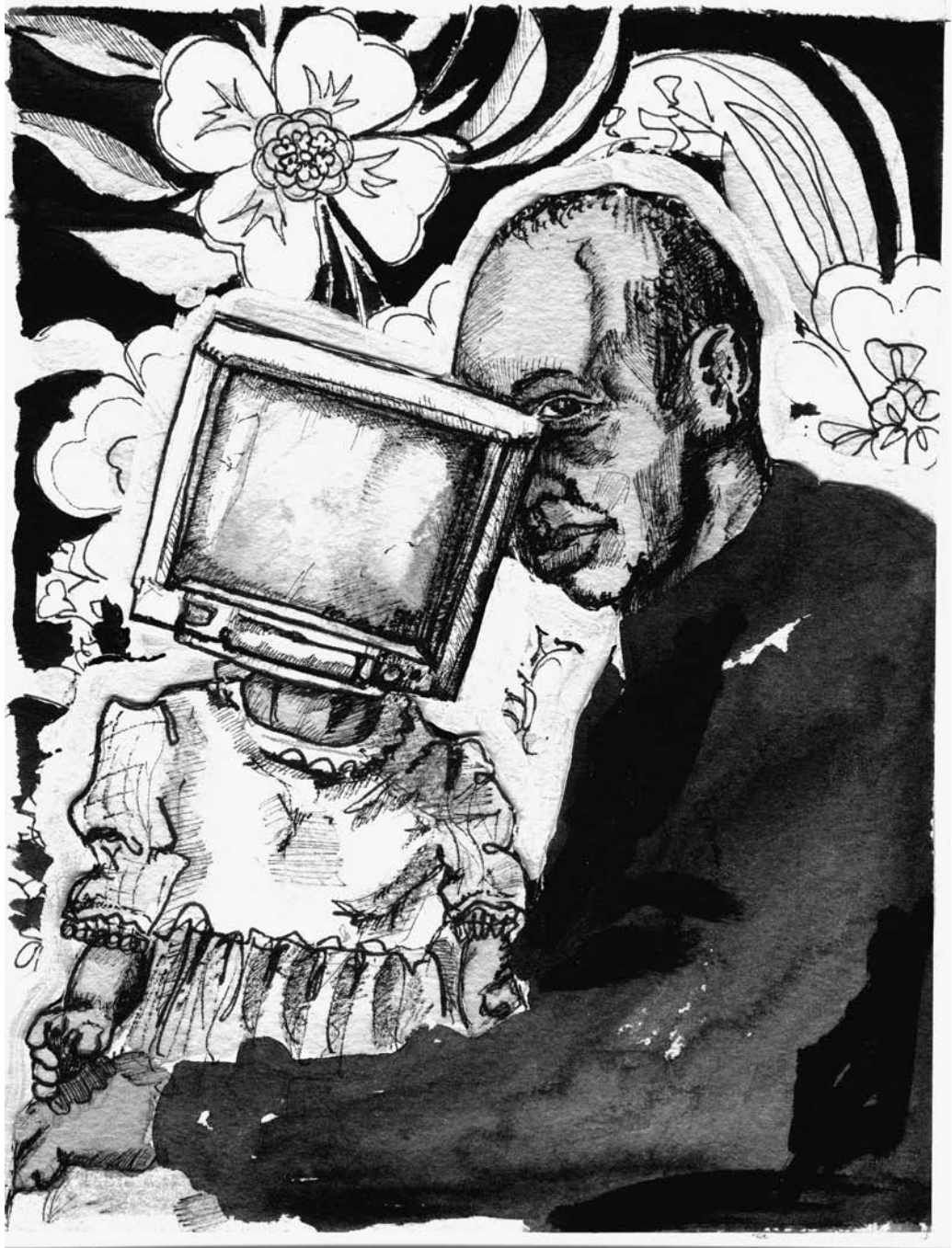
Nobody and everybody has the responsibility – responses to the Swedish antiracist website SWEDKID

Camilla Hällgren

This paper reports on the evaluation of an anti-racist website, SWEDKID, (www.swedkid.nu). It starts with a short reflection on multicultural and antiracist policy, education and research in Sweden and continues with an exploration of the development of the SWEDKID project and its methodology. The overall evaluation of SWED-KID constitutes of three stages where the first two stages concern the responses following the launch of the website and general patterns of use. The main focus of this paper, however, is a study for the third evaluation stage, which builds on class-room observations, questionnaires and interviews and aims to explore how the website is used in, and how it can mediate antiracist work in the classroom. The paper draws on critical multi-culturalism as a theoretical perspective, but also considers theoretical frameworks within evalua-tion and in particular the case study as an eva-luation method. In trying to avoid producing a victory narrative, it is also recognised that internal evaluation work can be associated with certain problems, e.g. the risk of being biased and giving prominence to more positive aspects.

In Sweden today, a quarter of children has at least one parent from another country (SCB, 2004). At the same time reports describe racism not only as a part of Swedish society in general but as 'still being part of the dark side of Swedish educational system' and present in everyday life in Swedish schools[2] (National [Swedish] Agency for Education, 2002:124; Rädda Barnen, 2002a, 2002b; Integrationsverket, 2002a, 2002b; Inte-grationsverket, 2001; Parszyk, 1999; Lange & Hedlund, 1998; Lange, Lööw, Bruchfeld & Hedlund, 1997). What we also see in Sweden are policy statements, which identify the school as a key agent in the fight against racism and at the same time reports and policy documents which argue that teachers do not have enough guidance on how to work with these questions in the classroom (Regeringens Proposition 1975:26; Nordmark; 1995; Inrikesdeparte-

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mentet, 1998; Roth, 1998; Skolverket, 1998; Parzyk, 1999; Skolverket, 2000). In mapping research in the area, it is notable that questions about antiracism and multiculturalism often are presented as 'second-hand' and of low priority. Moreover, multicultural issues have tended to be seen through a filter of language acquisitions and rarely connected to racism and xenophobia existing in the Swedish society (Hällgren, Granstedt & Weiner, 2003). Despite the fact that intercultural education[3] as an educational perspective was introduced in Sweden as early as 1983 (Utbildningsdepartementet, 1983), cultural diversity in school has for a long time been seen as equivalent to "teaching immigrants" or "teaching about immigrants". Furthermore there are still confusions about what the intercultural perspective actually means. At the same time as it is described by the state as preconditional for the work against racism in schools, it is also argued that there is a need for more support and research on how to work against racism in school (SOU 1998: 99; Nordmark, 1995). Teachers seem to be left very much to their own devices with regard to how to deal with these issues in their everyday work. Thus, SWEDKID, as an antiracist website was developed (www.swedkid. nu) to support teachers in their designated work against racism. The overall process of developing and using the website was further used as

a prism to research experiences of racism, the impact of ethnic diversity in Swedish schools and how ICT might be a part of supporting antiracist strategies in the classroom.

The SWEDKID project

SWEDKID involved the research, design, utilization, and evaluation of the website, as a pedagogical tool to challenge racist and anti-democratic ideas among young people in Sweden, the Nordic countries and more widely. It is a multi-agency project involving a range of departments at Umeå University, schools and private companies such as Paregos for design, and Skandia (insurance company), for financial support and development. Its research-base and development has been primarily the responsibility of the project team based in the Mathematics, Technology and Science Education Department at Umeå University, together with the Department of Interactive Media and Learning (IML, also at Umeå University). SWEDKID is also part of the Comenius-funded project Eurokid (2000–3) which involves three countries – Britain, Spain and Sweden – in the creation of home-language websites all of which went on-line in October 2002 (Britkid in a revised form), and a linked Europe-wide website developed and online in 2003[4].

SWEDKID's main aim is to present in web form, evidence and discussions on a range of experiences concerning racism, ethnicity and identity. Content of the website builds on in-depth interviews with young people from various minority and majority ethnic groups in Sweden (further developed in Hällgren, 2005). The virtuality of the net is used to problematise and 'trouble' young people's experiences and perspectives regarding what it is to be 'truly' or 'newly' Swedish (and European). In so doing, the website seeks to illuminate, challenge and intervene in the processes of racialisation of society and culture. The website has a twin function: to attract, sustain and challenge young people, and to inform and stimulate the actions of teachers.

Visitors to the website are encouraged to interact with the characters and to reflect on their own ethnicity, identity and approaches to racism and antiracism. They can choose one of eleven characters of varying ethnicities and identities (majority, minority, and hybrid) drawn from Swedish society. An overview sketch is provided of the character's family, culture, religion, interests, and problems etc., drawn from the interview data. The user can also take part of semi-fictional discussions between characters illustrating the impact of racism on their daily lives (based on incidents and experiences of interviewees) and for discussing specific questions a *Forum* is also available. Additionally, a wide range of linked websites, information sources and a glossary of terms used is provided together with a 'help' section including short-cuts to content and explanations of the website's underlying conceptual framework. After logging in, users can individually store their interactive work in a personal archive/portfolio, called 'my backpack' where it is possible to write about own experiences and keep record of responses given in dialogues. The backpack can also be used by teachers and students to communicate with each other by, for instance, printing out segments as the basis for an 'actual' live classroom discussion. From the 'teachers' room', teachers can create student logins, gain overview of how their students are working through various parts of the website, exchange ideas with other teachers, and seek guidance on useful web-links and resource materials.

The target audience of SWEDKID is young people of 10 years and upwards who have access to the Internet either at home or at school (or both). Because the website language, in the first instance, is Swedish, the website was mainly accessible to web users in Norway, Sweden, Denmark and the Swedish-speaking part of

Finland. However, the translation of the website into English (in March 2003) has ensured a wider audience for the website and more possibility for discussion of shared issues across countries and continents. The number of visitors to the website at the time of writing is: 23 141 (31 May 2005).

Theoretical frame

A critical multicultural perspective is used to explore the outcomes of the evaluation. It is seen as both illuminating of everyday racism, and of societal norms as mainly derived from the views of the majority, who, given their position of power, have preferential right of interpretation. A critical multicultural perspective encourages a recognition of ethnic, cultural and other social identities as 'differing in salience among individuals and across given historical and social contexts and [explores] how these are situated in a wider framework of power' (May 1999:33). Acknowledging both the limits of identity and hybridity between cultures, critical multiculturalism aims to avoid stereotyped conceptions of culture, ethnicity or identity. Rather, individual positions are recognized and supported with regard to individual rights to define identity and experience. The ideas of critical multiculturalism are closely connected, and in some cases also overlap, with ideas con-

tained in the Swedish Intercultural perspective, which, as already mentioned, is the officially preferred perspective in Sweden (Utbildningsdepartementet, 1983). Apart from Lahdenperä who has explored the concept and its utilisation in Swedish schools (1995, 1997, 2001) there is evidence of difficulties with understanding and implementing the Intercultural perspective (Inrikesdepartementet 1998a, 1998b; Sjögren, 2001; Lundberg, 1991)

In evaluating how SWEDKID is used and how it can support antiracist work in the classroom, it is important to resist the often utopian claims of web enthusiasts and take into account critics as well as advocates of the educational value of web approaches. For example Street (1998) argues that we have moved into a 'new communicative order' which takes account of literacy practices associated with screen based technologies; and Snyder (2002: 3), that the conventional book and other paper-based forms have been joined by 'written, oral and audiovisual modalities of communication…integrated into multimodal hypertext systems made accessible via the Internet and World Wide Web'. Cuban (2002), on the other hand argues that there is no substantial evidence of increased achievement as result of using information technologies. A similar point is made by Hult et al (2004), who, assert that it

is an error to assume that technologies automatically generate educational change. In an investigation of the impact of information technology (ICT) on Swedish schools over the last decade, Riis (2000) found a high level of confidence in the potential of ICT despite the gap between the expectations of what ICT can achieve educationally, and the reality of how it works in the classroom. In particular, ICT is seen by many as the key to change the way schools and teachers work, and thus, as a means to ensure "higher quality" teaching and learning.

Evaluation approaches

The main aim of the evaluation approach adopted in this paper is to understand the meaning of experience and to contribute to the extension of experience; in other words, to explore how the website is used and how it can mediate antiracist work in the classroom, identifying difficulties as well as positive aspects. The overall approach is largely qualitative (Patton; 1990; Merriam 1988). It is also recognized that, as argued by Guba and Lincoln (1989), the very act of evaluation is political. Evaluation is more than just a method, and can be used for different purposes e.g. political management and control or citizen involvement and education, furthermore. Thus an evaluation may be distinguished by its evaluative purpose (Karls-

son, 1996; 1999; Shaw, 1999). The position of the evaluator is also important, particularly in trying to avoid partisanship the production of a victory narrative. Thus it has been important to recognise the danger of evaluating one's own work, such as downplay problematic aspects and emphasise the positive.

The evaluation of SWEDKID is also a form of program evaluation. Greene (1994) argues that there are four major approaches to what she calls 'program evaluation', each with its own philosophical framework, promoted values, key audiences, preferred methods, and typical evaluation questions. These are outlined in table I on next page:

Table I. Approaches to evaluation (Greene, 1994:532–544)

Philosophical framework	Promoted values	Key audiences	Preferred methods	Questions
Postpositivism	Systems theory/efficiency	High level policy makers	Quantitative	Attainment of desired outcomes?
Pragmatism	Management/utility	Mid level program managers	Eclectic/mixed	How effective is program?
Interpretivism	Pluralism/under-standing, diversity, solidarity	Program directors/staff	Qualitative/case studies, interviews, observations, document review	How is program experienced by various stakeholders?
Critical normative	Emancipation/ empowerment/social change	Program beneficiaries/'powerless' groups	Participatory/stakeholder participation	In what ways does program support or challenge power structures and inequities in society?

A combination of the third and fourth philosophical frameworks has been employed in the evaluation case of SWEDKID. An interpretive approach to knowledge promotes pluralism in the evaluation context and the use of case study methods. It also seeks to enhance 'contextualized program understanding for stakeholders closest to the program … and thereby promotes values of pluralism as well as forges direct channels to program improvement' (Green, 1994:533). Interpretivism, at root, promotes contextual meaning; social reality is constructed in 'a constant process of interpretation of the intentional, meaningful behaviour of people – including the researcher' (Smith, 1989 in Green 1994:536). As a justification for inquiry, interpretivism also acknowledges values in the inquiry process and the outcomes – there are no facts without values. However, as Green (1994) points out, interpretivism does not advocate any particular set of values. Instead, the values are seen as brought in by the researcher. Evaluation of an antiracist website, carried out by a researcher who also was involved with its development, thus can be seen as a form of 'evaluation as advocacy', which is signified by the 'absence of value neutrality and the presence of a particular value commitment' (Greene, 1997:3). A 'critical normative' framework is also a feature of the evaluation. This, according to Green (1994), aims at encouraging an open ideological form of inquiry to illuminate historical, structural and value bases of social pheno-

mena, and to promote greater justice, equity and social change.

Evaluation strategy and design

The case study is adopted as the research strategy on which the overall evaluation is based. Based on the work of Yin (2003) the overall evaluation strategy of SWEDKID can be described as a single exploratory case study with multiple embedded units for analysis or substudies. The event of the launch and use of an antiracist website (SWEDKID) constitute the overall bounding system of the case evaluation, concerning how the website was received when it went online, its utilisation and how it can mediate antiracist work in the classroom. This is explored in three evaluation stages with associated substudies (see table II below). Though, the main unit of analysis, or the bounding system of the sub-study in focus of this paper, is the instance of working with the website with teachers and students in the classroom, an instance chosen because its presumed potentials of being a prism of opportunity to learn about difficulties as well as positive aspects of using the website in classroom settings (Stake, 1994; Yin, 2003).

Stake (1995) uses the metaphor of a 'palette of methods' to characterize the case study. Hence, the strength of the case study is its ability to deal with a variety of evidence, documents, artefacts and observations etc, both quantitative and qualitative (Yin, 2003; Hays, 2004). Thus, the purpose of a case study is 'not to represent the world, but to represent the case, and … the utility of case research for practitioners and policymakers is in its extensions of experience' (Stake, 1994:245). It is also argued that case study as evaluation offers the possibility of presenting a broader (naturalistic) generalisation[5] that draws on converging multiple sources of evidence in a form of triangulation (Stake, 1995; Yin, 2003). This is exemplified in the overall evaluation of SWEDKID, where a variety of measures were employed to collect data e.g. number of 'hits' and user tracking, public recognition, awards, press coverage, responses from teachers, formal interest from school bodies and education authorities, unsolicited emails from young people and other users, data from observations of young people using the site, questionnaires given to classes using the site, and interviews. However, sources that form the basis for this paper are those connected to the sub study concerning classroom settings. The value of using a case study is summarised by Yin (2003) as follows:

– To explain presumed casual links in real-life interventions that are too complex for

the survey or experimental strategies

– To describe an intervention and the real life context in which it occurred

– To illustrate certain topics within an evaluation (again descriptive)

– To explore those situations in which the intervention being evaluated.

Additionally, the case study is defined as an 'inquiry' into contemporary phenomena within its real-life context', particularly useful when 'how' and 'why' question are being asked about contemporary set of events. McDonald and Walker (1977) suggest that it is useful when questions are directed at the experience of participants and transactions in the 'learning mileu' and allows prospective users (of the program) a possibility to relate to their own experiences and preferences (McDonald and Walker 1977:181). This interpretation suits the aim to explore the website's mediating role in intercultural/antiracist strategies in the classroom.

Outlined in table II below are the three evaluation stages and their associated substudies.

Table II. Evaluation stages and sets of data

Stages and sets of data in the overall evaluation			
Stages	*1. Responses following the launch*	*2. Ongoing collection of data on patterns of usage*	*3. Formal in-depth evaluation*
Sets of data/units of analysis	*1. Media coverage* *2. Individual emails*	*1. Website 'hits'* *2. Website logins* *3. Website performance*	*1. Mediating antiracist work in classroom settings* *2. Questionnaires responses* *3. Web-design evaluation* *4. Feedback from teacher educators*

Stage 1 involves how the website attracted widespread media coverage at the time of the launch, both positive e.g. national and local newspaper, radio and web coverage which generally presented SWEDKID as an innovative and useful pedagogical tool for schools and critical, in particular, from racist and neo-Nazi organisations and individuals. Data from *Stage 2*, concerning patterns of usage, show an average with 700 + visits per months and over 200 individual schools and other educational institutions have requested full login. It also shows that users come from Scandinavian countries as well as countries inside and outside Europe. *Stage 3* comprises several activities undertaken for the evaluation, planned and unplanned, including questionnaires, web-design evaluation, and feedback from teacher educators. Comments from the web-design evaluation were generally positive and enthusiastic, though a common criticism was of the inaccessibility of the website for people with disabilities. Evaluations from teacher educators, again, were overall positive concerning aims and outcome, resulting in the website being introduced to student teachers as part of the compulsory programme. Doubts were expressed, however, about what was seen as the high moral tone of the website (and presumably its focus on racism and antiracism). (For more information on the first two stages

and substudies 3 and 4 in stage 3, see Hällgren, 2004b) The remaining article concerns the main evaluation activity of the 3rd stage of the evaluation.

Mediating antiracist work in classroom settings

This part of the evaluation comprises in-depth evaluation with teachers and students in the school. Questions that are explored include:

– What patterns of usage emerged, and how did they impact on age, sex, and ethnicity?
– To what extent did pupils find the website attractive and of interest?
– What was its accessibility in terms of language and in relation to different parts of the site?
– How were the design and graphics experienced by users?
– What were the reactions to characters and dialogues?
– How did the website mediate antiracist work in the classroom?

Working with teachers and students in classroom settings

It was decided to focus on one classroom and one set of students. Data were collected by the

means of questionnaire, participatory classroom observation, website logging, electronic user-tracking via Casemaster[6], and teacher interviews. The main themes raised during the evaluation were general utilization of the website, communicating and interacting with identities, features of the characters and dialogues and general reflections on using the website for learning more about racism and antiracism. The case-study is recounted from the perspective of the evaluator.

Setting up the work

While the classroom teacher, Anna, and I sat in the staff room and went through the website in preparation for the classroom settings, several teachers approached us and joined our discussion. They all mentioned the importance to work with the issues raised on the website. For example, one teacher spontaneously commented that it was important because the school did not have many children 'with foreign backgrounds'. Another, who had been a refugee from Bosnia, reflected on how hard it is to actually work with antiracist issues in the classroom and also how much the work might differ between class groups. She illustrated this by describing how she was working on the theme World War II with her history class. Together with the class she had watched Schindler's List. However, the

discussion afterward had been really 'sluggish'. At one point one student had remarked that he would do the same thing as the Nazis, which drew a laugh from the rest of the class. She described how deeply uncomfortable she had felt, that she really had not known how to deal with the situation. As a researcher of racism/antiracism and how to support teachers and students in this area, my initial response was horror. Here she was, a refugee from Bosnia, having to face this lack of empathy from her students and with no guidance on how to deal with it, or how to protect her self and her students from this kind of intimidating situation. What could SWEDKID provide in this situation?

