MEANING-MAKING IN PRAYER:
A MODEL FOR THE USE OF COLLABORATIVE CONSTRUCTIVIST
TECHNOLOGY FOR SPIRITUAL ENGAGEMENT

Devorah Preiss

This study was an exploratory investigation to demonstrate the efficacy of using digital technology in a constructionist fashion to develop an increased ability to be self-reflective and a mature member of a religious community of practice. Perkins’s (1992) “person-plus” model of distributed cognition was combined with Lave and Wenger’s (1991) theory of Legitimate Peripheral Participation and the philosophy of Heschel to provide the theoretical foundation of this study of meaning-making. In a summer camp, eight twelve-year-old females explored and shared their experiences as members of the modern Orthodox Jewish prayer community of practice. After viewing examples of illustrated sacred texts, pairs of girls collaboratively constructed a multi-modal representation of Jewish liturgy using the computer and a rich surround. They translated the Hebrew text into the vernacular, English, and presented the prayer as a poem. The dyads designed and illustrated the prayer text with color, fonts and images that expressed their negotiated interpretation and meaning. Participants were engaged in conversation with the prayer text, created joint knowledge and distributed meaningful imagetexts. The project was facilitated in
an ambiance consistent with the principles of spiritual education. The analysis of this intervention, named *PrayerLive*, utilized data collection methods including field notes, pre- and post-activity profiles, individual interviews, videotapes of dyadic collaborations and group sessions, as well as the completed multimedia presentations. The findings of this study include a portrait of the modern Orthodox Jewish adolescent female’s liturgical literacy as well as their attitudes and prayer practices. Research indicates that the computer supported collaborative learning (CSCL) when applied to the affective domain, supports meaning-making and increases participation in a community of practice, especially when it engages the feelings of the participant. The cohort reported positive changes in their personal experiences with the prayer text as well as a significant increase in their comprehension and reflection as a result of their participation in *PrayerLive*. The paradigm set forth in this study is a prototype for an interdisciplinary project that both explores a content area while teaching visual literacy, metaphorical thinking and computer skills. The success of the intervention recommends further study and development of technospiritual interventions for spiritual education.
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DEDICATION

I dedicate this thesis to the people who taught me how to pray with love and joy.

To:

My father, Kurt Jacques Preiss, ob’m, a role model for prayer, who loved to sing Jewish worship songs and taught me the awe of heaven. As his only child I learned how to be both a religious son and daughter.

Rabbi Moshe Neuman, the principal of my elementary school, who taught me how to pray with song and sing with joy. Through stories, humor and compassion he intuitively knew how to educate the inner lives of girls.

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Chapter 1

INTRODUCTION

Background

Most adolescents carry more technology on their person today than ever existed in schools 20 years ago. Today’s youth broadcast themselves, utilizing text or voice, from cell phones. They openly share illustrated facets of their life on Facebook, routinely Skype across continents to their faraway friends and access appropriate or inappropriate information, all in the privacy of their palms.

Today’s teenagers are extremely adept at tailoring and producing digital information. Online communities, such as Droidz (www.droidz.org) support the sharing of created works and instruct in the etiquette of critiquing a peer’s work. Their social relationships are networked as a result of Web 2.0. The world in the 21st century is increasing becoming the “global village” that Marshall McCluhan predicted in 1964.

This wonderfully stimulating, interactive reality primarily exists outside the walls of the schools that these youngsters attend. For the most part, schools conduct instruction the same way that they have been for the last five hundred years—in a linear fashion. The teacher is the expert and gatekeeper of knowledge (McClintock, 1997) and it is through these traditional portals that students are expected to access information and perchance, inspiration.

Computers and other forms of digital technology are by and large underutilized in schools today. According to Cuban (2001), computers in schools are
only used in limited ways, primarily to maintain and complement instruction in a
given subject area, usually with word processing or drilling tasks. Rarely are
computers used in an interdisciplinary manner that offers a transformative learning
experience.

   Compared with the flexible, personal and immediate access to knowledge that
may be gained on the Internet, schools, with their proscribed and limited instruction
styles, appear to be stuck in an educational model generated in the Industrial Age.
This cultural/social schism needs to be proactively addressed. A second concern that
dovetails this issue is the political and global reality in which these students live.