Anna and I decided to use four sessions during Swedish language lessons for the evaluation. Anna suggested that because the students were in seventh grade, aged thirteen to fourteen years, they needed fairly clear instructions on what to do and it was decided that I should write the instructions and that Anna would check and make changes if needed before we used them. We also discussed where in the curriculum, working with antiracism came in. Anna, who is a teacher of Swedish and English, explained that this was not clear at all, 'it could fit in almost everywhere; in Civics, Religion, Language or Art'. We also discussed access to guidelines or

action plans of the school and Anna explained that the main document currently available for guidance was what was written in the formal National Curriculum[7].

The determining factor for when and how many sessions would take place, however, was access to the computer lab. Three sessions (40–50 minutes each) were allocated to work on the computers and the fourth, to discuss the student responses in an ordinary classroom without computers. During the final session the students also completed a short questionnaire. One problem was that a holiday break occurred between the last two sessions, which meant that students completed the questionnaire a full two weeks after they last worked with the website.

To prepare the sessions and discuss the classroom observations, there were further meetings with the teacher, before and after the classroom sessions. Then, finally an interview was carried out focusing on the teacher's experiences and reflections on the classroom activity, the observations and questionnaire outcomes.

When meeting the students for the first time I explained my research intentions to them. I also described my work as a researcher, informed them about the website, how it developed and why, but also about the attention it had received and the prizes parallel to not knowing really how SWEDKID worked in the classroom. I explained that I regarded them an expert group, important for helping me to understand what happens when the website is used in the classroom. The emphasis on their role as experts was also an attempt to level out or defuse the power relations between them, and myself. I encouraged them to be critical, ask questions and think about things they liked and did not like, things they found strange or things they recognized. Later, when they begun to express their opinions, I deliberately encouraged/rewarded them with positive feedback, both through verbal and body language.

There were fourteen girls and ten boys in the class, all aged thirteen to fourteen years. Four of twenty-four students described themselves as 'non-Swedish' i.e. Finnish, Chilean-Lebanese, Russian-Lithuanian and Russian-Belarusian. One student wrote 'No' to the question about ethnicity and the rest (eighteen) described themselves as 'Swedish'. The teacher also identified herself as coming from minority background. The students had been at this school for nearly eight months but even though the computer room was situated centrally in the school, near the canteen, there were students in the group

who said they did not know where it was located. Consequently, a majority of the group gained their personal login to the computer lab at the first evaluation meeting.

General utilization of the website

Both positive and negative aspects were reported concerning SWEDKID. On the positive side, most students indicated that there were 'no things' they actively disliked, and that 'nothing needed to be changed'. For example, students from a minority background remarked that 'there was nothing that wasn't good' because 'people get to know how you react and so on'. On the negative side there were some students who seemed disappointed that the website did not offer more inter-activities and possibilities to communicate with each other. A common criticism mainly from the boys was the absence of 'games', 'quiz', 'competitions' and 'chats'. The girls tended to ask for 'more things to do', e.g. 'sending mail to friends'. This was also evident from spontaneous remarks and questions during classroom observations and at one point the teacher was forced to explain that 'the website wasn't Lunarstorm'[8]. The library function seemed least popular with the students. The few who reported visiting it, mentioned the wordlist and other parts of the library 'as an aid to work with the assignments'[9]. When asked what they thought about working with the assignments, (largely concerned with working through the website) the most common response was 'good'. However, no student used the most positive category (very good), and one boy described the activities as 'boring'. There were some students who said they could recall SWEDKID in detail two weeks after their last session, while some students claimed not remembering 'anything in particular' from the website.

Responses to the semiology of the website

Both girls and boys were generally approving of the design and character of the illustrations (for an example of navigation visuals, see picture 1 below) , and made positive comments about the diversity of ethnicities offered; for example, 'I like that there is not just Swedish people', 'all the colours made me happy, they [the characters] looked good, nothing was wrong'. Some characters were mentioned more often than others. Brahanne, a refugee from Eritrea, was for example described as 'good, pictures like that are cool' while Jonas, adopted from South Chorea, was assumed to have been 'given a bad camera angle'.

Picture 1.
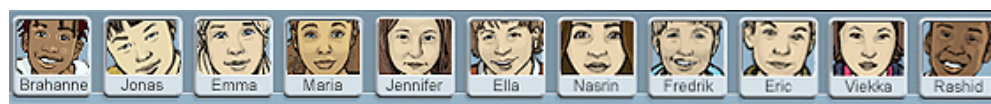
In parallel to appreciating the visuals because they contained 'a lot of features', however the students, particularly the girls, claimed not to be aware of the importance of appearance of the characters, e.g. 'I guess everyone looks the same, it doesn't matter how you look'.

It turned out that the designated age of the characters seemed appropriate to the students. As an outcome from pre-evaluations during development of the site it was decided not to provide information on the website of exact age to the characters. The teacher, though, reported that she had noticed a difference between this group and older students who had worked with the website. While 9th graders had described the characters as 'childish' and asked questions about age, the students in this group were not as concerned. This also came through in the classroom observations.

Communicating and interacting with identities

The students appeared attracted to the possibility of interacting with and sharing identities. This was done via the forum and the backpack, but also through engaging with the characters on the website. Nevertheless, when analysing the communications within the discussion-forum, only a few comments were received which connected to content[10]. The teacher reflected on the popularity of the forum and suggested it lay in the opportunity it gave the students to express themselves, rather than to work on the content directly; they 'use it as an arena for themselves as individuals'.

Possibilities of expressing identity were also provided in the backpack (digital portfolio). Students found it 'good', 'easy', and 'fun to write about oneself in different categories and read about others'. Engaging with identity was also suggested in students' interest in sharing characters' identity and experiences in dialogues and the characters personal pages; 'it was good to

meet so many people from different countries', 'to share their experiences', 'get to know how people behave' and 'talk to the characters'. This also corresponds to the data from the classroom observations and website loggings.

Interacting with the characters and the dialogues

Different strategies for following characters through the website were observed. The students mainly interacted with the content through identification and empathy with the characters. Students said that they understood all the features of the website and that they got to 'know new things'. However some students claimed to have learned nothing at all, and it was also these who tended to comment on Swedes being misrepresented. So perhaps their denials were refusal to engage, rather than just boredom.

Different strategies for following characters
Gender seemed a factor in the strategies chosen for interacting with the characters. The girls tended to visit as many characters as possible; 'I went to everyone because I wanted to check out everyone'. The boys seemed more selective, picking fewer characters, most often Brahanne and Rashid (from Somalia). Reasons given for choosing the characters were: 'because he (Rashid) had a cool name', and 'looked nice'.

The teacher thought that one reason for the popularity of these two characters, could be that there was a 'black' boy in ninth grade who was especially hero-worshiped by the younger boys. Nevertheless, there were also students who did not adopt a particular strategy for visiting the characters but 'just clicked on someone'. Only two students reported that they did not visit any of the characters, one of them going 'straight to the dialogues instead'. Some students complained that the dialogues were too long, though the majority thought them to be just about the right length.

Contradictions in user perceptions
Most students claimed that they understood the content and did not find any of the words 'too hard'. When asked if there were something they might want to ask the characters, student responses included 'nothing, it was all clear in the dialogues. Asking Brahanne how he 'did his hair' or 'how were things with him', were mentioned by the boys, while students from minority backgrounds were interested to know 'how they [the characters] react' and why Emma 'told that joke' (about Brahanne and Banana trees).

When asked if they had learned anything particular from any of the characters, general responses were 'don't remember' or learning 'nothing'.

Nevertheless there were students from a Swedish majority background who said that they now understood that it is possible to 'come from Sweden' even if 'you look like an immigrant' For example they argued that [Nasrin, Swedish-born, with parents from Iran] 'really comes from Sweden'. Students from a Swedish majority background reported gaining new perspectives for example on 'what people think about things' and understanding that there is more prejudice than they had thought. As a consequence they said they understood that there could be problems coming from a foreign background, and 'that everything isn't as great as you think' if you are seen as not belonging to Swedish majority. Students from a minority background had a slightly different response; for example they claimed a different understanding of the characters' experiences and the content of the website. They argued that the website was important because 'people get to know how you react' and that 'you should not judge someone from appearances, think about what you say'.

Misrepresentation of the Swedes
Some students expressed the view that parts of the website misrepresented and pathologized 'ordinary' Swedes, suggesting also that the characters were 'over sensitive'. A girl from a majority Swedish background remarked 'eve-

ryone, except Emma [the 'Swedish' character] had experienced something offensive related to their background'. She argued that this aspect was over emphasised; 'it is not that everyone from a foreign background has been bullied or abused'. Other comments were that 'everyone exaggerated, it was like everybody did not like them because they were foreigners', and 'that it was the Swedes who did the wrong things'. Characters were criticised for taking issues too seriously. One girl criticized the discussion associated with the 'Banana tree joke'; 'you shouldn't care so much if you know each other and it's just fun.' A similar comment occurred when related to the 'Café dialogue' (involving a discussion of terminology). The student suggested that the character 'was too sensitive – why can't they just be satisfied with being called 'black' or 'coloured', they care too much'.

Embodiment of the characters
A process of embodiment was evident in how students interacted with the characters and with the dialogues. They seemed to relate to them as persons and spontaneously referred to the characters as 'him' or 'she', 'how could he do like that', 'she was bullied' or 'he obviously didn't like my answer, I better change it' or (to a friend sitting next) 'be quiet, I am talking to him now' (Rashid). Students seemed to enter

into the experiences of characters, wanting to interact with the characters in the dialogues in order 'to understand how it feels'.

General reflections on using the website/ICT to learn more about racism

Most of the students claimed that the website was a good way of learning more about racism and multiculturalism. Students from a minority background especially liked the activities, grading them 'really good', while no students gave the lowest grades. The teacher was also positive about the website but claimed that the clear instructions given to the students had been important, especially for those students who had problems with keeping on task. This was also evident from the classrooms observations, where several students were seen to switch between different browser windows in order to visit other websites, when they thought they were unnoticed. According to the teacher, the efforts made by the students in working with the website reflected similar work patterns to other subjects and lessons.

The students were also asked if SWEDKID had changed their viewpoints. Nearly half said 'no', or 'no, don't think so' and 'it was a little bit exaggerated sometimes'. There were howe-ver positive responses to the antiracist perspective adopted by the website. One boy reported liking 'the meaning of the site', and one girl said 'I think the site is good because you learn how stupid racism is'. Additionally, students claimed that their awareness had been raised about the in-appropriateness of jokes. One boy stated that 'before I thought the world 'neger'[11] was normal to use, but that has changed a bit'. During the final session, when the outcomes of the student responses to the website (the loggins) were printed out and discussed, a girl from a minority background stood up and moved from the back to the front of the classroom while the 'Cafeteria dialogue' was being discussed. The teacher recalled this in the interview and interpreted this as a usually 'difficult' student being 'gripped by the message'.

Conclusions

The evaluation aimed at exploring how the website was experienced in the classroom and to what extent the website could challenge racism. The evaluation approach adopted for this study draws on an *interpretive* framework for program evaluation. The aim is to promote social reality as constructed in a process of interpretation, including that of the researcher. A *critical normative* framework was also incorporated, advocating greater justice and social change. Additio-

nally, the paper has drawn on frameworks concerning racism and ICT to provide an insight into to how schools may be using the website and its effectiveness in challenging racism more generally. The outcomes of the case evaluation are thus illuminative and can only claim to represent the case, not the world. Nevertheless the hope is to indicate general issues within ICT and concerning teaching about racism. The evaluation was carried out by an internal evaluator – as a participant observer in the classroom. Thus the conclusion will reflect on three issues in particular; the role of researcher, how the actual content of the website was perceived and the benefits of using ICT.

Reflections on the role of the researcher

The role of the researcher was important since 'the researcher is the instrument' particularly in a qualitative inquiry (Patton, 1990:14). There is a relationship between the researcher and what is studied, shaped by situational constraints (Denzin & Lincoln, 1994). A critical theory perspective encourages the process of research to include self-reflection, recognition of power relations and that a cultural taken-for-granted stance (Alvesson & Sköldberg, 2000). Additionally, Fine (1994) suggests that researchers should 'work the hyphen', that is 'probe how we

are in relation with the context we study and with our informants, understanding that we are all multiple in those relations' (Fine,1994:72).

The researcher in the school had a combination of four roles: co-teacher together with Anna, the teacher, participant observer, interviewer and evaluator. The role as co-teacher involved providing information and arranging and planning the lessons in cooperation with Anna, with both taking part in introducing and teaching the content. Furthermore, during the lessons an ongoing dialogue arose between the students and the researcher about their work with the website. The researcher answered students' questions and gave guidance when asked for, although consciously sought not to steer them in any particular direction. As a participant-observer the researcher could see how the students interacted with the website and as interviewer, gathered data by talking to the students during the lessons and afterwards, also with the teacher. Finally, as evaluator, the researcher looked for 'merits and shortcomings' (Stake, 1995:96) in using the website as a tool for working with antiracist issues. In the role as evaluator using qualitative approach, the researcher partly interpreted what was going on to 'emphasize the quality of activities and processes', and partly, to portray 'them in narrative descriptions and

interpretive assertion' (Stake, 1995:96). Considering the above, the researcher has not been a neutral observer, rather an evaluative critical analyst. Accordingly, what has to be considered also is the ethnicity and gender of the researcher which could be described as 'a typical Swedish woman', both parents Swedish-born, no connections to a National Minority, carrier of the attribute associated with the stereotyped picture of a Swede – blond and blue eyed etc. As such she came into the classroom as a representative of the majority group in Sweden. It could be assumed that this has at least two impacts. As a member of the dominant group, confronting racism, she challenged the conscious or unconscious sense of group power and group consensus, evident in questions from others about what 'is she doing, really, in this 'messy area?' Or as Essed puts it 'group power exists as long as the group stays together against the 'others'' (Essed 1991:41). Moreover, it can be assumed that the ethnicity of the researcher influences what students and teachers allow themselves to say or not.

Reflections on the use of SWEDKID in the classroom

Because the website focuses in a practical way on challenging racism in and out of school and aims to pioneer the use of the internet for teaching about 'values' (an example of what Street

(1998) recognize as an 'new communicative order') SWEDKID has been regarded very positively by policy makers. For example it has been short listed and awarded various prizes, and has been taken up by politicians, national agencies, private sector companies, the media, university, etc. Thus, policy makers seem to favour it, while students are clearly attracted to its design and web familiarity. But following the findings from the evaluation and from those of Cuban (2002) Hult et al (2004) and Riis (2000), there seems to be a gap between expectations and reality. There are also doubts about the extent to which SWEDKID is actually used in schools and how it reaches and supports its main target groups: teachers and students. One main question has been to what extent the website can influence the life of everyday classrooms? Looking at the interaction and student responses in the classroom, the website seems at least to have the potential to mediate awareness about racism, and therefore offering a starting point for further discussions.

A common criticism from the students is the absence of 'games', 'quiz', 'competitions', 'a chat' and sending mails to friends – something they have learned to expect from web activities. They were, however, generally positive about the graphic design of the website and the reading

level seems appropriate for the target age group. Corresponding to the work of (Riis, 2000) it has been evident from both the teacher interview and observations that working with ICT was surrounded by high expectations. Computers are something students look forward to work with. Consequently the computer made it easier for the students 'to start working' on the issues, and after the first session there were spontaneous comments like 'can't we work with SWEDKID again?' Overall, the use of the computer as medium in the classroom seemed to provide 'a free ride' into introducing antiracist issues to the students.

Many students seemed to empathise with the characters and the content in the dialogues, by e.g. talking and referring to them as real persons, but also in the responses written on the website, extracted from the web loggins. Nevertheless there was a failure by some to accept racism as a part of Swedish life and parts of the website were thought to misrepresent and pathologize 'ordinary' Swedes. According to Essed (1991) those who challenge or experience racism are likely to be described (by the majority group) as over sensitive and prone to exaggeration and experiences. Responses to the website also generated complaints about how unfair it is to show experiences of racism from only the minority

point of view and this constitutes 'bias against the whites'. This experience of victimisation is also identified by Essed as an expression of the 'conflict over definitions of the social world' (Essed, 1991:291). Thus students from majority ethnic backgrounds tended to be more critical of reported experiences of racism than students from minority backgrounds, who, instead, seemed to have been given by SWEDKID a public language for their own experiences. As we have seen, there were positive responses to the antiracist message of the website. Nevertheless, some students claimed to have learned very little, which suggests perhaps over-familiarity with the topic, or non-stimulating learning mileu and/or pedagogical uncertainty. There are, however, indications that the website has been successful in finding a language and content that are not too threatening and also that it provides a possibility for users to react and relate to, identify with, and to talk about complicated issues in an alternative way.

However there also seem to be blocks to using SWEDKID in the classroom. One is the computer itself. The teacher argued for example that even though she was confident, using computers was not a 'natural' part of everyday schoolwork for all teachers because there was a generation gap and also a lack of individual teachers' tech-

nological skills, interest and confidence. As other researchers have found, the use of ICT, in a particular in school, depends much on motivation and commitment of key individuals (Halloway & Valetine, 2003). Lack of access to computers and computers that actually work, was described by the teacher as something that 'cannot be taken for granted'. The risk of losing important lesson time because of technical failure is likely to lead teachers in other directions than ICT (see also Cuban, 2002).

Also, as shown in reports from National [Swedish] Agency for Education (2000; 2001; 2002) there was evidence of an uncertainty among teachers, not only in using the computer as a means to work with antiracism in the classroom, but in terms of content and where work with values is to be positioned in the curricula. Teachers tended to acknowledge that work with values is important, particularly as featured in policy documents. However, there needs, it seems, to be 'somebody' responsible for value issues and who this 'somebody' actually is, is often unclear. As Anna explained; 'nobody or everybody has the responsibility'. As also found by Norberg (1999), the work against racism often takes place on special days devoted to a particular theme, topics or project work. There was evidence also of a resistance to the word 'racism'.

As argued by the Swedish researchers Molina and De los Reyes (2002) there is a 'silent agreement of making racism into a non-question, which is in reality one of the largest hindrances for creating strategies against racism' (Molina & De los Reyes, 2002:317)

In summary the evaluation shows resistances as well as positive factors in the use of SWEDKID, which correspond with Postman's (1998) suggestion that for every advantage new technology offers, there is a corresponding disadvantage; 'technology giveth and technology taketh away (Postman 1998:2).

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Endnotes

1   The content of this article is a revision of a paper presented at the annual European Conference on Educational Research, Crete, 22nd –25th of Sept. 2004. (Hällgren, 2004a)

2   There is a recent a proposition (SOU 2004:50) about expanding the law against discrimination to also embrace students in school, the law it is planned to come into operation in January 2005.

3   In the Swedish context Intercultural Education is implied to be a process facilitating students from different cultural, ethnical backgrounds to interact with each other, share experiences and discussions in a multicultural classroom where the Swedish culture is not excluded, neither used as a norm. The perspective is described to encourage recognition of the individual as well as the cultural (see for example Lahdenperä, 2001, 1995). The intercultural perspective is, however, generally vague when it comes to explain the role of the teacher.

4   For a more detailed description of the Eurokid project, see: *EUROKID: An innovative pedagogical approach to developing intercultural and anti-racist education on the web.*', Pamela Carroll, Chris Gaine, Camilla Hällgren, Servando Pérez Domínguez, Joana Salazar Noguera, Melanie Stevens, Gaby Weiner. Intercultural Education (IE), Volume 14.3 (2003)

5   Stake (1995) further explains naturalistic generalisations as generalisation arriving through the process when the reader compares his or her own experiences and others (vicarious experiences) with the case.

6   'Casemaster platform' is developed by IML, and the technological tool supporting SWEDKID. It aids for example tracking of written responses and also in-depth evaluations of how users are working with the website. It thus facilitates the evaluation, for example, by identifying the parts of the website and characters that are most popular, the most common responses to questions etc.

7   Lena Hallengren the Minister for Pre-School Education, Youth Affairs and Adult Learning at Ministry of Education and Science, explained in an article the 1 of April 2004 that the National Agency for School development are now developing 'clear guidelines' for how principals, teachers and other responsible staff at school in a 'correct way' can act against violations of fundamental values of the school. (http://utbildning.regeringen.se/sb/d/1385/a/17029)

8   A website frequently used by young people in Sweden, mainly for communicating with each other. (http://www.lunarstorm.se)

9   The assignments are tasks available from another section of the website e.g. finding out more about religion, or different nationalities.