   Against the backdrop of the 21st century, with its rich technological
affordances, is the threat of biochemical warfare, random global terrorism, and
student violence. Young people are inundated with popular culture that emphasizes
competition and consumerism (Hess, 1999). There is a widespread sense of insecurity
and a resultant ethos of living for the moment. Families lack the stability or resources
to confront these unknowns, let alone help their children in this day and age feel safe
and secure in their growth and development (Lantieri, 2001).

   External representations of sex and violence in the mass media are ubiquitous
and far outweigh the time allocated to reflecting on one’s inner life. Due to the
“influence of this kind of popular culture in children’s lives, the meaning-making
efforts of many children are undermined long before they get to school” (Carlson-
Paige, 2001).

   Meaning-making is a mechanism through which people endeavor to
understand and deconstruct their world. Frankl (1963), in his book Man’s Search for
Meaning, highlights the importance of meaning-making by defining it as a central activity of human life. Without a sense of purpose, individuals despair and lose hope.

The terms meaning, religion and spirituality are related and yet distinct. Although prayer is a religious ritual it is not necessarily a spiritual activity or a meaningful experience (Brovender, 2005; Heschel, 1954; Greenberg, 2003; Steinsaltz, 1996). Spirituality refers to the individual’s relationship to the sacred and to the discovery of meaning. It is “a search for meaning, for unity, for connectness, for transcendence, for the highest of human potential” (Pargament, 1999, p. 4). Meaning-making for the purpose of this study is defined as an important component of spiritual awareness.

Religion generally relates to an institutionalized practice that involves a divine figure. While institutionalized religion is on the wane interest in spirituality has waxed. “With the beginning of the millennium, academicians have begun a vigorous investigation of the spirituality of children” (p.4). This body of literature, more fully described in the chapter that follows, has ascertained that the majority of children are aware of their spiritual selves (Coles, 1990; Hay & Nye 1998).

Educating children in a manner that addresses their intellect as well as their inner lives and that connects them to knowledge in an experiential, personal way is a pathway to their discovery of meaning. “If our education, and our knowledge itself, become prayerful through and through, we would create a great counter current to the tides of cynicism and violence in this ‘well educated’ society of ours” (Palmer, 1993, p. 13).
There is a paucity of research on both the use of computer-supported collaborative learning (CSCL) in the affective domain (Suthers, 2006) and in the use of technology as a vehicle for educating inner lives (Hay & Nye, 1998). This study is a pioneering effort to explore the synthesis of both these topics. The constructionist (Papert, 1980) intervention, that I have named PrayerLive, is presented in this study as a technospiritual exercise for the increased participation and consequent meaning-making in a community of practice (Lave & Wenger, 1991). Although the study deals with a very specific population and denomination, the approach and findings will be applicable to other populations and disciplines.

Spiritual education involves teaching students about “belonging and connectness, meaning and purpose” (Lantieri, 2001). While Constructionism (Papert, 1980) advocates learning through the construction of an external artifact, “using a cycle of internalization of what is outside, then externalization of what is inside and so on” (Papert, 1980, p. 3). In the collaborative construction of an artifact there is discourse in the construction and in the reflection cycles of the artifact. The discursive negotiation of meaning affects the individual’s mindfulness (Bruner, 1990) and contributes to an intersubjective meaning-making (Stahl, 2004).

The artifacts constructed by the research participants are an adaptation of a traditional component of an established community of practice. A community of practice, as defined by Etienne Wenger (1998), is a communal enterprise that involves mutual engagement and has a shared repertoire of resources and practices. In PrayerLive participants use the symbols of their cultures, secular and spiritual, to
construct meaning and to reflect on their understanding of the world (Mattis, 2002, p. 317).

A recent article in Wired magazine (Pink, 2005) heralds the end of the information age and the coming of the conceptual age. The information age was characterized by the ubiquity of personal computing and the concomitant access to a vast amount of knowledge. The conceptual age will witness digital technology extending into the affective realm of artistry, emotion and empathy. The last ten years have seen a marked increase in publications, conferences and programs that are concerned with the inner life (Pargament, 1999). Many individuals are searching for meaning, or spirituality, that is absent from traditional religious institutions.

Technology and spirituality

“Technology is the Holy Ark of this era” (Kula, 2001). For the Jews in the Biblical era the Ark was at the center of their physical and spiritual lives. Situated in the center of the community’s encampment it contained the moral code, the Ten Commandments, and was the locus of a Divine presence. If the Ark was mishandled, it caused death. Revered it inspired life.