10   The forum is pre-structured by discussions on what has been said in the dialogues on the website.

11   The word is a Swedish derogative term meaning 'a black person' (Sawyer, 2002)
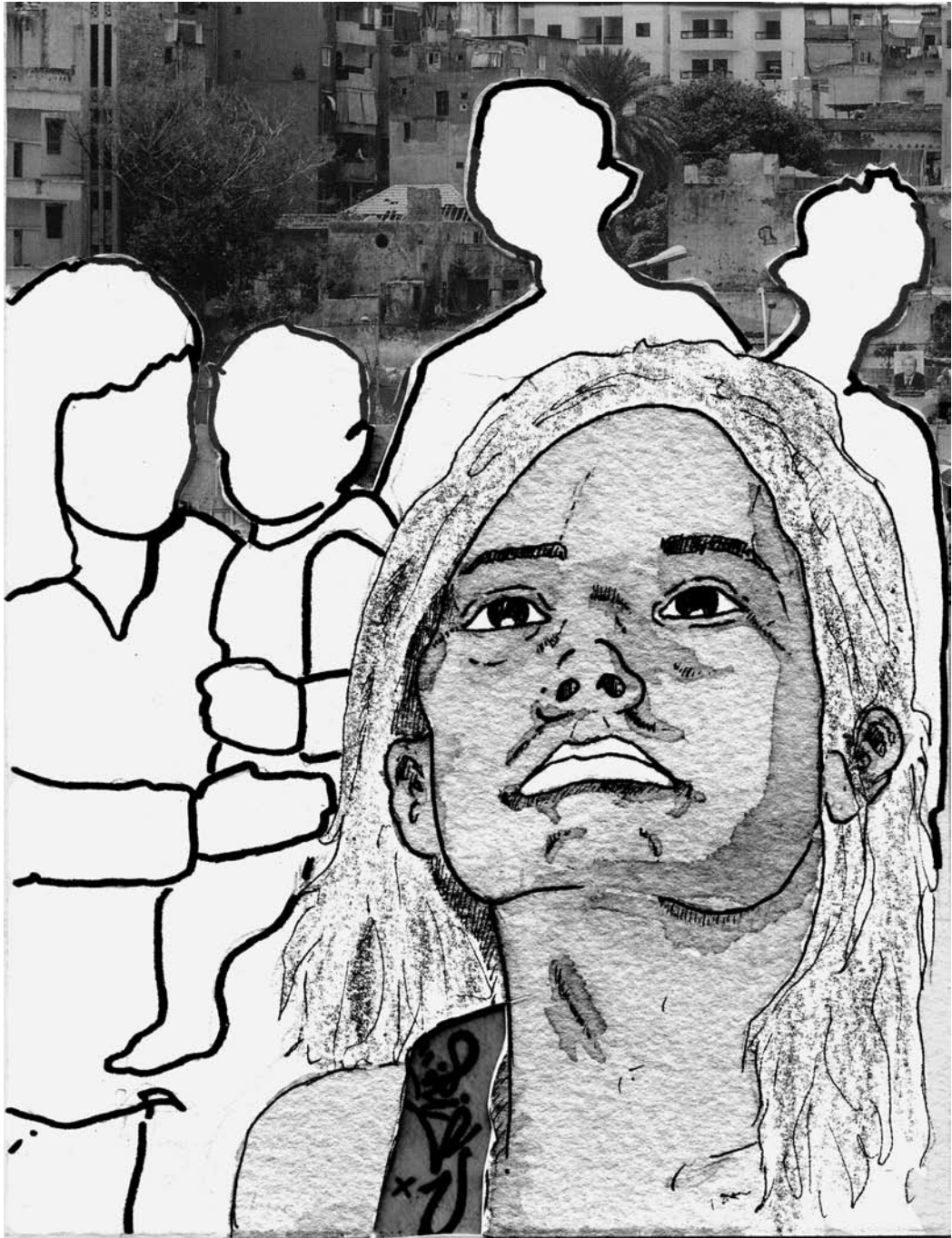
Professional Development for Social Justice: Rethinking the "End in Mind"

Brad W. Kose

Abstract

In the U.S., conceptualizations of K-12 teacher professional development seem to have shifted to a greater concern for equitable student learning outcomes. Beginning with this end in mind is an important step toward professional development that addresses educational injustices. However, if social justice is understood as a structural concept (Young, 1990), then professional development for social justice should broaden its current focus on equity to include a deeper understanding of the interconnections of power, privilege, difference, oppression, and justice both domestically and internationally. In this article, I narrow both professional development and social justice to focus on the improvement of teaching and learning. After summarizing Young's five faces of oppression, I explicate a tentative framework of the end goals professional development for social justice might strive toward in education. I argue that professional development for social justice should outline both the desired nature

of student learning as well as classroom level norms, practices, and relationships.

Professional Development for Social Justice: Rethinking the "End in Mind"

Locating injustice does not prove difficult. Domestically, people living in the U.S. face annual averages of over 300,000 attempted and completed rapes and sexual assaults, most of whom are women (U.S. Department of Justice, 2002), hate crimes that number in the thousands – crimes motivated by bias against the victim's race, religion, sexual orientation, ethnicity/national origin, or disability (U.S. Department of Justice, 2004), and a national poverty rate that has changed relatively little in the past four decades (recently up to 12.5%, The New York Times on the Web, August 27, 2004). It is also clear from a global perspective that social justice intersects with issues of wealth disparity, starvation, pollution, and sustainabi-

lity in international relations (Brown, Flavin, & French, 2001) and recently, the Olympics (e.g., www.fairolympics.org). Perhaps most discomforting are the documented links between foreign policy, war, terrorism, and the survival of the planet (Chomsky, 2003). Unfortunately, many other types of injustices remain, but I pause here and hope we reflect on each human life behind the various issues and accompanying sea of numbers.

In this article, I am interested in how the professional development of elementary and secondary educators may be used as a tool to help alleviate social injustices such as the ones briefly discussed above. I argue that understanding social justice as a structural concept (Young, 1990) is vital to conceptualizing what professional development for social justice means. However, rather than suggesting a comprehensive framework for the various components of professional development, I focus primarily on the vision that drives professional development for social justice. For conceptual reasons, I narrow this vision to the desired nature of both student learning and educational classrooms.

Social justice in the context of education
Regardless of whether the above social issues, among others, are dissipating, improving, or slowly changing, education has long been considered an answer to perceived national problems in the U.S. David Tyack and Larry Cuban (1995) argue, "For over a century and a half, Americans have translated their cultural anxieties and hopes into dramatic demands for educational reform" (p. 1). However, as these authors imply, motivations for reform were historically often unconcerned with issues of social justice. For example, the secular ideology behind the common schools movement in the mid-nineteenth century believed the purpose of education was to "make the United States quite literally God's country" (p. 16). Similarly, the landmark federal report, *A Nation at Risk: The Imperative for Educational Reform* (National Commission on Excellence in Education, 1983) that launched the Excellence Movement, was not rooted in concerns about social justice, but was more explicitly connected to enhancing the country's international competitiveness. This report nonetheless influenced a significant shift in public expectations and educational policy that has continued through President Clinton's Goals 2000: Educate America Act and President Bush's America 2000 (in 2001, the No Child Left Behind Act). This shift changed from focusing on educational processes (e.g., school funding, staffing) to predominantly looking at student performance outcomes (Adams & Kirst, 1999).

While the historical agendas behind this changing focus may be less than noble from a social justice perspective, it created an opportunity of greater attention to equitable student learning outcomes. For example, the well-known "achievement gap" (e.g., Education Week, 2004; Williams, 1996) looks at inequities in educational outcomes by disaggregating student data by gender, race, socioeconomic status, and other categories (in order to inform efforts to close the gap).

Parallel with this shift, the National Staff Development Council's revised *Standards for Staff Development* (2001) explicitly re-headline "Staff development that *improves the learning of all students*" (my emphasis). Its original standards (1995) only mention "all students" within a single bullet point and rather re-emphasize the (now replaced) phrase "Effective high school, middle level and elementary school staff development." Apart from the underlying motivation of this changed emphasis (unmentioned on its website), keeping *all* students at the forefront of professional learning efforts is an important step in social justice because 1) schools have historically underserved students who do not match their already existing assumptions and practices (Deschenes, Cuban, & Tyack, 2001), and 2) professional development is now widely

considered to be an important component in educational reform initiatives (Darling-Hammond & Sykes, 1999; National Center for Educational Statistics, 1996) and school improvement efforts to enhance teaching and learning (Elmore, 2002; Loucks-Horsley, Hewson, Love, & Stiles, 2003). Subsequently, *The National Commission on Teaching and America's Future* (1996) has argued the most important factor in impacting students' education is quality teaching. Certainly, evidence exists that teachers can positively affect student achievement (Darling Hammond, 2000a, 2000b; Haycock, 2001; Monk, 1994; Sykes, 1999).

But what is social justice? What are we striving toward? Is it enough for professional development to be predominantly focused on closing the achievement gap for all students? To answer these questions, I first draw on the work of Sharon Gewirtz and primarily Iris Young to better understand social justice. Then I explicate two central implications that seem essential to professional development that is truly for social justice. Within the final implication (professional development for social justice should be driven with a broader "end in mind"), I lay out a tentative framework of socially just learning and classrooms as a vision to guide professional development. Again, I do not pretend

to lay out a comprehensive theory of professional development for social justice (e.g., I do not discuss the design, delivery or evaluation of professional development in detail), but instead concentrate on its underlying purpose and content that should go beyond the incredibly important, yet limited, goal of equitable student learning outcomes.

On one hand, it is important to understand the naïveté and danger in blaming schools for broader inequalities and injustices that are beyond their control (Apple, 1996; Lipman, 1998). At the same time, schools in many ways appear to reify the language and perpetuate issues involving social class (Anyon, 1981; Apple, 1996; Bowles & Gintis, 1976; Kozol, 1991), race/ethnicity (Delpit, 1996; Gay, 2000; Ladson-Billings, 1994), gender (Shakeshaft, 1993), sexual orientation (Rensenbrink, 1996; Sears, 1993), disability (Deschenes et al., 2001; Jorgensen, 1998; Kennedy & Fisher, 2001; Stainback & Stainback, 1996) or a combination of these injustices (Bigelow, Christensen, Karp, Miner, & Peterson, 1994; Bigelow, Harvey, Karp, & Miller, 2001; Capper, 1993; Deschenes et al., 2001; Lipman, 1998; Sleeter & Grant, 1994b). Keeping those cautions in mind, educators should nevertheless consider education's role in addressing social injustices, and for our

purposes here, the role of professional development for social justice.

Limiting professional development
I narrow the scope of professional development for social justice down to the improvement of teaching and learning at the classroom level despite its limitations. Certainly, there are other important forms of professional development not directly related to instructional improvement (e.g., serving professional organizations) just as there are fundamental ways to address social injustices beyond the classroom level (e.g., adequate funding). Within these constraints, I argue below that professional development for social justice should start with a broad understanding of the nature of student learning it hopes to indirectly or directly influence. In a subsequent section, I contend that focusing solely on student learning to drive professional development, even when described holistically and truly intended for all students, is limited when considered from a social justice lens, and must include an understanding of the classroom community that transcends individual learning goals. I assume that better teaching or pedagogy is the primary mechanism for improving the classroom community.

Others have argued or implied that professional development should "begin with an end in mind" and be directed first and foremost toward the improvement of teaching and learning (Bredeson, 2003; Lindstrom & Speck, 2004; National Staff Development Council, 2001; Sparks & Hirsh, 1997). While the design, delivery, and processes of professional development cannot be relegated to a rational-technical, backward mapping exercise (e.g., professional *development* is not synonymous with *linear*), I agree that it should start with a broad vision of its intended outcomes (broadly defined). From a professional development perspective, explicating what we want students to learn not only provides a language for educators at the classroom level to focus their creative energies, it provides tangible goals with which to align school systems that support professional learning including the curriculum, assessments, professional community, and leadership (Lindstrom & Speck, 2004). Yet it is not uncommon to find theories or frameworks for professional development which leave student learning vaguely defined, almost as if the design, delivery, content, and evaluation of professional development are neutral processes that can be applied regardless of the nature of student learning. From a social justice perspective, as we will see, the nature of student learning matters, and thus an explicit understan-

ding of student learning concerns professional development for social justice.

Similarly, making social justice more transparent from the classroom perspective has several advantages to those aligned with this agenda. One issue that I notice from my perusal of educational literature and professional conversations is that social justice as a concept is 1) increasingly popular, 2) often ill-defined, and 3) laden with so many different meanings that people claiming to be for social justice may in fact have contradictory orientations. As but one example, I recently interviewed principals who were identified by others to promote classrooms that affirm diversity and social justice in the classroom. While one principal articulated a vision of students taking pride in their cultural heritage and learning about the broader contexts of power, privilege and racism, another principal responded that students were learning to understand and address social issues when they were exposed to apple orchards because they did not have those types of opportunities in their community. The sad irony in the latter case is that while well-intentioned and an important part of these students' learning, the way in which this principal framed social justice may perpetuate another form of injustice (oppression as cultural imperialism), as we will see.

My point is that articulating social justice to the level of classrooms and learning would provide a meaningful language to understand and assess to what degree classrooms are socially just, which in turn provides focus points for improving them and for our purposes here, understanding targets for professional development. Additionally, providing a more transparent view of socially just student learning aligns this agenda with the movement toward equitable student achievement, thus bolstering leverage for social justice.

Before I explicate a framework for thinking about social justice at the classroom level however, two qualifications should be kept in mind. First, while alignment with movements concerned with equitable student learning outcomes and more clear goals for professional development might provide leverage and guidance, educators should have professional development opportunities to critically examine the content, processes, and purposes of education, that is "knowledge *of* practice" (Cochran-Smith & Little, 2001), including the below framework. Second, this framework must be adapted and revised according to different educational and historical contexts. With these qualifications, it still seems worthwhile to articulate a broad framework for social justice at the level of teaching and learning, the core practice of schooling. In the least, such a framework could be a starting point for conceptualizing professional development for social justice. To gain a more in-depth understanding of social justice, I describe the work of Sharon Gewirtz and Iris Young in their own language to the extent possible. Later, I draw out implications for education and professional development.

Justice as a distributional, relational, and structural concept

Sharon Gewirtz (1998) recently examined a variety of approaches to social justice in education policy, which she differentiated into two interrelated dimensions: distributional justice (e.g., Rawls, 1972) and relational justice (e.g., Fraser, 1997). According to Gewirtz, distributional justice "refers to the principals by which goods are distributed in society. This is the conventional conception of social justice, classically defined by Rawls (1972) …" (p. 470). She acknowledges that a just society cannot exist without a fair distribution of material and nonmaterial goods, but also agrees with Young (1990) that to define social justice as synonymous with distributional justice is too limiting. Gewirtz expands upon this argument and begins to define relational justice:

For Rawls, justice is about the distribution of rights, duties and the social and economic goods accruing from social cooperation. It does not appear to be about the form of social cooperation itself. Relational conceptions of social justice do, however, focus on the form of social cooperation. These conceptions refer to the political/relational system within which the distribution of social and economic goods, rights and responsibilities takes place… It is about the nature and ordering of social relations, the formal and informal rules which govern how members of society treat each other both on a macro level and at a micro interpersonal level. (p. 471, Gewirtz's emphasis)

The author's main point was not to provide a definitive conceptualization of justice in education, but to advocate for Iris Young's (1990) approach to social justice that held up to scholarly criticism and she found more comprehensive than than other approaches. I also found Young's work particularly relevant to understanding social justice and below summarize some of her essential points concerning justice and injustice. I then draw on this work and specify what I consider to be two important social justice implications for professional development, implications to which most

professional development literature is in the least, deficient.

Gewirtz (1998) explains, "Young's approach to justice rests on a conceptualization of *injustice* based on a detailed explication of 'five faces of oppression': exploitation, marginalization, powerlessness, cultural imperialism, and violence" (p. 469–470, emphasis in original) and "represents a rich and holistic fusion of the distributional and relational dimensions of social justice" (p. 477). In Young's words (1990), "Justice should refer not only to distribution, but also to the institutional conditions necessary for the development and exercise of individual capacities and collective communication and cooperation. Under this conception of justice, injustice refers primarily to two forms of disabling constraints, oppression and domination" (p. 40). She acknowledges that oppression is often associated with tyrannical rule, but finds the language of oppression necessary to understand, study and evaluate social injustices. Oppression means the "systematic institutional processes which prevent some people from learning and using satisfying and expansive skills in socially recognized settings, or institutionalized social processes which inhibit people's ability to play and communicate where others can listen" (p. 38). Domination, the opposite

of which is a thorough and political democracy, refers to "institutional conditions which inhibit or prevent people from participating in determining their actions or the conditions of their actions" (p. 38).

Young is careful to point out that oppression must include, but go beyond the tyrannical intentions of a few individual's decisions, actions, or policies and be understood as a *structural concept*. Understood in this way, deep injustices result from everyday systemic and institutional processes, structures, rules and policies that are created, sustained, and unquestioned by well-meaning people. More broadly, Young notes that, "We cannot eliminate this structural oppression by getting rid of the rulers or making new laws, because oppressions are systemically reproduced in economic, political, and cultural institutions" (p. 41). Oppression occurs to *social groups* that are defined by a shared identity (e.g., gender, race, ethnicity, class, sexual orientation) as opposed to a shared attribute (e.g., genitals, skin color, age, the street one lives on), and exist only in relation to another group. Oppressed groups do not necessarily have an oppressing group, but they all have a corresponding privileged group. To give a quick and common example in the U.S., Black students are often systematically placed disproportionately into special education or tracked into less demanding courses. White students are often the beneficiaries of this practice because they are better prepared for postsecondary academic pursuits. Now we look at each of the faces of oppression in more detail and before drawing out the implications for professional development.

Exploitation
Young (1990) contends that exploitation as oppression occurs when the results of labor from one social group are transferred to benefit another group. Exploitation is not just understood in terms of great wealth disparities, but how structural relations produce and reinforce power inequalities between social groups, which Young extends beyond class to include the exploitation based on gender or race. Young correctly argues that exploitation cannot be overcome merely through redistributing wealth, but "requires reorganization of institutions and practices, of decision making, alteration of the division of labor, and similar measures of institutional, structural, and cultural change" (p. 53).

Marginalization
Marginalization occurs when oppressed social groups are not needed or used by the system of

labor. As with exploitation, oppression as marginalization cannot only be understood as a distributional injustice, as severe as the material deprivation may be. In capitalist societies, people who come to depend on a welfare system may be deprived of the rights and freedoms that others have and additionally blocked from "the opportunity to exercise capacities in socially and recognized ways (p. 54)." Even in cases where people at the margins are afforded comfortable material well-being, marginalization may still manifest itself in boredom, uselessness, lack of self-respect, and denial of participation in social activities according to Young.

Powerlessness
The powerless are oppressed to the extent workplace and outside social practices inhibit the development of professional capacity, constrain creativity or decision making power in their work, and subjugate them to disrespectful treatment because of their nonprofessional status. Often, they must take orders and seldom have the right or opportunity to give them.

Cultural imperialism
Having less to do with the social division of labor, cultural imperialism manifests itself when a particular social group experiences its culture to be rendered invisible and at the same time stereotyped and labeled as Other by the dominant group (which establishes its culture to be universal and normal). Young suggests that the oppressed group may internalize the dominant group's portrayal of cultural inferiority and devalued status but may also experience a "double consciousness" described by W.E.B. DuBois and refuse to accept the stereotyped image of oneself. This face of oppression is the one area in which Gewirtz (1998) employs the critique of Fraser (1997) and suggests that a theory of difference needs further differentiation. Gewirtz argues that, "It is vital that we do not uncritically affirm and celebrate *all* expressions of difference. This is not simply because some expressions of difference are antagonistic to a politics of redistribution, but because some are oppressive in themselves (e.g., neo-Nazism)" (p. 480, Gewirtz's emphasis). She explains that this critique does not undermine Young's conceptualization of justice, but that we need to consider which aspects of difference need to be abolished, affirmed or universalized.

Violence
Violence as oppression occurs when social groups experience systematic violence. This may include unprovoked property damage, physical attack, harassment, intimidation, or humiliation simply because of membership to

a particular group. According to Young, although many theories of justice remain silent about violence, it is related to social injustice, not only as an individual immoral act, but because of its systemic character that is directed toward members of particular groups. Violence is a social practice because everyone knows that it happens and expects it to happen again; violence results from the institutionalized cultural and social practices that encourage, tolerate, or uphold its existence.

In the following sections, I suggest two broad implications that the above understanding of justice and injustice implies for professional development's end in mind: the importance of connecting social injustice within and outside of school and beginning with a broader end in mind.

Professional development for social justice reflects upon how societal injustices are connected to school level injustices

At the most general level, professional development for social justice would create opportunities for educators to recognize, understand and reflect upon the structural dimensions of injustices in broader society (e.g., the five faces of oppression) and identify and address their dynamic presence in the classroom. Schools

do not exist in political, social, or historical vacuums. Besides the broader context of institutional structures and societal practices that shape the attitudes, assumptions, beliefs, backgrounds, and experiences of principals, teachers, paraprofessionals, and students, schools have a history of blaming students and their backgrounds for not fitting the system rather than vice versa (Deschenes et al., 2001). Therefore, social injustices may be perpetuated not only by overtly racist, sexist, or homophobic educators, but also by less apparent institutionalized forms of such discrimination. For instance, in the U.S., elementary schools are predominantly taught by white females who teach an increasing population of students of color. It is not uncommon for white teachers (and thus schools) to unconsciously locate the behavioral problems of "other people's children" within the students themselves rather than on pedagogy that conflicts with students' cultural background (Delpit, 1996). Besides the achievement gap, other indicators point to institutionalized forms of racism in education. Students of color are disadvantaged in the following categories: drop-out rates (National Center for Education Statistics, 2003), high school graduation rate, completion of some college, and attainment of bachelor's degree (National Center for Education Statistics, 2002).

Once more, I do not assume that educators have the capacity or responsibility to significantly alter the inertia of institutional and societal injustice, but there seem to be at least four areas that professional development for social justice can help educators address oppression in the classroom. First, educators should have opportunities to explore how aspects of their own identities have been oppressed or privileged and how their beliefs and assumptions may lead to actions that perpetuate the societal status quo in the classroom. Pauline Lipman (1998) found in her case study of school restructuring for two junior high schools, that the intended impact of decentralization, collaboration, and smaller, collective settings were significantly mitigated by educators' ideologies and beliefs about race, class, individualism, and society.

> *In the restructuring project and in the voices of many teachers and administrators, African American students were the problem, not racism or inequality, and remedies were directed to them. It is hardly surprising that much of the work teachers did focused on fixing, motivating, and controlling these students, who were described as deficient, unmotivated, dangerous, and deviant. This orientation resonated with the national discourse about African-Americans as "problem people," di-recting attention away from the institutional norms and practices of schools and social structures of inequality to focus on student characteristics.* (p. 291)

Lipman (1998) later reveals three exemplary teachers she found to be successful with African American students, but laments that the standards for exemplary teaching set by various educational organizations often do not include making cultural connections with students despite literature to the contrary. To borrow another poignant quote that falls in line with the theme of this article:

> *It is even less likely that a criterion of excellence will be teachers' stance in opposition to unequal relations of power and privilege in school. However, emergent literature on exemplary teachers of students of color has helped to broaden notions of pedagogical excellence by highlighting committed, culturally responsive teachers who actively work against the subordination of marginalized students and for social justice. Here I argue that the leadership of these teachers must be a part of transforming schools in the interest of all children"* (p. 246, emphasis in original)

The above quotes, and particularly the latter one, are good segues into my second point that educators should have professional learning opportunities to understand how *institutionalized practices* in the classroom and in schools perpetuate societal and classroom injustices, often by well-meaning people. For example, educators should re-examine assumptions about pull-out models to serve students with disabilities (and often students of color) as such practice is often to their disadvantage (Capper, Frattura, & Keyes, 2000; Jorgensen, 1998) and may leave students who have fewer needs with the more qualified classroom teacher (Capper, forthcoming).

Third, educators should have professional learning opportunities to assess and address how *student* attitudes or assumptions may perpetuate forms of marginalization, powerlessness or cultural imperialism in the classroom. Students, like educators, bring to school their own biases, pre-conceptions, and beliefs about people, power, and difference.

Finally, educators should not only work toward creating conditions free from oppression during school, they should also help develop the student capacities necessary to address social justices outside of school and in their future adult lives. To give a relatively obvious example in the context of this article, one can imagine a high achieving, responsible, respectful, student of "character" who later becomes a *well-meaning* business executive that benefits from the labor of low-paid workers (likely without health benefits) and from the existing, unquestioned policies that give such workers little chance of improving their skills or being promoted (i.e., he benefits from their exploitation and powerlessness[1] even though he may consider himself to be practicing sound ethical behavior). I emphasize well-meaning because such practice is commonly accepted as legitimate by many people in the U.S. That is a more direct example. One can imagine many less obvious interrelations (e.g., more wealthy citizens benefit from private health care, private schools, ownership of automobiles, while others are disadvantaged by a lack of public services). If professional development is truly interested in social justice, then it should target student learning that recognizes, understands, and takes action toward individual and institutional forms of oppression. I later connect this argument to international perspectives as well.

Professional development for social justice begins with a broader end in mind
As previously mentioned, many have argued that professional development should be driven by

desired student learning outcomes. However, professional development for social justice starts with a much broader vision in mind: a more just, democratic society. In this section, I argue that this goal means a more comprehensive orientation toward student learning, but also implies a vision of the classroom community that transcends individual learning experiences and outcomes. To make my argument more concrete, below I contend that professional development for social justice should include notions of students' diversity and socio-political development and that classrooms should consider components of achievement rigor, an ethic of care, equitable inclusion, differentiated pedagogy, and democratic, socio-political processes. Once again, this guiding framework is not definitive but a starting point for discussion.

Expanding notions of student learning. Although there appears to be little theoretical disagreement that professional development should work toward improving the achievement of all students (defined broadly to include learning for understanding and I would include nonacademic achievement in areas such as physical, art, music), from a social justice perspective it is important to keep explicit that all students means all students, regardless of background, experiences, or abilities (Capper et al., 2000).

However, given the above understanding of justice, professional development for social justice should go beyond an effort to improve student achievement to include at least two different, but interconnected areas: what I term diversity development and socio-political development. Certainly, other dimensions of human development such as affective, moral, intellectual, aesthetic, etc. development are relevant, but beyond the scope of this discussion.

Diversity development. This development is important for social justice because most of the oppressive barriers to social justice involve the politics of difference (Young, 1990). As people increase in their level of awareness, understanding of, and personal development in diversity, they have greater capacity to address diversity issues related to social justice (Adams, Bell, & Griffin, 1997). This type of development includes cultural diversity (Gay, 2000; Ladson-Billings, 1995a, 1995b) but should include various aspects to identity such as ability, sexual orientation, gender, socioeconomic background (Adams et al., 1997) and religion (Schweber & Irwin, 2003). I suggest that this type of development, which is aligned with different approaches to multicultural education (Sleeter & Grant, 1994b), should include both a growing appreciation for one's own background along with

an increasingly ability to affirm others' backgrounds which are different.

Socio-political development. I re-emphasize that it is not enough for educators to understand issues of inequity, inequality, diversity, and oppression, but that a more just society also depends upon students who develop their socio-political skills in recognizing and addressing these social injustices inside and outside of schooling contexts (for related arguments see Bigelow et al., 1994; Bigelow et al., 2001; Gay, 2000; Ladson-Billings, 1995a, 1995b). Correspondingly on its website, *The National Association for Multicultural Education* (2003) suggests that multicultural education strives toward

> *the highhest levels of academic achievement of all students. It helps students develop a positive self-concept by providing knowledge about the histories, cultures, and contributions of diverse groups. It prepares all students to work actively toward structural equality in organizations and institutions by providing the knowledge, dispositions, and skills for the redistribution of power and income among diverse groups. Thus, school curriculum must directly address the issues of racism, sexism, classism, linguicism, ablism, ageism, heterosexism, religious intolerance, and xenophobia.*

Finally, as I mentioned earlier, the opposite of a society characterized by domination is one where citizens fully participate in democratic processes (Young, 1990). Students need to learn more than the principles and functions of a democratic government, they should understand how political decisions are forces for social justice or injustice, how to engage in this political process, and by implication, address *institutional* forms of injustice. As Moyer and others point out (2001), social movements that have helped shape a more socially just democracy require political and collective activism, leadership, organization and skill; democracies do not "naturally" become more socially just. At the same time, democratic education need not be biased. Glickman and Alridge (2001) suggest, "The role of the teacher or school is not to indoctrinate students into a certain perspective or way to think about social issues, but instead to give students the skills to analyze and think for oneself" (p. 19).

International implications. Educating *students* to address social injustices beyond the classroom is important from an international perspective as well. Certainly, social justice intersects with multiple geo-political struggles and relationships. Furman & Gruenewald (2004), for instance, have convincingly argued that the

Earth's sustainability is but one pressing global issue inextricably tied to social justice, domination, and oppression. But let us briefly consider the primary international issue according to many U.S. politicians: terrorism.

From a social justice lens, terrorism should be carefully examined because it is linked in the least to (extreme) violence as oppression. I do not have the space here to examine the assumptions or intricacies of terrorism. However, if authors such as Chomsky (2003) are correct that terrorism must be understood within the interconnected contexts of international power, ideology, and foreign policy, then a democratic state requires citizens with a healthy skepticism of simple foreign policy "solutions" that may in fact create new forms of terrorism and thus, social injustice. As two political scientists quoted by Chomsky argue in regard to terrorism: "'Delicate political and social problems cannot be bombed or 'missled' out of existence… dropping bombs and firing missiles… only spreads these festering problems. Violence can be likened to a virus; the more you bombard it, the more it spreads'" (p. 211). In this sense, citizens should be aware of how national identity and foreign policy (i.e., structural dimensions and practices) influence, subvert, enable, or encourage various forms of terrorism and violence.

Certainly, professional development for social justice would be one way to help develop socially responsible citizens who are reflective and knowledgeable about its nature and willing to engage its complexity.

Social justice from the level of classrooms. Second, beginning with the end in mind should focus not only on what we want students to know, but what social justice implies for classroom communities. This argument stems from Young's (1990) notion that justice cannot be limited to distributive justice but must consider: "The institutional conditions necessary for the development and exercise of individual capacities and collective communication and cooperation," (p. 40). Focusing solely on student learning, even if described in perfect detail, is too narrow of focus to drive professional development for social justice. We can better understand the *structural* conditions, social practices, norms and relationships that move to free or oppress students by looking at the dynamics of the classroom. Of course, student learning may take place outside the classroom (e.g., community service learning), but I use the classroom to highlight (artificial) differences in teaching and learning for conceptual purposes. I suggest at least five necessary components for socially just classrooms: achievement rigor, an

ethic of care, equitable inclusion, differentiated pedagogy, and ultimately a socio-reconstructionist orientation to teaching and learning. I have described these in more detail elsewhere (Kose, 2004) and summarize them below.

The most straight-forward component (achievement rigor) means high academic expectations for all students regardless of background or ability and a non-deficit learning environment that holds all students accountable to high standards for student achievement.

The work of Shapiro & Stefkovich (2001) and Starratt (1994) on ethical leadership in education provides a complimentary perspective on social justice. They suggest that an ethic of justice and an ethic of critique should be balanced with an ethic of care. An ethic of care challenges a dominant, often patriarchal emphasis on an ethic of justice and instead turns to "concepts such as loyalty, trust and empowerment" (Shapiro & Stefkovich, 2001, p. 16) in moral decision making (i.e., relational justice). An ethic of care places students as central in school (e.g., as opposed to subject matter) and is concerned with social responsibility and addressing relevant injustices.

Similarly, equitable inclusion means educators see students as individuals and attend to their various needs rather than treating them all the same (i.e., the teacher recognizes *differences*). All students feel that they belong and their backgrounds, abilities, identities, languages, and experiences are represented and affirmed in the classroom (i.e., students are not marginalized, disempowered, or subject to cultural imperialism). Additionally, these classrooms use the metaphor of a service delivery system to support all struggling students *in the classroom* (with some exceptions) rather than a medical, pull-out model to fix problems perceived to be located in the students (Capper et al., 2000). While this type of classroom benefits all students when done well, inclusion is not effective if teachers have not been prepared to teach in this environment (Jorgensen, 1998). Again emphasizing social justice as a structural concept, equitable inclusion also requires professional development that looks beyond the classroom to see the various institutional, curricular, assessment or cultural barriers and biases that hinder student learning (e.g., students missing high quality teaching and learning opportunities because of three pullout programs).

Differentiated pedagogy means teaching and learning environments that are structured in a way to meet the various levels, skills, and abilities of all students, particularly in the academic

areas. In other words, socially just classrooms not only have high expectations and rigorous curricula for all students, they also have teachers capable of differentiating instruction (e.g., Tomlinson, 1999) so that students can be successful. Differentiated pedagogy also means that management systems take into account how children from dissimilar cultural backgrounds respond differently to management styles (Delpit, 1996). And as appropriate, students should increasingly take initiative and pursue learning interests.

Finally, students not only feel included in socially just classrooms, they develop socio-political skills and dispositions that allow them to understand and take action in the ways in which society enables institutionalized forms of discrimination, racism, sexism, homophobia, etc. Classrooms should be places where students intentionally work toward visions of what is possible rather than as places that fit them to what is and will likely be. They should provide democratic contexts for students to exercise decision-making and build the skills and knowledge necessary to participate in a democracy. This viewpoint is perhaps best captured by a social-reconstructionist perspective of schooling (Sleeter & Grant, 1994a; Zeichner & Liston, 1990; Zeichner & Liston, 1996) and can

be facilitated within the context of high achievement. For example, in U.S. K-12 education, there are examples of teaching mathematics for social justice and equity (Gutstein, 2003; Secada, Fennema, & Adajian, 1995), science for social justice (Barton, 2003), and various forms of teaching for social justice (Ayers, Hunt, & Quinn, 1998).

To be clear, my underlying purpose explicating socially just learning and classrooms is not to make a case for sudden, radical political structural change, but to provide a framework to start the conversation for what should guide professional learning aimed toward social justice.

Conclusion

It is essential to appreciate the complexity of what the above sort of vision of teaching and learning implies for professional development leaders. Even if we could agree on the ideal nature of student learning and classrooms for social justice, it is another thing to design professional development capable of fostering exemplary teaching. As Adams and others (1997) have pointed out, individual diversity development alone (i.e., for educators) is a very complicated and evolving process fraught with resistance. Educational leaders designing professional development need to take into consi-

deration their own identity development, other educator's levels of development, and additionally the complexities involved in teaching students about social justice (not to mention the complexities of teaching students in general). As schools develop more sophisticated and critical approaches to cultural curriculum reform as described by Banks (1997), the associated staff development also necessitates more complex and ongoing forms of professional development (Redman, 2003).

Additionally, educational leaders should take into account how professional development itself may perpetuate injustices when considered through the eyes of teachers' professional autonomy (Smith, 1995). Again, even those who wish to utilize the framework described in this article should consider professional development concerns not only "knowledge for practice" or "knowledge in practice", but also "knowledge of practice" (Cochran-Smith & Little, 2001).

Although beyond the scope of this paper, it is worth briefly mentioning that educational leaders should understand the additional complexity of professional development in schools. The work of Newmann, King and Youngs (2000) demonstrates that professional development must be understood in the context of school

capacity (e.g., leadership, professional community, curriculum alignment, etc.). Similarly, it is severely limiting to assess the effectiveness of professional development for social justice solely in terms of student learning (or even classrooms). Professional development should be evaluated on multiple levels such as changes in organizational support, changes in educator's thinking and disposition, and changes in educators' practice (Guskey, 2000).

In this article, I have attempted to make explicit a broad understanding and vision of professional development for social justice. I believe that we are not only morally obligated to engage in further relevant dialogue and discussion; I believe that professional development plays a role in the collective, democratic struggle for social justice that cannot be ignored.

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Footnotes

[1] Certainly the oppressed are capable of fighting injustices; they should not be viewed as victims to the system even though it influences their (and everyone's) lives.

Is there more than just symbolic statements?

– Gender Equality as part of Swedish State Educational Politics

Charlotta Edström

Abstract

Sweden is, in terms of gender equality, a country with an international reputation as a progressive country. This paper reports on an analysis of gender equality as part of Swedish state educational politics with a special focus on early years' education. The first part of the paper is an introduction while the second part concentrates on the documentary analysis itself with the focal point being the period 1994–2004. The Swedish version of gender equality, jämställdhet, is visible in policy statements in different documents. Some statements are in line with more feminist interpretations while the formulations in the legally binding documents tend to be more open-ended. Concrete state measures aimed at achieving gender equality are generally more limited. Two stable foci are: getting more male staff into early years' education and more girls into science and engineering. The mid 1990s onwards saw an increased emphasis on early years' education and on gender equality as a pedagogical question, an interdisciplinary field of knowledge and part of values education with concrete measures being taken. To conclude, the present situation seems rather positive even though there is no guarantee that similar measures will be taken in the future.

Introduction

The aim of this paper is to explore and analyse gender equality in Swedish education politics for early years' education (for children between one and seven years of age) as part of the wider education system and provide an illustration of main themes and trends. Gender equality is an important part of social justice and an issue that needs to be addressed in education (Lynch and Lodge, 2002). During recent years the importance of life-long learning and an increased emphasis on the early years have received international attention. In Sweden pre-school was, following successive reforms, officially integrated into the education system during the second

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half of the 1990s. Generally, there are still few studies that concentrate on early years' education and even fewer that focus on gender equality for children of these ages. Therefore, the intention in this study, which builds on analysis of official state documents and concentrates on the period 1994–2004, is to fill this knowledge gap. In Sweden there is, at least rhetorically, a strong emphasis on gender equality in state policy-making. Thus, an interest in the analysis is to explore differences regarding state emphasis on gender equality in different documents and concrete measures to achieve gender equality. The paper contains historical comparisons from the end of the 1960s onwards to illuminate the present situation and provide a picture of the degree of stability and change in the policies over time. The main attention is on pre-school but comparisons are made with compulsory school throughout the whole paper.

The first part of this article provides an introduction to methods of analysis, theoretical framework and background to Swedish gender equality politics. The second concentrates on the analysis itself – on identifying older and newer gender equality policy themes for pre-school compared to the compulsory school. The analysis begins with a historical illumination and thereafter presents the developments in

the mid 1990s with gender equality as a pedagogical question. Subsequently, there is a focus at the end of the 1990s and on the integration of pre-school into mainstream education and the introduction of the pre-school curriculum and new forms of governance. Following that, gender equality in the new millennium – especially the new teacher education and the establishment of a gender equality delegation for pre-school – is explored. The main themes and trends are generally overlapping over time but the intention has been to depict developments in a roughly chronological order. The third and concluding part of the paper contains a discussion of the findings.

Methods and Theoretical Framework

Gender theory and critical feminist policy analysis constitute theoretical frameworks for the analysis. Drawing on the work of the Australian political scientist Carol Lee Bacchi, the state here is seen as an actor in decisions about what is problematic (or not) and what measures should be taken (Bacchi, 1999). Moreover, the state is understood as a multifaceted dynamic site of struggle between competing interests rather than as a monolith. Policies do not emerge in a vacuum but are connected to historical, social and political developments (in this

case, from the respective countries' education systems) and to the wider societal sex-coded context (Cf. Codd, 1995). Thus, policy documents are understood as products of political processes that include controversies as well as compromises and the aim is to 'read' these documents as illustrations of their time.

Policy statements in speech and documents have traditionally been interpreted as expressions of ideological intention. However, it has been argued that it is idealistic to interpret all statements as such (Ibid). The American educational researcher Catherine Marshall depicts language in speech and documents as the "power tool of politics" (Marshall, 1997:20). My interpretation of the selected documentation for this study is that different statements and discussions together frame gender equality discourses and, by implication, also indicate what Marshall refers to as "areas of silence" – e.g. what is not seen as problematic (Marshall, 1997:23). It is easy to be trapped by euphemistic or vague policy formulations. Therefore, it is important to make a distinction between state emphases expressed in policy statements in different documents and the emphasis when it comes to concrete measures. The terms "symbolic" and "material" have been helpful concepts in this part of the analysis (Marshall, 1997; Mazur,

1996). 'Symbolic' is a term applied to policies with no additional measures taken to put them into effect whereas 'material' policies involve concrete measures to bring about change (Mazur, 1996).