Technology, a centerpiece of contemporary Western culture, is non-linear, collectivist and does succeed in engaging the spirits of many people. The ability of digital technology to reproduce ad infinitum seems almost godlike: its transcendence of boundaries, its equanimous distribution, networking and transparency allow for an unprecedented amount of connections and global awareness. Connections are one of the features of spiritual intelligence (Emmons, 1999; Hay & Nye, 1998).
However, like the Ark modern technology must be approached in the proper way to ensure that its powers are used productively. Users may encounter both the sacred and the profane. The challenge for educators today is to determine how to channel the potential for the positive energy that lies dormant in 21st Century technology.

Numerous techno-spiritual innovations are available on the Internet today. The Internet is rife with sites that address prayer in both religious and spiritual vains (www.beliefnet.com; www.neshamacarlebach.com). For example, users are invited to submit names for prayers, blessings or memorials in a multitude of venues. One can light a cyber candle in the Sisters of the Carmelite order (http://www.gratefulness.org/candles/enter.cfm?l=eng), email a message to the Western Wall in Jerusalem (www.aish.com) or tune into broadcasts of live worship from a synagogue (http://www.emanuelnyc.org/simple.php/wor_broadcast) or from a church (http://thesundaymass.org/video). These Internet innovations welcome participants’ contributions to existing structures. None are constructionist activities that require individuals to reflect on knowledge and construct anew.

Mary Hess (1999), prolific author on the topic of media and religious education, suggests that religious educators embrace the digital culture of the 21st century as a medium for religious development. Mass media, she argues, provides raw materials as well as a landscape for negotiating the creation of meaning and identity.

The primary way in which media education tools are useful within religious education has to do with exploring the ways in which various pedagogical interventions might open up such fledgling encounters with transcendence.
and create viable connections from them to elements of historically grounded religious practice (p. 4).

Noting the absence of religion from mainstream culture, Hess continues, “More than anything, we need to help people re-encounter, re-interpret, or in some cases encounter for the first time, the scriptural – database” (p. 4). Hess’s suggestion of re-interpretation is consistent with the current literature on literacy practice (Gee, 1996; Kress, 1996; Street, 1995), which articulates the need to approach text from a cultural and social perspective.

This study invited students from Orthodox Jewish day schools to participate in a creative constructionist exercise, PrayerLive, designed by the author of this study. Technology, collaboration, and artifacts were utilized with a particular group of young female students to facilitate meaning-making and participation in their prayer community. This was a result of their active engagement with specific Hebrew prayers. Traditional Jewish liturgy was transferred to a contemporary and familiar venue, the digital screen. The students were empowered to reify meaning by decorating, narrating and illustrating the prayer text that they have been reciting by rote since preschool. The value of the technology in the process was to significantly enrich the information environment that the cohort could draw on to inform their reflection and construction.

Judaism has a long continuing hermeneutic tradition as evidenced by the existence of thousands of exegetical books on the classic texts (Brown, 1980). The students of this study forged a link to this ancient tradition by unearthing discovering the personal meaning of sacred texts within the framework of a digital medium that is familiar, creative and practical (Suthers, 2006). Transmediation (Suhr, 1984) or
multimodal representation (NLP, 1996), the process of embodying meaning across multiple sign systems, was the hermeneutic tool that encouraged critical reflection on the words through the interpretation and reconstruction of the text.

**Problem Statement**

Jewish Day Schools throughout the world are charged with educating children in the religious rituals and history of the Jewish people. According to the findings of the United Jewish Communities report, *Jewish Education of Jewish Children* (Kotler-Berkowitz, 2005), Jewish education is the most effective way to combat intermarriage and to battle the waves of assimilation affecting contemporary American Jewry. The latest survey revealed that 47% of Jews marry outside of their faith (NJPS, 2001). As such, educators face the formidable task of delivering instruction that will weld the future links onto the chain of Jewish continuity

*Jewish day schools*

According to the Jewish Education Society of North America as of the year 2000 there are approximately 750 Jewish Day Schools, sometimes called yeshivot, in the United States. The schools’ denominations range from ultra-Orthodox to Reform. In the ultra-Orthodox yeshiva boys and girls are completely separated and there is an emphasis on Jewish subjects. A smaller number of dual curriculum day schools stem from the branches of Conservative and Reform Judaism.

The largest group, 75%, represents the modern Orthodox day school, also called the yeshiva day school. Most of these institutions are co-educational and are committed to a dual curriculum. Although there is a great variety in the intensity of
observance and religious philosophies in all of these day schools, they all share a common history, the classical Jewish texts, and the desire for Jewish continuity.

This study is concerned with prayer in the modern Orthodox day school. All students in these Jewish day schools, from nursery on up, begin their day with the recitation of prayers. For the three-year-old group this means a circle time of about ten minutes. For children approaching adulthood, the bar mitzvah for boys at 13 and for girls the bat mitzvah at 12 (Babylonian Talmud, Niddah, p. 45b) Morning Prayer entails approximately three quarters of an hour. Older children, when they are in school, are required to pray an afternoon service and an evening service, for an additional ten minutes each.

The goal of the day school prayer instruction is long term, to retain members of a community of practice (Clark, 2001, Wachs, 1970; Greenberg, 1938). Another goal, according to Rabbi Adin Steinsaltz, prolific author and the head of a network of educational institutions in Israel, is to produce moral and ethical members of the Jewish community (Steinsaltz, 2000).

A short description of the rituals of Orthodox Jewish prayer practice will illuminate the problems that set this study into motion. According to Orthodox Jewish law, Jews are required to pray a fixed liturgy three times daily preferably with a quorum. Individual prayer is acceptable but does not include prayer items with “extra holiness” such as the public reading of the Torah or the communal recitation of the prayer for a deceased relative.

Yeshiva day school students typically learn about the meaning and procedure of prayer in one or more of the following three ways. 1) They may observe and/or
participate in prayer in their homes: Routine tasks such as eating, waking, going to
sleep etc. all have blessings associated with them. 2) In school and in summer camp
they are required to partake in daily prayers and in that context are occasionally
lectured to about specific prayers. 3) They may attend synagogue on the Sabbath and
holidays. 4) In synagogues pre-bar mitzvah boys are offered small roles in the prayer
services. In addition to the prayers, personal artifacts are required of male Orthodox
Jews to remind them of their commitment to a higher being.

*Gender roles in Orthodox Jewish prayer.* Orthodox males, from the age of
three, wear a garment of ritual fringes (*tzizit*) under their shirts and they are required
to cover their heads at all times. After becoming bar mitzvah boys don phylacteries
(*tefillin*) daily during Morning Prayers. The binding of the leather phylacteries on the
arm and on the head includes forming God’s name on the hand. This costly religious
artifact is a physical symbol of a change in a boy’s religious status, from child to a
full fledged community member, with full participatory rights.
Convening a prayer group in the Orthodox synagogue requires a quorum of ten post-bar-mitzvah men; women are not counted. The public reading of the Torah and the leading of the service is done by a man, in the men’s section. A physical
barrier, a minimum of four feet, segregates the women behind a partition and does not allow for equal access to ritual. The Hebrew language of the prayer book is written in the male gender and the spiritual leaders of almost all of the Orthodox synagogues and the deans of most of the Orthodox day schools are male.

As a result of the bifurcated prayer system in Judaism mentioned above, Orthodox Jewish girls are limited in their opportunities for “legitimate peripheral participation, LPP, the process by which newcomers become part of a community of practice” (Lave & Wenger, 1991, p.29). Young modern Orthodox women do not have the “broad access to mature practice” (Lave & Wenger, 1991, p. 110) that might enable them to develop and to become full-fledged members of the prayer community of practice. The Orthodox woman’s prayer practice, although nestled within the larger Orthodox community of prayer, exists within a vacuum (Nussbacher, 1999).

The target population of this study, 11 and 12 year old girls, who attend modern Orthodox Jewish day school, as aforementioned, have had prayer as an integral part of their childhood. At age 12, these girls commonly celebrate a rite of passage that
legally marks their entrance as full-fledged adult members into the Jewish community (Babylonian Talmud Niddah, p. 45b). The bat mitzvah for girls is not viewed as compulsory as is a bar mitzvah for boys. Furthermore, membership in the adult community for girls does not include an artifact, like phylacteries, to mark this religious maturation. Opportunities for participation in the prayer community remain as before. The only relevant and personal prayer artifact that they have is the one that accompanied them from first grade, the prayer book.

Prayer education. Jewish Day Schools, or Yeshivot, “are successful in teaching their students the mechanics of praying in the vernacular and in inculcating the habit of daily prayer” (Steinsaltz, 1996, p. 80). This is a significant achievement and meets the long term goal of training members of a community or practice. However, the education fails to provide students with tools that will enable them to make prayer personally meaningful and spiritual (Brovender, 2001; Steinsaltz, 1996). It is “high time to acknowledge that the expectation among educators and teachers that mere performance would lead to internalization, and recitation in the course of time to devotion, has not generally been fulfilled” (Simon, 1996, p. 190). The obligation for prayer is technically fulfilled but the spirit is absent.