The concept 'gender' is used, instead of sex, in gender theory as a means of emphasising that what is perceived as female and male is mainly socially and culturally constructed. They are thus relational categories (Thurén, 2003). A feminist starting point is that there is a gender order where women are generally subordinated and men constitute the norm. Also that this is an unjust situation that needs to be changed (Gemzöe, 2002). Power is a key term. While this article mainly concentrates on gender, it is also important to acknowledge connections between gender, class and ethnicity as matrices of power (Marshall, 1997). A special interest has been to what extent the state discourses accord with the above described feminist interpretations. Thus, article focuses on three questions

1. How are gender equality goals, problems and solutions depicted in state discourses?
2. To what extent are different gender equality state discourses matched by concrete measures?

3. To what extent do gender equality state discourses accord with feminist interpretations?

The documentary analysis began with in-depth reading of the selected documentation. This was followed by summarisation, categorisation[1] and comparisons of documents from different periods to identify discourses and concrete measures aimed at promoting gender equality. The period from the end of the 1960s to 1994 is exemplified with analysis of 'key documents'[2] of the period. Although the selection of documents for the period 1994–2004 is extensive it does not include all the available documentation and the intention is not to cover everything but to provide an illustration of main developments. The selection process has mainly been based on three criteria; that the documents are authoritative, reflect long-term government positions and, in some instances, are legally binding[3]. The following types of documents have been used for the analysis: preparatory state investigations, government bills and communications, parliament committee reports, parliament communication, national curricula and legislation. Additionally, a number of documents issued by the Ministry of Education, National Agency of Education or National Agency for School Improvement are also included (A table

of the documents scrutinised can be found in the appendix).

Swedish Gender Equality Politics

Sweden has been characterised as a strong social-democratic welfare state where citizens have access to extensive individual social provisions, generous benefit levels and egalitarian financial distribution (Esping-Andersen, 1990; Esping-Andersen et al., 2002; Sainsbury, 1999). Social class has historically been seen as the dominant line of conflict (Eduards, 2002). Sweden also has an international reputation as advanced regarding gender equality. These characteristics are, to some extent, shared with the other Nordic countries (Bergqvist et al., 1999). The 1970s, the period when gender equality became an official part of the political agenda (Lindvert, 2002), was characterised by strong public sector expansion, centralised collective bargaining, social engineering and centrally planned standard solutions (Lindblad, 1994). The Swedish gender equality process has been characterised by women and some men who actively promoted gender equality from inside established political structures with much emphasis on consensus and co-operation (Pincus, 2002; Cf. Eduards, 2002). These actors have been referred to as 'state-feminists'. Progressive initiatives were carried out partly as a solution

to Sweden's lack of labour-power. So, the prime aim was not necessarily to increase equality (Hirdman 2001).

'Jämställdhet' is a specifically Swedish concept created in the 1970s that has been important in Swedish policy-making. It is difficult to translate the concept into English (Briskin and Eliasson, 1999) as it is strongly related to Sweden's history of a strong social democratic welfare state and state-feminism (Erixon Arreman and Weiner, 2003). As the Swedish historian Yvonne Hirdman argues, jämställdhet approximates to "of equal standing" in English (Hirdman, 1992:216 in Melin, 1999). Moreover, jämställdhet does not address conflict or power relations and is free of sexual overtones (Florin and Nilsson, 2000). Thus, given that jämställdhet policy is accepted by all seven political parties in the parliament (Pincus, 2002), it cannot be seen as a strong radical force.

The overall objective of Sweden's government gender equality policy aims "to ensure that women and men have the same opportunities, rights and responsibilities in all significant areas of life" (Skr. 2002/03:140 5). Swedish state measures have generally been part of wider programs rather than single initiatives. Main attention have been on women as part of a wider collective, on equal rights regarding economic redistribution and on women's position in the labour market (Lindvert, 2002). In recent years the focus has been widened to include freedom from sex-related violence (Cf. Prop. 1990/91:113) and analyses of a gender-based power structure and unequal power relations (Prop 1993/94:147). Swedish political initiatives have resulted in high levels of parental leave and childcare, and a high proportion of women in the labour force (Cf. Sainsbury, 1999). At present the proportion of women in national government is 50 percent (Regeringskansliets hemsida, 2004a) and in parliament 45 percent (Women in national parliaments, 2004). As mentioned, all parties in parliament say they agree to the Swedish version of gender equality. Some of these, including the social democrats currently in office, also declare that they are feminist parties (Cf. Pincus 2002). An example is provided below, an excerpt from the social democratic party program, 2001

> *To break the thinking that refers to biological differences to motivate social differences between the sexes is to widen the developmental possibilities for both men and women. It creates another and in its deepest meaning more human society, with equal rights and equal responsibilities for women and men, in fa-*

mily life, working life and societal life. With this basic outlook the social democrats are a feminist party. (Partiprogram Socialdemokraterna, 2001:10, my interpretation)

The situation currently can, at first sight, be seen as impressive. However, Sweden is not a gender equal society in all respects. As the Swedish political scientist Maud Eduards argues there is also "a public Swedish discourse about the success of the welfare state and gender equality with clear national undertones" (Eduards, 2002:122) and much evidence of continuing inequalities; for example a sharply sex segregated labour market. Men's work also continues to be more highly valued in that they receive higher salaries in both male-dominated and female-dominated sectors. Meanwhile women continue to do the majority of the unpaid housework (SOU 1998:6; Skr 2002/03:140). In summary, much remains to be done. Even so, it seems clear that state feminist policy-making has been influential in placing gender equality on the political agenda. In recent years, at least rhetorically, feminist state interpretations of the current gender equality situation are more evident. It seems as though feminism has achieved fashionable status in national policy-making (Cf. Gemzöe 2002).

Gender Equality in Swedish Education Politics

This second part of the paper begins with a historical background about gender equality in early years' education. Thereafter the attention is on the mid 1990s and the increased emphasis on gender equality as a pedagogical issue. Subsequently, the focus is on the late 1990s and on gender equality as part of the pre-school curriculum, values education and quality audits. Finally some developments in the new millennium, with gender equality as part of the new teacher education and the establishment of a delegation for gender equality in pre-school, are discussed.

The end of the 1960s to the mid 1990s: Gender Equality in Early Years' Education

During the end of the 1960s and the 1970s pre-school was seen as part of the social and family policies and as a complement to the family. State emphasis on pre-school expansion became a central political question in the mid 1970s. The sharp expansion was a means to facilitate women's entrance to the labour market. For children aged one to six years, public institutions included childcare day-care centres, family day nurseries and half-day pre-school education. Even though the National Board of Health and Welfare issued recommendations in terms of

activities and organisation, the pre-school was, almost exclusively, run by the municipalities (Vallberg Roth, 2002). State policies for pre-school, as reflected in different documents over the period covered, included guidelines for practitioners work regarding gender. At the end of the 1960s and throughout the 1970s, there was an emphasis on similarities between girls and boys, women and men. The message was that practitioners should treat children uniformly, irrespective of sex, to counter the influence of traditional sex roles. As an example it is noted that the attitude of staff "must be" that "girls as well as boys ought and need to do handicraft and work with tools, play noisy games and caring games" (SOU 1972:26 118). There was also state emphasis on getting more men into the pre-school work-force where women then constituted a large majority. This was in line with the general focus in Swedish gender equality policies of a more equal representation of women and men in different fields of the labour market. The emphasis on getting more male staff was also, in line with the emphasis on sex roles in socialisation, as a pedagogical concern. It was, for example claimed that because the staff is largely female and there are many single parent families, children may miss the opportunity of developing relationships with men. Also even when parents co-habit "it is not always certain"

that the father "to any appreciable degree participates in the care and upbringing or at all has any deeper contact with his child" (SOU 1972:26 105). Thus, this issue was taken seriously and, from the beginning of the 1970s, quota systems were introduced to increase the number of male pre-school student teachers (Wernersson and Lander, 1979).

In the 1980s government focus remained on expanding the pre-school but, from the mid 1980s onwards, there was also a shift towards increased emphasis on pedagogical content (SOU 1997:157). Swedish pre-school pedagogy was, at this time, characterised by five principles:

1) An emphasis on the connection to children's own experiences and knowledge.
2) A view that learning and development takes place the whole time and not just in arranged learning situations.
3) An emphasis on the pedagogical importance of caring situations.
4) Working methods directed towards play and theme work.
5) An emphasis on the individual child's development seen as part of the pre-school group (Socialstyrelsen, 1987:23–25).

Regarding gender the message was that the pre-school should provide an atmosphere embodying egalitarian values and a collective belonging and responsibility. Gender equality was interpreted as one aspect of equality, the other being socioeconomic equality. The responsibility of staff was to actively promote "equality in everyday life" and make sure that pre-school children acquired gender equality "knowledge and values" (Ibid: 39). The exact nature of this knowledge and values are not clarified. It is also argued that staff should provide the children with similar possibilities irrespective of sex and it is noted that special staff consciousness is demanded regarding children from an immigrant background (Ibid:27). To conclude, the 1980s saw a substantial increase in emphasis on egalitarian values and social context. The problem of too few men, or too many women as part of the workforce also remained part of the state discourse even though the quota system had been abandoned. It was, for example, claimed that a "skewed sex distribution" means that staff need to pay special attention to "how one influences the children as role models and with own values" (Ibid: 31).

Regarding the Swedish mainstream education system, it has a history of strong centralised governance through detailed binding regula-

tions (Cf. Lundahl, 2003). Concerning gender, compulsory school practitioners were from the end of the 1960s onwards expected to treat girls and boys in the same way, give them the same general knowledge and also additional knowledge about the sex role issue. Also, from this period, an aim has been to achieve a more equal representation of girls and boys in different upper secondary school programs thereby supporting a more equal representation in the future labour market. In the 1980s it was specified that a satisfactory even enrolment distribution was 40:60 (Priegert and Wernersson, 1999). A particular focus has been on getting more girls into science and technology, and from 1984 onwards, special resources were allocated for municipal summer courses in technology for girls of grades eight and nine[4]. Thus, the influence of the labour market was visible in the gender equality policies of the compulsory school.

The mid 1990s: Gender Equality as a Pedagogical Question – of what?

The beginning of the 1990s was a period characterised by a political shift towards neo-liberal policies (Lundahl 2003; Halvarsson et al., 1999) simultaneously to an economic crisis that heavily affected early years' education (Skolverket, 2004a). Due to new legislation and rising birth-

rates, expansion intensified at the same time as economic cutbacks and streamlining were introduced (Cf. Skr. 1998/99:121). During this period, discussions on the integration of the pre-school into the compulsory school system also came on to the political agenda (SOU 1997:21). Regarding gender, the mid 1990s involved a new state emphasis on defining gender equality in education as a pedagogical question and a field of knowledge. This new emphasis was visible during the period of the conservative coalition government (1991–1994) as well as during the following social democratic administration (1994 onwards). Thus, practitioners' gender equality work was to be based on much more than their own attitudes, and was to have certain consequences

> *Such an approach must have consequences for a number of areas: teacher pre-service education, teacher in-service education, research and development work, follow up and evaluation, but above all for the daily work in the school.* (Prop 1994/95:164 12)

This shift towards an increased focus on practitioner competencies and responsibilities, which was in line with education more generally, was visible in pre-school policies where gender equality was highlighted as a "pedagogical challenge"

(SOU 1997:157 68). Thus, the aim was to initiate learning about gender equality work with pre-school children. Increasing practitioner knowledge and awareness of the importance of adults as role models became a key focus in this work (Ibid) and state in-service education initiatives were initiated (Skolverket, 1999a).

Gender equality was also referred to as a pedagogical question and field of knowledge for the compulsory school but it seems less clear what the contents in this field of knowledge was to consist of. During the period of the conservative coalition government, state opinions focusing on differences, including biological differences, were apparent with the idea that these should be taken into account in teaching (Utbildningsdepartementet, 1994a; Ds 1994:98; Cf. Priegert and Wernersson, 1999; Weiner and Berge, 2001; Öhrn, 2000). The discussions about biological differences were based on brain research and the 'differences' highlighted were consistent with well-known stereotypes of female and male behaviour (Ds 1994:98). Consequently a program of measures was proposed which included that girls and boys should receive compensatory education to counter their differences in abilities. As the Swedish educational researcher Elisabeth Öhrn argues this program indicated a distinctive policy shift

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From the perspective of gender equality and equal conditions in school as put forward in Swedish educational policy from the 1960s onwards, this programme of measures poses a momentous shift in orientation. It means a focus on sex differences and the sex dichotomy, and diffuses questions of power and the ways in which gender is put to work in school. (Öhrn, 2000:130)

During the following social democratic government the focus on biological differences was reduced. Gender equality was referred to as a "democracy and power issue" (Prop 1994/95:164 7) with power basically regarded as a public matter in relation to the classroom and the labour market. To conclude, even though formulations seem vague during this period, there are competing messages regarding the extent to which practitioners' knowledge should concern sex differences based on biology.

What concrete measures were taken during this period in compulsory school in terms of promoting gender equality as a pedagogical question and field of knowledge? A few years earlier the education system had undergone a process of devolution and deregulation with the introduction of a market influenced model with municipalities responsible for the

allocation of resources. In this new model the state governed mainly by objectives (Skr 1993/94:183; Cf. Lundahl, 2003). Thus, the main concern was that formulations on gender equality in the education legislation should be stronger though with no additional state economic resources allocated (Prop 1994/95:164). Yet, some gender equality project money was available during this period (Tallberg Broman, 2002) and a network of schools was established. There was also, at least rhetorically, increased state emphasis on teacher education and some discussion on gender equality in relation to coeducational versus single sex education (Cf. Skolverket, 1997).

The late 1990s: Gender Equality in the Curricula and the Return of the State?

As mentioned, the political agenda in the beginning of the 1990s involved discussions on pre-school integration into the compulsory school system which was completed in 1998. As a consequence, pre-school became part of general education legislation (SFS 1985:1100) with its own binding curriculum for children aged 1–5 years of age (Utbildningsdepartementet, 1998a). Additionally, the Ministry of Education and National Agency of Education took up responsibility for the pre-school. For six-year olds a pre-school class was established and placed

in the mainstream school curriculum (Utbildningsdepartementet, 1998b).

Gender equality as a pedagogical question is visible in the preparatory investigation for the first pre-school curriculum (SOU 1997:157) which involves an extensive discussion of gender equality from a number of different angles. Gender equality is, for example, discussed in terms of social construction and it is referred to a societal gender order. However, it is difficult to discern any clear signs of more extensive discussions in the curriculum itself. The first pre-school curriculum of 1998 is a short document of sixteen pages only and is the first pre-school ordinance directed towards practitioners (Utbildningsdepartementet, 1998a). It contains core values, goals to be aimed for and guidelines for activities. Core values are the "ethical attitudes" (Ibid: 7) or "fundamental starting points" (Skolverket, 1999b:11) for the preschool activities and thereby they shall always influence actions (Ibid). Gender equality in this document is seen as part of society's core values which are as follows

> *The inviolability of human life, individual freedom and integrity, the equal value of all people, equality between the genders, and solidarity with the weak and vulnerable are*

> *values that pre-school shall actively promote in its work with children.* (Utbildningsdepartementet, 1998a:7)

Gender equality is also mentioned in a number of other places in the curriculum, for example in a section on Objectivity and comprehensiveness

> *The ways in which adults respond to boys and girls, as well as the demands and requirements imposed on children contribute to their appreciation of gender differences. The pre-school should work to counteract traditional gender patterns and gender roles. Girls and boys in the pre-school should have the same opportunities to develop and explore their abilities and interest without having limitations imposed by stereotyped gender roles.* (Ibid: 8)

Moreover, it is also maintained that "pre-school should strive to ensure that each child develops" a number of society's shared democratic values. Among these values is "an understanding that all persons have equal value independent of gender, social or ethnic background" (Ibid: 11). Also noted is that pre-school staff working team should "work towards ensuring that both girls and boys have an equal measure of influence over and scope for participating in activities (Ibid:15). To conclude, gender

equality is clearly visible in the pre-school curriculum. The formulations tend to be rather open-ended but the message seems to be that the pre-school should provide children of both sexes with equal opportunities and access to of influence and space. How exactly practitioners are to achieve this end is mainly their own professional responsibility (Ibid).

What then are the implications of the sections on gender equality in the new pre-school curriculum? One new aspect is that gender equality, together with other values, now constitutes the core of pre-school values. This means that gender equality, at least symbolically, has high status. During the 1990s, the word 'värdegrund' was created to refer to curricula core values (Lahdenperä, 2001) which in English approximates to values education or citizenship education. The end of the 1990s saw an increased emphasis on values education and, indeed 1999 became the values education year for school and pre-school, which meant a temporary increase in state activities in this field (Zackari and Modigh, 2002). Subsequently, two national values education centres were established to further promote a development.

The introduction of the curriculum has also meant that state control, at least officially, has become stronger than before. Yet, it is also important to note that the pre-school has become part of an education system that has recently been ranked as one of the most decentralised among the OECD countries (OECD, 1998 in Lundahl et al., 2002). Since currently the responsibilities of the state are to set national goals and guidelines (Skolverket, 2004b) it is not evident that the governance of gender equality has become stronger. However, the second half of the 1990s saw a partial return of the state in the field of education. New forms of governance were introduced and 'quality' gradually became a key word in policy-making. In 1997 a new form of evaluation, 'the quality audit' was introduced as were state inspections. The quality audit is an annual internal municipality and school self-evaluation based on national goals. This is at present obligatory for compulsory school but not yet for the pre-school. Yet, this is likely to change in the future, since it is a government priority that this shall become compulsory also for the preschool (Skr 2001/2002:188; Prop 2004/05:11). Moreover, many pre-schools already carry out quality audits voluntarily. There are also national quality audits and state inspections, based on visits and other information. These new types of state governance include gender equality and can therefore be described as material

policies which though at an early stage, since they are part of ordinary governance, may have the potential for promoting gender equality in the future. A crucial issue is that sophisticated indicators are being developed. It is hoped that a number of aspects, such as for example indicators on the degree of girls' and boys' influence, will be included.

When comparing the pre-school curriculum with the compulsory school curriculum[5] (Utbildningsdepartementet, 1998b) the overall curricula as well as the sections on gender equality are generally similar if rather open-ended. Yet, there are some differences that need to be mentioned. First the pre-school curriculum only contains goals 'to aim for' whereas the compulsory curriculum also contains 'goals to achieve'. Interestingly, the compulsory school curriculum version of core values, originally introduced by the conservative coalition government, still contains the contentious section on "Christian tradition" and "Western humanism" (Utbildningsdepartementet, 1998b:5; Cf. Bergström and Boréus, 2000) which was excluded[6] from the pre-school curriculum. Clearly, core values are changeable. The compulsory school curriculum also contains additional guidelines about staff responsibilities regarding gender and educational choice that have no parallel in

the pre-school version. Also, compulsory school staff is expected to challenge the limitations in "pupils' study- and work choices based on gender, social or cultural background" (Utbildningsdepartementet, 1998b:17). Thus, the focus on the future labour market is clearly visible in compulsory schooling but not in the pre-school documentation.

Gender Equality in the New Millennium

The end of the 1990s saw state criticism of teacher education programs and plans for reform and revision. Discussions about teacher education are connected to practitioners as professionals with long lists of the competencies and knowledge that they are expected to acquire as part of their work (Skr 1996/97:112; Skr 1998/99:121). The newly reformed teacher education is also intended to provide improved training on gender equality. This is visible in the preparatory state investigation for the reform where assumptions about biological sex differences also are dismissed as a basis for educational practice (SOU 1999:63). Below is the investigation summary on how gender equality and gender/sex theory can be incorporated into teacher education

Gender equality and sex theory shall be treated as fields of knowledge in teacher educa-

tion. Gender equality is a question of values and a political question. Sex theory is about descriptions and theories about what sex means for the individual and how the relations between the sexes look in different social structures. There are no universally valid ways of dealing with girls and boys in school. Knowledge about the social sex structure (gender system) and its consequences on different levels is needed to be able, as a teacher addressing gender equality and give girls and boys equal/ just conditions. Wide and deep knowledge is needed to be able, as a teacher, to analyse concrete situations in the classroom and act in a constructive way. (SOU 1999:63 469, my interpretation)

In the following government bill (Prop 1999/2000:135) the message is that every teacher education in the country should "apply a sex perspective on education". Moreover, teacher educators are also expected to "develop student teachers' consciousness and knowledge about the gender equality issues as part of their future work" (Ibid: 66). To conclude, the picture of the newly reformed teacher education may appear positive from a feminist point of view. However, to what extent the above statements have been integrated into practice is yet to be seen (Cf. 2000/01:UbU3; rskr. 2000/01:5) and

current teacher examination requirements concerning gender equality are vague. In the most concrete requirement the attention is directed towards differences. It is stated that the student teacher shall "understand the importance of sex differences in the teaching situation and in the presentation of the subject content" (Högskoleförordningen (1993:100) appendix 2. Examensordning).

At the time of writing (autumn, 2004), the state's emphasis on gender equality as a pedagogical issue, a field of knowledge and part of values education is a 'material' policy in the sense that it is visible in current government documents and accompanied by concrete measures (Skr 2001/02:188; 2002/03:140). Some of the not binding documents, including recent documents directed towards practitioners, have rather strong references to more feminist interpretations and to the gender order (Cf. Skolverket, 1999c; Myndigheten för Skolutveckling, 2003). Regarding concrete measures, a state delegation for gender equality in pre-school was established in 2003, for a period of two and a half years with a wide scope of stipulated tasks[7]. One of the tasks is to promote recruitment of more male staff (Delegationen för jämställdhet i förskolan, 2004). As the Swedish educational researcher Britt-Marie Berge shows there also

seems to be a consistent pattern in the state policies for the early years of compulsory school; that there are too many women (Berge, 2003). However, even though this can be seen to be a persistent theme also in the new millennium there are also indications that the attention on the staff's own sex may be toned down. In a recent state investigation presented by the delegation for gender equality in pre-school it is argued that

> *The delegation is of the opinion that pedagogical skill must be the most important factor concerning all staff and it is the attitudes towards children and the gender aspect that are important for gender equality, not the sex of the staff.* (SOU 2004:115 41)

In the same state investigation it also suggested that the teacher examination requirements shall be changed and that the new formulation shall include a clear reference to student teachers' knowledge about the gender order. Another proposed measure is to make it compulsory for the municipalities to allocate at least fifteen percent of their pre-school quality improvement state subsidies to gender equality measures (SOU 2004:115). Moreover, the government has earmarked money for gender training for at least one practitioner in every

Swedish municipality and additional funding for gender equality projects has also been available (Skr 2002/03:140). Recently, a national evaluation of the pre-school, which showed that gender equality was not a very visible part of values education, was also carried out (Skolverket, 2004c). To conclude this section, the focus on lack of pre-school male practitioners is a stable theme which, once again, is matched with concrete measures. However, as also shown above, the gender focus in regard of pre-school policy making is wider than just getting more male staff and it is clear that the scope has broadened further the last few years.

There are at least two possible ways of interpreting the current situation. A positive interpretation is that there is a strong state commitment to gender equality in early years' education characterised by a range of initiatives over the last few years. A more critical interpretation is that current measures are time-limited and not part of 'ordinary' state governance. Moreover, even though the present picture seems positive there is no guarantee that similarly 'concrete' measures will be carried out in the future. However, it seems clear that the emphasis on gender equality in pre-school has increased after the integration into mainstream education. Above all, this is visible in the establishment of the pre-

school gender equality delegation. One reason why this has taken place seems to be that it is in line with the general raise in pre-school status, which for example is visible in the introduction of a universal pre-school for the four and five year olds in 2003, and the increased emphasis on the pedagogical aspects of pre-school activities. In particular, there is an attention on pre-school school preparation in, for example, reading (Cf. Prop. 1997/98:93; Cf. Göhl-Muigai, 2004; Skr 1998/99:121; Skr 2001/02:188).

Regarding compulsory school, earmarked money for gender training for practitioners and for gender equality projects has been made available. Moreover, most state efforts to promote gender equality in compulsory schooling are still aimed at girls; directed in practice towards getting more girls into science and technology (Skr 2002/2003:140). Thus, girls and science and technology subjects is clearly a stable and material policy. Why this continues to be a main focus of government seems to be based on some labour market logic. Governmental discourses may be summarised in one sentence: The current number of applicants for science and technology is generally described as problematic and it is important to have more women scientists, technicians and engineers for a future skilled labour force[8]. Issues of social justice are absent

from these discussions. To conclude this section, the material parts of this policy have had little to do with early years' education. However, initiatives in these years have been highlighted as indicative of recent strategies to get more applicants in science and engineering subjects in upper secondary school and higher education (Skr 2001/2002:188). Even though this policy is stable, it is rather narrowly focused in the sense that it concerns one sex (girls) and one choice (science and technology) at a certain age (15 and 16 year-olds). Significantly, even though recent years has involved more state emphasis on boys than before, there has been no similar state attention on boys' educational choices (Cf. Tallberg Broman, 2002).

Concluding Discussion

This section first provides some comments about the methods used for the analysis and thereafter concentrates on an area of silence, a possibly emerging discourse, the visibility of ideological influences and the degree of stability and change in the policies. As shown in this paper, gender equality is a visible part of Swedish state educational policies for pre-school as well as for compulsory school. Thus, it may be argued that these policies are at least symbolic. It has also been shown that some state documents, but none of the binding ones, included femi-

nist perspectives involving power and gender order. The formulations in the legislation and curricula, however, tend to be imprecise. Feminist discourses are positive to gender equality in the sense that they can 'name' the issue at hand with apt terms. On the other hand, feminist statements may also, if they are not matched with concrete measures, give the impression that much more has been achieved than is the case. My interpretation is that it has been valuable to make a distinction between symbolic and material policies, especially since some state discussions are influenced by feminism whereas historically 'concrete' state measures, as shown, have been more limited.

When comparing general Swedish gender equality politics with educational gender equality policies the conclusion is that the historically strong focus on the labour market is a shared idea. The two most stable single gender equality goals found in the analysis are getting more male pre-school staff and getting more girls to choose science and engineering. As the Swedish educational researcher Karin Hjälmeskog shows, the private sphere, which the school also is expected to prepare pupils for, has become more invisible during recent years as has education for gender equality in the private sphere. As an example, compulsory school courses

geared towards equal sharing of household tasks and children's upbringing was removed in the present compulsory school curriculum (Hjälmeskog, 2000). This pattern is confirmed by this study too. Regarding pre-school, we can see in recent years more emphasis is placed on school preparatory tasks (Prop. 1997/98:93; Cf. Göhl-Muigai, 2004; Skr 1998/99:121; Skr 2001/02:188) whereas the importance of the traditionally female caring and more 'home-like' aspects has been de-emphasised (Cf. SOU 1997:157 65). Regarding compulsory school, the responsibility of working with gender equality in the private sphere is missing from the educational discourse. This seems to be a clear area of silence.

My interpretation is that there has been a generally even-handed focus on girls and boys in the sections in the documents concerning gender equality in pre-school. The possible exception is that the characteristics of the staff, e.g. that it is mainly female, may have been considered more problematic for the boys. In the compulsory school documents more attention has been directed towards girls and most resources has been directed towards their educational choices. Thus, there has not been any Swedish equivalent to the international "male underachievement" crisis where boys are depictured as

"missing out" and girls as "privileged and performing well largely at the expense of boys" (Öhrn, 2000:129). This does not imply that Swedish policy-makers have not paid attention to the difficulties faced by boys (Cf. Öhrn, 2000). Rather, differences regarding achievement are mentioned and also that girls generally receive higher grades. There has also been an increased attention on boys concerning values education (Öhrn, 2000) and recent accounts of boy's achievement patterns are viewed as problematic (Skr 2002/03:140; Utbildningsdepartementet, 2004; Regeringskansliets hemsida, 2004b). The situation is described as serious. Yet, the picture does not seem to match the international debate. First, achievement does not seem to have become the main concern in the Swedish policies. Moreover, the girls are generally not depicted as responsible for the 'missing out' of the boys. However, since boy's achievement patterns are viewed as so problematic and the achievement gap has increased in recent years it seems likely that future discourses, and perhaps also material policies, will involve a stronger focus on boys. To what extent this will spread to pre-school policy-making remains to be seen.

A conclusion regarding state educational gender discourses from the end of the 1960s onwards is of a complex and sprawling picture. There was historically an emphasis on uniformity between the genders which gradually was replaced by more emphasis on differences. This change was in parallel with the ideological shift in a neo-liberal direction in Sweden of the beginning of the 1990s to which both social democratic and conservative coalition governments contributed. In this study, the documents which most emphasise differences were issued during the conservative coalition government, and concern exclusively the compulsory school. Thus, it seems that ideological differences between conservative and social democratic administrations in regard to gender equality exist (Cf. Priegert and Wernersson, 1999). However, even though the importance of differences became a less visible discourse when the social democratic government returned to office, it did not disappear. The picture seems to have become more multi-faceted and diverse during recent years and also involved a gradual shift towards more emphasis on feminist interpretations of gender as a social construction. To conclude, my interpretation is that both the general shift in the neo-liberal direction and ideological differences between different governments are visible in the documents used for this analysis.

Interesting differences also exist between the education documents and the general gender

equality documents that need to be mentioned. Feminist statements about issues of power and gender order are weaker and more vaguely formulated in educational documents compared to other governmental sectors; for example a reference to biological sex differences can only be found in the educational documents. It is to be expected that the state gender equality documents are stronger on feminism since their main emphasis is on gender equality rather than education. Yet, this does not explain why in some documents, the state points to the need for more feminist interpretations and in other documents of the same period pays significant attention to biological differences. To conclude, it seems clear that the state is a dynamic site and it seems that the arms of the state may be operating in different directions in some instances.

As shown in the analysis some discourses are stable over time whereas other discourses have emerged more recently. The foci on getting more male staff and more girls into science have been stable whereas the emphasis on gender equality as a pedagogical question, field of knowledge and part of values education only emerged from the mid 1990s onwards. The pattern seems to be that the discourses, once they become part of the agenda, are rather stable and, as time goes by, are complemented with newer discourses.

Regarding concrete measures, recent years seem to have been positive for the pre-school.

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Appendix: Official Documents in Cronological Order

Year	Name of Document	Type of Document	Actors Responsible for the Document
1972	SOU 1972:26, Förskolan del 1: Betänkande avgivet av 1968 års barnstugeutredning.	State investigation	The Commission on Childcare
1972	SOU 1972:27, Förskolan del 2. Betänkande avgivet av 1968 års barnstugeutredning.	State investigation	The Commission on Childcare
1985	Skollagen	Education legislation (originally from 1985)	The Swedish Parliament
1987	Pedagogiskt Program för förskolan. Allmänna råd från Socialstyrelsen 1987:3.	General recommendations	The National Board of Health and Welfare
1990/91	Om ansvaret för skolan	Government bill 1990/91:18	The Government, The Ministry of Education
1990/91	Om en ny jämställdhetslag m.m	Government bill 1990/91:113	The Government, The Ministry of Public Administration
1993	Högskoleförordningen 1993:100	The higher education ordinance 1993:100 (originally from 1993)	The National Agency for Higher Education
1994	Utvecklingsplan för skolväsendet	Government communication 1993/94:183	The Government, The Ministry of Education
1994	Jämställdhetspolitiken: Delad makt – delat ansvar	Government bill 1993/94:147	The Government, The Ministry of Health and Social Affairs
1994	Visst är vi olika!	Anthology	The Working Group Female and Male, The Ministry of Education
1994	Vi är alla olika	Ministry investigation/communication	The Working Group Female and Male, The Ministry of Education
1995	Jämställdhet mellan kvinnor och män inom utbildningsområdet	Government bill 1994/95:164	The Government, The Ministry of Education
1997	Utvecklingsplan för förskola, skola och vuxenutbildning – kvalitet och likvärdighet	Government communication 1996/97:112	The Government, The Ministry of Education
1997	SOU 1997:21, Växa i lärande: förslag till läroplan för barn och unga 6-16 år: delbetänkande/av Barnomsorg och Skolakommittén	State investigation	The Childcare and School Committee, The Ministry of Education
1997	SOU 1997: 157, Att erövra omvärlden: förslag till läroplan för förskolan. Slutbetänkande/av Barnomsorg och Skolakommittén	State investigation	The Childcare and School Committee, The Ministry of Education
1997	Olikheter – en brist eller tillgång? : undervisningsformer, pedagogiska metoder och innehåll i ett genusperspektiv: ett referensmaterial.	Works of reference	The National Agency of Education
1998	Läroplan för förskolan	Government bill 1997/98:93	The Government, The Ministry of Education

1998	Läroplan för det obligatoriska skolväsendet, förskoleklassen och fritidshemmet m.m	Government bill 1997/98:94	The Government, The Ministry of Education
1998	Utbildningsutskottets betänkande 1997/98: UbU 16. Läroplan för förskolan	Education Committee Report	The Education Committee, The Swedish Parliament
1998	Utbildningsutskottets betänkande 1997/98: UbU18. Läroplan för det obligatoriska skolväsendet, förskoleklassen och fritidshemmet, m.m.	Education Committee Report	The Education Committee, The Swedish Parliament
1998	Riksdagsskrivelse, rskr.1997/98:270	Parliament communication	The Swedish Parliament
1998	Riksdagsskrivelse, rskr.1997/98:272	Parliament communication	The Swedish Parliament
1998	Läroplan för förskolan: Lpfö 98	Pre-school curriculum	The Government, The Ministry of Education
1998	Läroplan för det obligatoriska skolväsendet, förskoleklassen och fritidshemmet: Lpo 94 anpassad till att också omfatta förskoleklassen och fritidshemmet	Compulsory school curriculum	The Government, The Ministry of Education
1998	SOU 1998:6, Ty makten är din -: myten om det rationella arbetslivet och det jämställda Sverige: betänkande/av Utredningen om fördelningen av ekonomiskt makt och ekonomiska resurser mellan kvinnor och män	State investigation	The investigation on the distribution of economic power and economic resources between women and men
1999	Utvecklingsplan för förskola, skola och vuxenutbildning – samverkan, ansvar och utveckling	Government communication 1998/99:121	The Government, The Ministry of Education
1999	Jämställdhet i förskolan – en pedagogisk utmaning	Information paper	The National Agency of Education
1999	Olika på lika villkor. En antologi om jämställdhet i förskolan	Anthology	The National Agency of Education
1999	Ständigt. Alltid! Skolans värdegrund. Kommentar till läroplanen	Report with comments to the curricula core values	The National Agency of Education
1999	SOU 1999:63 Att lära och leda. En lärarutbildning för samverkan och utveckling: Lärarutbildningskommitténs slutbetänkande.	State investigation	The Teacher Education Committee, The Ministry of Education
2000	En Förnyad Lärarutbildning	Government bill 1999/2000:135	The Government, The Ministry of Education
2000	Utbildningsutskottets betänkande 2000/01:UbU3 En förnyad lärarutbildning	Education Committee Report	The Education Committee, The Swedish Parliament
2000	Riksdagsskrivelse, rskr.2000/01:5	Parliament communication	The Swedish Parliament

2002	Värdegrundsboken. Om samtal för demokrati i skolan	Material for discussion (also issued in 2000)	The Values Education Project, Ministry of Education
2002	Utbildning för kunskap och jämlikhet – regeringens utvecklingsplan för kvalitetsarbetet i förskola, skola och vuxenutbildning	Government communication 2001/02:188	The Government, The Ministry of Education
2003	Jämt och ständigt – Regeringens jämställdhetspolitik med handlingsplan för mandatperioden	Government communication 2002/03:140	The Government, The Ministry of Industry, Employment and Communications
2003	Hur är det ställt? Tack, ojämt!	Information material	The National Agency for School Improvement
2004	Vårt uppdrag	Information material	The Delegation for Gender Equality in Pre-school
2004	Könsskillnader i utbildningsresultat – en översiktlig genomgång av kunskapsnivå, genomströmning och utbildningsdeltagande	Internal working report	The Ministry of Education
2004	Könsskillnader i utbildningsresultat. Fakta, mönster och perspektiv	Ministry report	The Ministry of Education
2004	Verksamheternas resurser	Information material	The National Agency of Education
2004	Ansvaret för stat, kommun och enskild skola	Information material	The National Agency of Education
2004	Förskola i brytningstid	Report on the national evaluation of pre-school	The National Agency of Education
2004	SOU 2004:115 Den könade förskolan – om betydelsen av jämställdhet och genus i förskolans pedagogiska arbete. Delbetänkande av Delegationen för jämställdhet i förskolan	State investigation	The Delegation for Gender Equality in Pre-school
2004	Kvalitet i förskolan	Government bill 2004:11	The Government, The Ministry of Education

Endnotes

1 The categorisation of the documents included mapping gender equality and main educational themes and reforms. Regarding gender equality the documents were categorised into to the following four main categories: gender equality goals, problems, solutions and concrete state measures. As the analysis went on a number of sub-categories also emerged.

2 These documents are the Commission on Childcare (SOU 1972:26; 1972:27) and the Pedagogical Program for Pre-school (Socialstyrelsen, 1987), i.e. documents that are often referred to in later state documents and in research.

3 The selection of these three criteria builds on the Swedish educational researcher Lisbeth Lundahl's discussion where she draws on Lindkvist, 1982. See: Lundahl, 1997.

4 By the mid 1990s, when these summer courses had taken place in most Swedish municipalities, the emphasis on girls taking up science and technology began to be questioned by the state itself. See: Ds 1994:98; Prop. 1994/95:164. Yet, the strong attention on girls did not vanish.

5 The comparison involves the original compulsory school curriculum introduced in 1994 and the revised version from 1998 that includes the pre-school class. During the revision process it was suggested in the preparatory state investigation (SOU 1997:21) that an active sex/gender perspective should be added as part of the curriculum. However, this suggestion was dismissed on the basis that gender equality already was visible enough in current documents. See: Prop 1997/98:94; 1997/98:UbU18; rskr. 1997/98:272. Thus, the sections on gender equality in the revised version are the same as before the revision.

6 It was suggested by the Christian Democrats that the pre-school curriculum should contain a similar section on "Christian tradition" but this proposal was dismissed on the basis that no complaints had been made during the circulation for consideration by the parties concerned. See: Ubu 1997/98:16; rskr. 1997/98:270.

7 Included among the tasks are to: grant money to pre-school gender equality projects, document and disseminate information from Sweden and abroad and to highlight good examples from Sweden and abroad where one has succeeded to attract men to start and/or continue to work as pre-school staff. Also included among the responsibilities are to develop ways to analyse toys and children's books from a gender perspective and examine gender equality education in university pre-school teacher education programmes.

8 The current number of applicants refers applicants to the upper secondary programs and to the universities. It is described as problematic either in relation to current labour shortage, future possible labour shortage, or future needed increase in the labour force.

Examining Tensions in a "Design for Science" Activity System:

Science versus Engineering Goals and Knowledge

Mary J. Leonard

Abstract

Until the 1990s, technology education in the United States was the domain of industrial arts programs. It has since been reconceived more broadly and emphasized as relevant to all students from kindergarten through high school. Yet technology education has no clear home in middle and high school programs and no mandate for its implementation, leaving it to be accommodated where there is interest—often the science classroom. Many "Design for Science" curricula have sprung up in recent years, motivated by the promise of increasing student motivation and providing real-world context for science concepts. While technology and science are deeply interrelated, they have epistemological differences that may create difficulties for students in making desired connections between artifacts under design and science concepts that underlie their behavior. This paper proposes a study to investigate hypothesized tensions in a Design for Science classroom that may arise from disparate goals and knowledge stemming from these epistemological differences.

Introduction

Curriculum developers in the United States have increasingly been drawn to engineering design activities as a means of providing students real-world contexts for science concepts (e.g., Fortus et al., 2002; Kolodner, 2002; Sadler, Coyle, & Schwartz, 2000; Seiler, Tobin, & Sokolic, 2001). A common implementation in middle schools (years 6–8) is having students build model cars powered by various sources (for example, rubber bands or balloons) as a way to learn about force and friction (key physics concepts). In these settings, engineering design is typically used to scaffold science learning, as well as to support such general education goals as decision-making and working in teams. The attractions of this approach are great—design activities are motivating to students (Kelly &

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Heywood, 1996; Roth, 2001) and education standards emphasize teaching science in rich, authentic contexts (American Association for the Advancement of Science [AAAS], 1993; National Research Council [NRC], 1996). Furthermore, design activities fit well with important learning theories: the cognitive constructivist view that individuals construct knowledge from their experiences (Piaget, 1985); the social constructivist view that students learn through meaningful activity with others (Vygotsky, 1978); the constructionist view that students learn by building artifacts (Papert, 1993); and the pragmatist philosophy that values design-based learning (Dewey, 1933; 1938).

But there are potential drawbacks to this particular approach—namely, that it risks portraying engineering design as science applied to technological problem-solving (Leonard, 2004). In reality, engineering design has significant epistemological distinctions in its goals, activities, and knowledge that make it not a simple "plug-and-play" context for science learning. That is not to say it is inappropriate to combine science and engineering in classrooms; to the contrary, the domains are highly interdependent, a feature that learning activities can and should capitalize on (Barlex & Pitt, 2000). It does mean, however, that because of distinctions between science and engineering practice, it is important to pay attention to their divergences as well as their synergies and to construct an understanding of their relationship into the curriculum.

Overview of the Study

In light of educators' and education researchers' interest in design-based contexts for science, it is important to improve our understanding of what happens in the enacted curriculum, to enable us to more effectively capitalize on design for science learning. In the hope of contributing to this goal, the present study proposes to investigate a snapshot of an early iteration of a Design for Science (DS)[1] curriculum that employs engineering-type design challenges as a means for students to learn science concepts as well as skills in common to both science and design. Analysis will focus on video recordings spanning two weeks of the enacted curriculum in a suburban middle-school classroom (year 8) in the United States. In the unit under study, students are challenged to build a balloon-powered model car to travel the greatest distance over a flat surface. Students work primarily in small design teams of four, and also take part in whole-class sessions for discussion, lecture, and peer presentations of designs and experimental results.

The study will draw on activity theory (Engeström, 1999; Leont'ev, 1978, 1981) and discourse analysis (Gee, 1999) in a qualitative, interpretive approach that examines practices, goals and other factors that mediate participants' design and science activities. Activity theory and discourse analysis share core conceptions of cognition and activity, but differ in their basic unit of analysis, and as such, provide complementary analytical frameworks. For both, the focus is what happens on the social, rather than individual, plane—on the socially organized character of the activity (Heath & Luff, 2000). Of particular interest to this research is what activity theorists have termed "tensions" between mediating factors—for example, dissonance between different representations of the activity's goal held by participants. Activity theory helps identify potential tensions; discourse analysis enables deeper analysis of actions at the sites of tension.

This study proposes that viewing the DS activity system from a vantage point that acknowledges epistemological differences between science and engineering may allow one to predict and explain certain tensions in the system. It follows that an anticipated outcome of this study would be consideration of how building better bridges between engineering design and

science inquiry might alleviate these potential tensions. To explore this hypothesis, this study will look for evidence or counter-evidence of tensions between science and design goals and knowledge in a DS classroom activity system. In particular, this study will examine the following hypothesized tensions:

1. Science versus design
- How do students and teachers reconcile or integrate goals of learning science concepts and designing/building balloon cars? How do the science and design goals interact in, or determine, their actions?
- What affordances and obstacles does the design activity present for students to develop understandings of targeted science conceptual knowledge?

2. Teacher versus student goals
- What are the teacher's and students' operational goals in the enacted curriculum? Are their representations of the activity's goals compatible? How do their goals manifest in the activity?

It is important to note that this paper comprises the introductory chapter to my proposed doctoral research study, projected to begin in early 2005. As such, the paper presents the conceptual

framework, background, and rationale for the study, but does not include detailed specification of methods nor, of course, empirical results. The sections that follow lay the groundwork for the study, reviewing the state of technology education in the United States; discussing approaches taken in DS classrooms; examining the relationship between science and engineering, especially with regard to their distinct goals and forms of knowledge; and suggesting implications of this relationship for DS classrooms.

Technology Education in the United States

Until recently, technology education in United States secondary schools was the domain of elective, skills-based industrial arts and vocational programs. Academic standards published over the past decade, however, emphasize a broader technology education for *all* students. Now, AAAS standards identify technology education as one of the three major areas of "science," along with mathematics and science itself (Rutherford & Ahlgren, 1990). National, state and local technology education standards for kindergarten through year 12 recognize the need to prepare all students to live and work in a technological world – that is, to develop technological literacy (Rutherford & Ahlgren,

1990; NRC[2], 1996; International Technology Education Association [ITEA], 1999; and, for example, Wisconsin Department of Public Instruction [WDPI], 1998; Madison Metropolitan School District [MMSD], 2001). Involving students in design activities is a thread that runs through technology education standards as a way to lay a foundation for students' technology literacy. Technology standards set the goal for middle- and high-school students to go beyond understanding design to develop design capability, "that combination of ability and motivation that transcends understanding and enables creative development" (Kimbell, Stables, & Green, 1996, p. 25).

Traditional disciplinary boundaries in middle and high schools, however, do not provide a clear home for today's conception of technology education. Technology topics are interdisciplinary, spanning at a minimum, industrial arts and science, but ranging further to social studies, communication, and mathematics. The technology teacher's (or curriculum developer's) disciplinary background plays a determining role in how technology topics are treated—science teachers tend to emphasize abstract science concepts; industrial arts teachers, skills and realized technologies (Barak & Pearlman-Avnion, 1999; Hepburn & Gaskell, 1998; Jones, 2001).

Regardless of the approach taken to technology education however, because U.S. national standards are not directive in nature, it is effectively left to state and local school districts to choose whether or not to incorporate technology education in their schools at all. The real standards to which schools are subjected, and increasingly so, are standardized tests. Until technology is afforded the same status as a discipline of knowledge as science and mathematics and becomes an area of assessment, it may be sidelined in its quest for a piece of the schools' limited resources. That curriculum developers are incorporating technology activities at all, in the form of design activities in science classrooms, is promising and commendable. However, when creating such curricula, it is important to recognize that science and engineering are separate, albeit highly interrelated, domains and to more fully consider the ramifications of this relationship on learning in DS environments.

Linking Design to Science

Educational researchers studying DS activities have observed students' difficulties linking their designs to the science concepts targeted for learning. In a Learning by Design instructional unit on preventing coastal erosion, Puntambekar & Kolodner (2005) found students needed help "relating the science they had learned ... to their designs" (p. 5). In his investigation of people tasked with redesigning a mechanical household device, Crismond (2001) noted "naïve designers made few connections from their work to key science ideas" (p. 791). Summarizing their study of a RoboLab curriculum, McRobbie, Norton, & Ginns (2004) advised teachers "that students will not necessarily make the links between the science ... [and the design simply] by engaging in the activity. Some students will require specific scaffolding in order to see the science" (p. 6). One approach to providing such scaffolding for students introduces tools, curricular structures, and/or pedagogical approaches that require students to justify their design decisions with causal explanations based on the relevant underlying science (Kim, 2002; Puntambekar & Kolodner, 2005; Roth, 2001; Ryan, Camp, & Crismond, 2001; Schauble, Klopfer, & Raghavan, 1991). To develop such causal explanations, students must carry out systematic investigations into science principles operating in their designs: i.e., to conduct scientific inquiry in support of their engineering design task. By establishing this requirement, curriculum designers have (tacitly or explicitly) embraced an *interactionist view* of science and engineering practice, one that holds science and technology are distinct but are "in a dialectical relationship, with each informing and being challenged by the other" (Barlex &

Pitt, 2000, p. 16). Gardner (as cited in Barlex & Pitt, 2000) identifies several other views of this relationship besides the interactionist view: the *engineering as applied science view* in which science drives engineering; the *demarcationist view* that science and engineering are strictly independent; and the *materials view* that engineering drives science.

Consensus among scholars who study technology practice is that the applied science view is inadequate for describing the nature of engineering design, and moreover, that the interactionist view is more appropriate. In considering the reflective practice of designing engineers, Schön (1983) notes while they make use of scientific knowledge to solve problems, "large zones of practice present problematic situations which do not lend themselves to applied science" (p. 308). In Bucciarelli's (1994) ethnographic report on designing engineers, he asserts that the viewpoint that engineering design's principle task is applying science knowledge "misses the complexities of alternative forms and paths to a design, … it ignores the diverse interests of participants in the design process, … and it fails to acknowledge the indeterminacy of technical constraints and specifications and … their negotiation in process" (p. 185).

Different views of the science-engineering relationship manifest in different positionings of engineering design in the science classroom. Those with an interactionist view might be expected to distinguish between engineering and science goals and means, while those who view engineering as applied science may more likely treat engineering as primarily a means for illustrating the applications of science. Research into teachers' and students' conceptions about the nature of engineering design reveal the predominant view of engineering as applied science (AAAS, 1993; NRC 1996; Lewis, 1992). Some educational researchers emphasize the similarities between science and engineering as the basis for their DS curricula (e.g., Roth, 2001), while others consider them indistinguishable fields of practice and therefore amenable to being merged (e.g., Seiler, Tobin, & Sokolic, 2001). However, I hypothesize the difficulties students have making the link between their designs and the science underlying them arises from different epistemologies (i.e., knowledge about the limits of knowing, the certainty of knowing, and the criteria of knowing (Kitchener, 1983)) of science versus engineering that may have been untended in DS curricula.

Epistemological Distinctions: Goals and Knowledge

Contemporary philosophers, sociologists, educators, and reflective practitioners of engineering and technology maintain that there are key epistemological differences between science and engineering's goals and knowledge. Put simply, the goal of engineering is creation of artifacts that meet human needs or wants; the goal of science is development of knowledge and understanding of natural phenomena (Sparkes, 1993; Rutherford & Ahlgren, 1990; NRC, 1996). In his historical analysis of aeronautical engineering projects, Vincenti (1990) notes "for engineers, in contrast to scientists, knowledge is not an end in itself or the central objective of their profession. Rather, it is ... a means to a utilitarian end" (p. 6). With their different goals and orientations come different beliefs and theories about the nature and limits of knowledge and its acquisition, as well as different norms for accepting assertions. In his account of the philosophy of technology, Mitcham (1994) observes the questioning of technological theories is qualitatively different from the questioning of scientific ideas, in that "the assumption among technologists is not that technological theories are true but that they work, and that the works to which they give rise are good or useful" (p. 96).

As for knowledge, Bucciarelli (1994) notes engineers rely on their understanding of the principles and concepts of their discipline, for example, mechanics, chemistry, or electricity, to make their designs. Scientific principles, such as the law of conservation of energy or properties of surface chemistry, provide engineers with understandings of the behavior of objects. Scientific and mathematic principles may provide the underlying form and basis for an engineer's work or they may be drawn on to understand and solve emergent design problems. At times, designing engineers "see" objects in terms of abstract, often idealized, scientific and mathematical concepts and relationships; for example, stresses and strains, circuit relationships, energy flow, or momentum. At other times, designing engineers talk about the concrete materials of the situation; for example, the performance of a particular photovoltaic module.

In addition, engineering design requires an intermediate form of knowledge between abstract scientific (and mathematical) knowledge and specific device knowledge (Gilbert, 1992; Layton, 1993; Levinson & Murphy, 1997; McCormick, 1997; Schön, 1983). In his taxonomy of engineering knowledge, Rophol (1997) refers to this level as *technological laws*, built either by adapting abstract natural laws to

the real technical process at hand, or by generalizing from empirical results. For example, Hooke's law of elasticity explains the stretch of a material as a linear function of the tension. Adapted to practical technical purposes, the corresponding technological law is: "Whenever the maximum tension effected on a component does not exceed the established percentage of the marginal tension at which Hooke's law ceases to be valid, the component will be wear-resistant" (Ropohl, 1997, p. 68). Layton (1993) provides another example:

> A science teacher, aiming to develop an understanding of the kinetic-molecular theory of heat, might deal with the conduction of heat through materials in terms of molecular motion. For the technologist, engaged in the task of improving the insulation of building and reducing heat losses, a simple fluid flow model of heat might be adequate for most work (p. 58).

Layton goes on to identify several additional ways academic science knowledge often needs to be reworked to be useful in the specifics of engineering design tasks. First, what is needed to solve an engineering problem often must be drawn from several diverse academic sciences and then repackaged in a way suitable for the task at hand. Kanter, Kemp, & Reiser (2001) encountered this situation when they searched for a biomedical engineering task for middle school students that would "promote students' meaningful understanding of the human biology content and concepts we were targeting" (p. 3). They found typical biomedical device projects like developing a glucose sensor or a wheelchair would require synthesizing knowledge from chemistry, electricity, materials, and mechanics in addition to that from human biology. The curriculum designers opted instead for a "lower tech" design context that focused more exclusively on their targeted human biology concepts—having students redesign their school lunch choices to meet their bodies' energy needs.

Next, science knowledge must sometimes be reconstructed or reorganized into a form more appropriate to the engineering context. Layton gives as an example, a situation where public health engineers found the scientific classification of water- and excreta-related diseases in terms of causal agents (viruses, bacteria, protozoa, and helminthes) not suitable for developing a disease prevention program. They had to reorganize the information according to environmental transmission patterns of the diseases, a classification not dependent on causal agents.

Finally, solving engineering problems requires "building back into the situation all the complications of 'real life', reversing the process of reductionism" (Layton, 1993, p. 59) and decontextualization (separating general knowledge from the particular context in which its instantiated) that have enabled the advancement of science knowledge. For example, most physics theories carry the assumption of a frictionless system when the theory is not dealing specifically with the phenomenon of friction, whereas in many engineering situations the effects of air resistance and friction are integral to successful designs.

There's a still larger body of engineering knowledge beyond that adapted from science. Rophol (1997) identifies, in addition to the technological laws discussed earlier, several other types of engineering knowledge. The second type is *functional rules,* specifications of what to do to attain a certain result in certain circumstances, cookbook-style. Expert heuristics (Gigerenzer, 2002), as well as the construction templates that embodied the knowledge needed to build Gothic cathedrals (Turnbull, 1993), fit this category. Next, the category of *structural rules* concerns the assembly and interaction of components of a technical system. These rules may be based in scientific knowledge; for example, rules for connecting electrical components that derive from Ohm's law. Others, such as rules for reinforcing a framework construction, may originate in historical and current practice. Structural rules are particularly important, as they support mental modeling of imagined objects in terms of concrete elements. The next knowledge type, *technical know-how*, includes tacit and implicit knowledge as well as specific skills of one's practice. This is the knowledge of expertise (Larkin et al., 1980), built up from thorough practice and experience of many, many cases. Schön (1983) refers to this kind of knowledge as "knowing in action" and it includes patterns of action—an engineer's technical repertoire. Knowledge that is tacit, experiential, and embodied is an important component of an engineer's knowledge. It includes an individual's feel for the stuff s/he is dealing with—for example, one's sense of an "inch" or the order of time constant appropriate for modeling a phenomenon (Bucciarelli, 1994). The final type of conceptual knowledge identified by Ropohl is *socio-technical understanding*. This kind of knowledge has begun to transform engineering design, opening it to "systemic knowledge about the relationship between technical objects, the natural environment, and social practice" (Ropohl, 1997, p. 70).

Implications for the Classroom

What do the existence of distinct science and engineering goals and a broad and unique body of engineering knowledge imply for the DS classroom, whose objective is providing an engineering context for understanding science concepts? Some implications follow.

1. It takes more than science knowledge. While engineering knowledge may not be among that targeted for learning, it will come into play, unbeckoned, during the design activity. For example, students will grapple with problems related to construction of their artifacts, attempting to work through their lack of pertinent functional rules, structural rules, or technical know-how. Schauble (2003) illustrated the significance of structural laws when she related how a group of elementary school students were stymied when their LEGO™ [3]-LOGO car would not run: "they very carefully put on wheels and gears and everything they said a car has to have, but none of it was hooked up to anything else. And they were surprised when it didn't go!" If teachers or curriculum developers are unaware of or fail to acknowledge the spectrum of knowledge designing engineers draw on, they may perceive such problems to be diversions from the "real" goal of a contextualized understanding of science concepts.

2. Science knowledge may need to be reworked to be relevant to design tasks. Knowledge in a form used or developed in science is not always directly transferable to engineering; students may need to be guided in working at different levels of abstraction; moreover, they may require engineering references in addition to science resources. Vincenti (1990) gives a detailed account of a theoretical tool in engineering design, control-volume analysis, a concept notably absent in textbooks on thermodynamics for physicists, but spoken of frequently in engineering texts. Control-volume analysis enables engineers to "obtain results in physical problems from just a knowledge of the boundary conditions" (p. 116) in problems that are so complex the underlying physics is not understood or equations to describe the behavior are not practically solvable. Although middle-schoolers may not be faced with design tasks requiring knowledge this advanced, it remains that engineering often requires science knowledge be reworked to be relevant; thus, to

accomplish their design tasks, students may require access to (or guidance in generating) engineering-specific knowledge in the form of appropriate technological laws and structural rules.

3. When learning *science* concepts is a desired outcome of the design activity, the need for the science may have to be created or made explicit in the curriculum. This is the area where most scaffolding is currently directed—pushing students to explain behavior in science terms. Because the test of engineering success is "does it work?" rather than "can you explain how it works?" engineering tasks can often be successful without understanding the cause-and-effect (the science) of an artifact's behavior. Davidson, Evens, & McCormick (1998) describe middle-school students who designed and made a money collection box sporting a mechanical woodpecker that pecked away at a tree trunk in response to a coin being dropped in the slot. Although multiple science concepts were embedded in the activity (including force, momentum, and pendulums), the students were able to realize their design through trial and error and without drawing on these science concepts. Layton

(1993) differentiates between *essential* science knowledge, required for successful outcome of the task, and *useful* knowledge, which facilitates achievement of the design goal. More scaffolding will be necessary when the science is useful but not essential to the design task.

These issues point to potential sites of tension that I will investigate in the DS activity system. I posit taking an epistemological view that recognizes differences between science and engineering goals and knowledge will help uncover difficulties students face beyond linking their designs to science concepts. To fully recognize the challenges we are setting for students and to build better bridges between science and design in the classroom requires that we more fully acknowledge in the curriculum, similarities as well as distinctions between science and engineering. It is no easy task we are asking of students—as W. J. M. Rankine, a 19th century engineer and scholar, put it in *The Science of Engineering*, "the application of these [scientific] principles to practice is an art in itself" (cited by Layton, 1993, p. 76).

Coda

This paper comprises the introductory chapter to my doctoral research study, a work in the proposal stage. I invite you to contact me during the coming year if you are interested in learning the outcome of this proposed work.

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Endnotes

1   I use the name Design for Science, or DS, as a generic name for such curricula.

2   In contrast to the other standards, the National Research Council [NRC] science standards only deal with technology as it relates to and interacts with science, not covering it as a field for study itself.

3   The ™ symbol identifies a name or acronym as being protected by a "trademark," thereby making it a distinctive name for a specific product. Trademarks are usually registered and protected by law.

epistmé
techné
phronesis

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Phronesis – on teachers' knowing in practice

Towards teaching as embodied moral

J. Ola Lindberg och Anders D. Olofsson

Abstract

This article concerns a possible way to understand the concept of teaching. It begins with an elaboration on three different aspects of knowledge with roots in ancient Greece; epistmé, techné and phronesis. Thereafter some traditions and lines of development in research on teaching over the last thirty years are presented. It is shown that phronesis still seems to be a useful concept when trying to understand teaching and teachers' knowing in practice. In an attempt to go beyond the Cartesian dualism of subject and object, phronesis is then described within a philosophical hermeneutical approach. The conclusion points towards a possibility to understand teaching and teachers' knowing in practice as embodied moral.

Introduction

What is this thing called teaching? The question has engaged educational researchers over the years and the answers given seem from time to time to be as many as the approaches used. Teaching has been scrutinised from various theoretical perspectives and research findings have fairly often been complied with the Swedish state, and later implemented in educational settings like the compulsory school and the university. Teachers in educational institutions have, so to say, walked hand in hand with the researchers, and teaching influenced by behaviourism or constructivism is just two of many examples.

The way teaching has been understood historically, or in other words, teachers' knowing in practice, seems to be more of a non-linear process. The meanings invested in the concept of teaching have undergone a rather extensive development and it does not appear to be a very controversial claim that the winds of change are blowing relatively often within education. A thing in common though, is that the understanding of (and sometimes also notions of good)

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teaching has differed quite a lot. What makes it interesting is that scientific knowledge built around teaching have made the concept more complex and not, which is tempting to believe, easier to understand. There seems to be more to understand about this thing called teaching and our aim in this article is to build an understanding of teaching as an activity permeated by moral. The understanding is based on a philosophical hermeneutical approach.

On the concept of knowledge – a short root tale from Greece...

As so often a good story begins in ancient Greece, and in that regard our story of teaching is no exception. The Greeks considered knowledge about the world to be dividable in several different parts; all connected to different aspect of life (see for example Aristotle, 1980; Carr, 2004; Gadamer, 1989; Kemmis, 2004). They used *epistemé* to denote theoretical and scientific knowledge. For technical knowledge and know-how their term was *techné*. And finally for matters with moral implications concerning the practical life within the polis they used *phronesis*. Based on Aristotle's (1980) writings we first intend to give a short description of these concepts, and then elaborate more on the different possible definitions and aspects of *phronesis*.

In the Greek philosophy *epistemé* denotes what is scientifically true; the kind of knowledge that is built upon logical and analytical arguments and that one can secure and argue for with reason. *Epistemé* is the knowledge of the theoretical sphere, which is universal, non-contextual, eternal and lasting. Epistemic knowledge is possible to communicate to other people through teaching (see for example Saugstad, 2002).

Techné is the knowledge associated with acting and making, the knowledge about how things can be done. *Techné* is supposedly about craft and art, and could be said to answer the question of how to do certain things. A person with *techné* can understand the guiding principles behind how something should be done but is not able to apply these principles in a particular context without experience and training. *Techné* is experienced based and must be learnt through practice (see for example Saugstad, 2002).

Finally, *phronesis* is the knowledge closest to the concept of wisdom[1]. It has both practical and moral implications, and is often practiced rather than possessed. *Phronesis* as knowledge is concerned with those aspects of life that can be seen as uncertain and always open to dif-

ferent possibilities. *Phronesis* could thereby be regarded as the moral considerations in doing, the wise aspect of actions chosen.

… with a more elaborated account of phronesis

Phronesis as a concept is an integral part of Aristotle's theory of ethics. Aristotle saw in the exercise of *phronesis* a way of recognizing what is "good" for humans (Noel, 1999). *Phronesis* is, in an Aristotelian perspective, the knowledge of practicing moral, knowledge with ethical implications. Aristotle (1980) defined *phronesis* as:

> *…practical wisdom cannot be scientific knowledge or art; not science because that which can be done is capable of being otherwise, not art because action and making are different kinds of thing. The remaining alternative, then, is that it is a true and reasoned state of capacity to act with regard to the things that are good or bad for man.* (Aristotle, 1980: 142, Ross translation).

As a contrast to knowledge as *epistemé* and *techné*, *phronesis* can neither be planned for nor learnt through for example teaching. *Phronesis* is understood as the rational guiding human action and as a link between the universal and the particular (Bernstein, 1983).

There are different opinions whether *techné* and *phronesis* can be separated as clearly different aspects of knowledge or if they should be treated as somehow intwined with each other. In the view of Dunne (1993), both forms of knowledge are pointed toward the practical life. However, there are aspects of *techné* and *phronesis* that seem to set them apart. Eisner (2002) for example, is of the opinion that *phronesis* cannot be taught but is acquired through experience. Since experience takes time, so does developing knowledge as *phronesis*. Dunne's view is that *phronesis* is expressed in action and therefore cannot be forgotten, which points towards *phronesis* as a kind of knowledge that is:

> *…an excellence and not a species of knowledge, but another kind of cognition…But equally we may see it the other way: that genuine phronesis is absorbed into action – action as an ineluctable movement that a person can never step out of…Each new act arises within the terrestrial magnetism of our past acts, which lie sedimented in our habits.* (Dunne, 1993: 268).

Knowledge sedimented in the body as contrast to knowledge being part of cognition is in accordance with the way Merleau-Ponty (1962) treats knowledge as embodied. *Phrone-*

sis could therefore be expressed in the actions of humans as a disposition for acting in a morally good way.

Action and practice

To enable us to further discuss knowledge and actions, especially in relation to concepts such as practice or praxis, there are several distinctions that need clarification. Bernstein (1971) shows how difficult the distinction between action and praxis is, and how practice in some cases even could be a synonym to praxis. Here, and in relation to the argumentation of teaching as embodied moral, we intend to briefly clarify the use we make of them by emphasising that our use is within an (neo-) Aristotelian tradition.

It would for instance be possible to further elaborate on the possibility to use practice and its cognate practical in different ways. Practical could be used in a high or low sense, as Bernstein (1971) suggests, where practical could refer to the role of the practical in human lives, of praxis as Aristotle signified the free activity in the polis. The contrast is the more mundane use of practical, as something opposed to the theoretical or intellectual aspects of life. If the use of practice is closer to Aristotle's use of praxis, then teaching as a practice is something different than the practice of teaching.

Definitions of practice in relation to teaching have varied from time to time and been dependent on the assumptions made in each particular case (Dunne, 2003; McIntyre & Dunne, 2002).

To act in relation to a pedagogical practice has been an important research object for the last thirty years (Noel, 1993). To weave the academically and theoretically held notions of teaching together with the more practical work exercised by practicing teachers has been a central focus in the development of a more academic view of teaching during the late 20th century and in the beginning of the 21th century. An important question in this development has been what should be understood with reference to the concepts of theory and practice (Saugstad, 2002), and whether the starting point of research on teaching ought to be theory or praxis. For that reason we have found it purposeful to present a short description and deliberation of the view of teaching within traditional educational research, to provide an account of how different forms of research about teaching have come to understand and explain, in one way or another, teaching.

Research on teaching – some traditions and lines of development

Arfwedsson (1994) describes three different lines of research on teaching. They hold different views of teaching, and therefore provide different possible understandings of teachers' work and teaching. The first line of research focused on teacher behaviour and was aimed to describe effective teaching. The second was directed on the process of teacher socialisation. It answered questions about teaching and actions in practice related to the teacher's background and prior experiences. The third and last one highlighted teachers thinking processes and their actions in practice. The assumption was that teachers reflect upon actions different in different situations depending on the demands of the situation and the purpose of the actions. This last way of understanding has been dominant from the latter part of the 1980's up until today.

Research on teachers' reflection in action is built on Donald Schön (1983) and his concept of the reflective practitioner. Schön separates, in his perspective on reflection, *reflection – in – action* and *reflection – on – action*. Reflection in and on action implies an understanding for actions in relation to practice that differs from a view of actions as controlled or guided by a technical rationality.

Within the so-called reflective thinking tradition, Noel (1993) has identified three different research lines on how understanding the practical is conceptualised. Building on Noel's description, one possible account of the development of research on teacher thinking is given here. Common in these views is the aim to examine and understand, in varying degree, what teachers know and how they think, rather then to identify how they act or behave.

The first research line referred to is Schwab (1978), *the practical*. This line has explicitly normative tendencies and the research results are to be seen as guides to improve the possibilities for teachers to make good decisions when planning and acting. Research is about validating different solutions to practical problems and describing the consequences certain actions could have on teaching. Each individual has her or his own way of understanding what is to be seen as a good practical action. The research must therefore focus on the unique and particular. It is the teachers' own understanding of their actions that are the most interesting. Theory is therefore, in a way, secondary to the practical deliberations behind actions within every unique situation.

A second research line then emerged and can be denoted the definition of teachers knowledge as

personal practical knowledge (Noel, 1993). Elbaz (1983) discussed the practical in terms of a practical knowledge. By this it is meant that teachers have vast personal knowledge of teaching, and these are the result of the interactions teachers have with others in practice. By focusing more explicitly on teachers' personal knowledge, thoughts about personal practical knowledge were further developed by Clandinin & Connelly (1988; 1995). The assumption was that teachers, either consciously or unconsciously, had gained experiences which were expressed in the teaching situations. Knowledge was seen as a product, in the sense of special knowledge held by practitioners (teachers), and influenced by the practitioners' (teachers') personal backgrounds and teaching environment. Within this research line, there is not as much attention put on teachers' use of knowledge as attention put on the development of teachers personal knowledge. Over the last years, within this tradition, there has been more interest shown to the stories teachers live by (Clandinin & Connelly, 1999; Clandinin, 2002).

The latest line is highlighting how teachers make use of practical knowledge described as *phronesis* (e.g. Noel, 1999a). This line is denoted practical reasoning by Noel (1999a), because it puts the process of reasoning ahead of action. Research is here aimed at examining what personal aspects of the teacher (e.g. feelings, experiences, intentions etc) can be said to underlie actions taken by teachers when teaching. Assumed is, that in the practical reasoning that precedes actions moral is included. All actions can therefore not be said to be defendable for a teacher to take, because of the underlying dimension of morality that is present ahead of action.

Teaching – some specific views focusing on moral

Within the two first lines of research, the practical and personal practical knowledge, the individual as a subject is central (Noel, 1993, 1999a). Actions in relation to practice are seen as being part of aspects of the teacher, for example the teachers' ability to cope with a specific situation with or without an understanding of the underlying theories on actions in practice or morally defendable actions.

Fenstermacher (2001) uses *manner* as a concept to denote the teacher's role as being virtuous and thereby fostering moral and intellectual developments of her or his pupils. The importance of moral and *manner* is described as:

…the manner of the teacher is paramount if the teacher is to be successful in cultivating the moral and intellectual virtues of the students. In this case, manner is defined as conduct expressive of disposition or traits of character that fall into a category of moral goods known as virtues. (Fenstermacher, 2001: 640).

Fenstermacher identifies and describes a number of methods or actions teachers could deploy when using their teaching as a means to develop a morally "good" behaviour in their students. It appears, though, as a problem for Fenstermacher that manner is very close to the concept of modelling itself, and that the methods described are hard to see as separate parts. What Fenstermacher seems to conclude, is that different teachers use the methods in different ways. The teachers' own moral point of view, as well as their intellectual capacity, make a difference in their success using the methods. Manner seems to engulf the methods as a whole, and to what extent the teachers need to be themselves moral examples require more attention.

Taking a step towards a situational view, van Manen (1982a) stresses the importance of always striving for the good in action, something that is possible through what he calls *pedagogical*

wisdom. Pedagogical wisdom is a concept in which what he calls *pedagogical tact*, is incorporated. According to van Manen (1982a), the pedagogical wisdom is embodied (Merleau-Ponty, 1962) in such a way that we orient ourselves towards the situation experienced and that we act in line with the pedagogical tact. The situation demands us to act in a specific way and it is impossible in advance to decide what will be demanded. This can be expressed in terms of:

It may be more appropriate to say that pedagogy chooses us. It chooses us when it calls upon us to make it our calling. And so when we hear the calling, our hearing may occur to us as a choosing. (van Manen, 1982b: 289).

In other words, something that is not possible to learn as a method or a technique. The pedagogical skill seems possible to understand as a consequence of a teacher's sense of tact. (van Manen, 1991).

van Manen & Li (2002) has further developed this understanding of action to also incorporate the concept *pathic*. Accordingly, *pathic* denotes a feeling of existence, which is possible to characterise as an implicit and vague feeling of understanding in a situation, difficult to verbalise. A feeling that is pathic is always present but neither

cognitive nor part of essentially human quali-ties. It is rather relational, contextual, embod-ied and temporal. A feeling of what you have to do, right here, right now.

Noel (1999b) has, also with reference to *phro-nesis*, discussed a similar idea. Noel connects *phronesis* with another Aristotelian concept, namely *phantasia*. According to Noel, *phanta-sia* is important and connected to *phronesis* as it comes into play even before, for example, a teacher acts in a classroom. The teacher projects, as *phantasia*, mental images of possibilities to act and of what is a good end. In other words; through *phantasia* the teacher should consider both how to realise an ideal teaching and the possibilities and constraints for doing so. Noel (1999b) expresses it as:

> …both the producing of images and the in-terpreting and comparing of possibilities. The interpretive sense of phantasia is especi-ally important at this point, where we have multiple possibilities for the future and we must decide which is the good end to pursue. (Noel, 1999b: 282)

The teachers' images as *phantasia* are thus inter-woven in the action of teaching, and *phronesis* contributes to the possibility of reaching a good end based on interpretation and imagination in the classroom.

Philosophical hermeneutics as an approach to understand teaching

The starting point within a philosophical her-meneutical approach is Heidegger's (1962) con-cept of being (*dasein*). Being is understood as thrown (*geworfen*) into the world, which means that man and world cannot be separated into subject and object. As thrown, man is under-stood as always being part of already existing human relations that makes man and world a relation of culture, history and language. Being is realised in projected possibilities and man is, due to the projected possibilities, therefore always becoming something else. Being-in-the-world as thrown is always being-together (*mit-dasein*) with others.

Gadamer (1989), building on Heidegger's thoughts, adds to the philosophical hermeneuti-cal approach the concepts of tradition, prejudice and effective history. In doing that, Gadamer opens for the possibility to understand man as caught up in historicity. Tradition refers to the influence of the past and the thereby repetition of the past man brings about. Linked to tradition is the concept of prejudice, the already taken for granted aspects of tradition, which makes

understanding possible at all. Understanding is thus always an effect of history, and effective history is the concept used to give an account of man as already part of tradition.

Research founded on a philosophical hermeneutical approach strives to make the hidden prejudices of tradition explicit and thereby, and as far possible, isolate and suspend their validity, whereby a new or different meaning can emerge. Understanding is always seen as being part of an interpretation.

In this approach the researcher has the possibility of going beyond the Cartesian dualism of subject and object (see Bernstein, 1983) or in other words; the dualism of subject and object is invalidated. In the next section we argue for a non-dualistic understanding that challenges some of the scientific assumptions about knowledge and practice in relation to teaching.

Phronesis and action from a philosophical hermeneutical perspective

Starting the discussion in Aristotle's concept phronesis, we presented some lines of development with reference to teaching. With special attention on moral we conclude that teaching can be conceptualised as exercising a form of embodied moral rather than be seen as actions based on subjective and reflective understandings of teaching. Furthermore, teaching is also founded on social and not individual grounds. For our following argument based on a different conception of teaching, the human condition of being as thrown is crucial, as is the idea of an already shared world and the importance of being-together. Being-together emphasises the always present aspects of creating common grounds for existence. As a possible relational and social understanding of these common grounds, their possible origins and the way humans constantly create and recreate themselves as moral aspects of being human, *phronesis* is presented.

The understanding of action (and thereby also teaching) we develop here is based on Gadamers interpretation of *phronesis*. *Phronesis* is, according to Gadamer, possible to describe as a kind of knowing directed towards actions or events which expresses itself in an endless variation dependent upon the circumstances. *Phronesis* is said to balance the universal with the particular of action and contributes in this sense to the understanding of the relation between the theoretical and the practical (Gadamer, 1989).

For Gadamer understanding is argumentation and knowledge, as *phronesis*. This means that

phronesis is always interlaced with the application of understanding. Application is a trait of all understanding and interpretation and could therefore not be seen as a part of *phronesis* in which something could be given in advance and then be related to something particular. Application gives understanding a direction as the moral in being, something always present connecting what is understood as theoretical to what is understood as practical. In that way *phronesis* could be seen as the moral disposition in human action.

Implicit in philosophical hermeneutics is a view of action as a consequence of a relational and social being-together. Accordingly, an understanding of action as a rational performance is impossible. This indicates that actions are actions with intentions even though their outcomes are not easily foreseeable. These intentions are brought up when an act is decided by conditions that differ from other conditions. Through the being-together, the act invalidates mans experience of subjectivity. Actions could be taken by man, but not chosen by a rational subject or as expressed by Heidegger (1996): "To define the I ontologically as a subject means to posit it as something always already objectively present" (p 295). Existence is thereby not ascribed the individual (see for example From &

Holmgren, 2002), it is prescribed by the being-together and unceasingly so due to the thrownness of being. This understanding of man's actions is different from one built upon a technical rational (e.g. *techné*). Man cannot plan for a certain way of acting that produces specified and prescribed goals (see for example Dunne, 1993). Man is instead directed towards the things that take place when being-together.

According to Gadamer (1989), a moral being is always included in *phronesis* and thereby also in action. If *phronesis* is looked upon in this way, man acts according to notions of relations of world and knowledge that have meanings in relation to collective understandings of right and wrong. Actions are, however, not always the same. Man acts differently in different situations due to the invested meaning of the current situation. This leaves no room for an individual to act from a pre-specified and well-reasoned plan of action.

We mean that what is understood as an acceptable action is decided according to the being-together. In other words; *phronesis* contains an expression of knowledge as a moral judgement, and acting is always in accordance with what the situation demands. It is a question of judgement (compare Arendt, 1998); something that varies

from one time to another and consequently seems not likely neither to be learnt nor taught as an important knowledge or skill. Judgement is thereby always in connection with the tradition, prejudices, and the effective history. This leads us to an understanding of being-together as demanding an understanding of action as always directed towards something, and that action (and thereby also teaching) always starts in *phronesis*.

Final reflections

From a teacher's point of view, teaching could be seen as actions in relation to practice. For example the teacher could experience teaching as following the intentions one had, and leading to the aims specified (although always close to being unsuccessful) having been met. To use the language of play, the teacher does certain moves and the students respond with countermoves. This is, in line with our earlier arguments, not a part of the teachers' actions in terms of a technical rationality, which enables an exemplary planning and conduct in the teaching situation. Instead we picture the teachers' actions in terms of actions enabled, through *phronesis*, to meet the demands of being-together. This would imply an understanding of teaching in which all of the participants feel a sense of belonging. In other terms; the teachers owe to the actions

being directed by *phronesis* decided by being-together, a feeling of teaching as a flow. This is a move away from the individual (or the subject) as a starting point for understanding teaching towards the social.

What we strive for is an understanding of teaching, which is built on *phronesis* and thereby holds the possibility to describe a *becoming* with origins in the prejudices being handed to man by language and history. Acting based on a sense of judgement, is built on an understanding constituted in the being-together influenced by effective history. This means that an understanding of action, through *phronesis*, is always directed at something within the situation. Further, it is directed in such a way that it always relates to the "morally good" that a situation or in our example, the teaching situation, demands. Through *phronesis*, notions of moral are always present in the actions of man.

As we have tried to show above, both Fenstermacher and Noel emphasise the importance of the situated character of teaching, and that the activities therein are relevant for how the teacher acts. The approach Fenstermacher is using could be seen as an attempt to describe teachers as models. Teachers should act as examples, think about and plan their actions

in as "morally a good way" as possible. In other words – in a good manner. Noel, on the other hand, implies that teachers could, by using *phantasia*, prepare their actions with regard to the demands they face within their practice. Our view is that both Fenstermacher and Noel, although making considerable efforts to acknowledge the situational aspects of teaching as constitutive for action, cannot avoid ending in a theoretical position with regard to teaching with elements of subjectivity. van Manen's (and to some extent also Li's) theoretical assumptions about both *phronesis* and action, and especially about how teaching always involves a pathic dimension, seems to be a step away from Fenstermacher and Noel. What separates van Manen from Fenstermacher and Noel is the explicit emphasis on the relational, temporal, actional and thereby also non-cognitive dimension of teaching. This orientation towards an understanding of teaching as dependent on the being-together is something that is close to our own understanding. The problem, with van Manen's explication is the identification and use of the concept of lifeworld in his possible understanding of the rational of teaching. In other words; the teachers' lived experience seem to create an individual lifeworld which serves as the foundation for *pathic* teaching. This more individually oriented understanding of the moral or pathic

dimensions of teaching, makes it difficult to express a view of teaching as dependent upon relational, contextual and temporal (and thereby also social) aspects. In contrast to, for example van Manen, we instead argue that a way to put all these aspects into play, without any subject oriented models for understanding, is to take the starting point in the being-together.

We claim that our understanding of *phronesis* differs from a view of *phronesis* in which actions are regarded as activities that the individual teacher can plan in advance and thereafter realise and accomplish. The always present, situational and relational, *phronesis,* can be seen as the moral understanding teachers have of *epistemé* and *techné*. And since *epistemé* and *techné* cannot be disregarded when it comes to talking about teaching, this could be somewhat paradoxical. But to infer from there that it is *epistemé* and *techné* as possible forms of knowledge that are normative in relation to teaching would be to miss the point. Teaching is directed and guided by *phronesis*, with a rationality based on an embodied moral and therefore clearly distinguished from a technical rationality. For that reason we argue that teaching as an action is not only constituted by being-together, but in demand of *phronesis*. In short – teaching is closely related to being as embodied moral.

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Endnotes

[1] *Phronesis* is a term with many possible translations. Examples are practical wisdom; practical reasoning, moral discernment (Noel, 1993).

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Tidskrift för lärarutbildning och forskning
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Jones (1987) in a paper on…; Jones (1978c:136) states that; Evidence is given by Smith *et al.* (1984)…; Further exploration of this aspect may be found in many sources (e.g. White, 1981a; Brown & Green, 1982; Jackson, 1983).

7. All works referred to should be set out in alphabetical order of the author's name in a list at the end of the article. They should be given in standard form, as the following examples:

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Genese, F., Tucker, G.R and Lambert, W.E. (1976) Communication skills of children. *Child Development* 46, 1010-14
John, V.P and Horner, V.M. (eds) (1971) *Early childhood Bilingual Education.* New York: Modern Language Association of America.
Jones, W.R. (1959) *Bilingualism and Intelligence.* Cardiff: University of Wales Press.
Karmiloff-Smith, A. (1986) Some fundamental aspects of language development after age five. In P Fletcher and M.Garman (eds) *Language Acquisition:Studies in First Language Development* (2nd edn). Cambridge: Cambridge University Press.

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