The author of this study spent years as a participant observer, in adolescent prayer groups in both an elementary modern Orthodox day school and summer camp. Personal observations from those experiences mirror the findings of the scholars mentioned above. Many of the males, over the age of 13, who don phylacteries and are allowed to lead the services, stand prominently in the front and appear very involved. Boys under the age of 13 and most of the girls, on the periphery of the
action, are constantly being admonished by the patrolling educators to “stop fooling around and daven (pray).” Other educators describe the scene. “There is a constant flow of students exiting and entering and there is much conversation” (Finkelman, 2001).

An administrator who oversees the junior high prayer service, in the modern Orthodox day school that I observed, stated “The kids feel disconnected to the process. They have learned prayers by rote and now that they are growing up they are starting to think about what it means. It’s a real challenge to make it work.” (Drelich, personal interview, 2003) A female teacher who participates in this daily prayer service observes: “The young women are not optimally engaged in prayer, and as a result their spiritual development becomes arrested” (Fredman, personal interview 2005).

In addition to their change in religious status girls at age 12 are transitioning developmentally into the “formal operational thinking” stage of cognitive development (Piaget, 1932). In this phase students’ intellectual prowess expands to include the ability to think abstractly. They are able to solve hypothetical problems, which involve complex operations. For a given condition they are capable of generating a variety of possibilities. This shift in thinking is accompanied by a new search for meaning as well as a concern for the self vis-à-vis the world.

Fowler’s (1981) eight stages of faith development piggyback on Piaget’s cognitive model. During adolescence the “Synthetic-Conventional Faith” stage may begin. The individual, newly endowed with abstract reasoning, grapples with questions of meaning and patterns in one’s life.
The emergent capacity of this stage is the forming of a personal myth—the myth of one's own becoming in identity and faith, incorporating one's past and anticipated future in an image of the ultimate environment unified by characteristics of personality (p. 107).

While her cognitive abilities and physical body matures, the young woman’s religious/spiritual self, bound within the confines of the traditional Orthodox community of prayer practice stagnates.

Mary Pipher (1995), author of *Reviving Ophelia: Saving the Selves of Adolescent Girls*, discusses the impact of this burgeoning awareness in relation to traditional gender roles. She maintains that during adolescence girls oftentimes lose a sense of spirituality and feel disconnected from the practices of their childhood.

While the position of modern Orthodox young women regarding prayer is unique, there is no research to date that focuses on this population. Furthermore, none of the curricula or methods that have been generated to inculcate the skills of prayer specifically address the intellectual, social and cultural context or needs of the female gender.

This study acknowledges the particular conundrum of the modern Orthodox female’s relationship to the prayer community of practice. It provides an intervention, for young female Orthodox adolescents, to prevent a feeling of disenfranchisement that may result from their changed cognitive and religious status.

*Description of Study*

In a rural camp setting, during summer vacation, eight girls who agreed to participate in the study, met with one another and me to explore and potentially enhance their participation in prayer. After initial meetings to discuss the nature of
prayer text and how one might interpret the liturgy, the participants were randomly assigned into pairs.

They were assigned the task of collaboratively reconstructing a blessing from the Eighteen Blessing Prayer, the lynchpin of every Jewish worship service. Each dyad was instructed to complete the task of translating the prayer from Hebrew to the vernacular, of writing the prayer text as a poem and of designing and executing an illustrated PowerPoint (PPT) presentation, which epitomized a non-literal, personal interpretation of the blessing.

I observed the participants throughout this project and recorded both field notes and videotapes of their collaboration, as well as of the introductory and evaluative sessions. Video recordings, field notes, pre and post activity profiles, personal interviews and the completed multi-media projects provided the data for this study to address the question of how CSCL, as a technospiritual intervention might be an effective methodology for meaning-making and increased participation in a community of practice.

The research questions investigated here were:

How does the meaning-making activity contribute to the adolescent Jewish girl’s literacy and practice of the prayer through a project intended to enhance the relationship with the liturgical text?

- How do these students collaborate with each other and the ancient text on the computer and the internet?

- How does the multi-representation of the content of Jewish prayer contribute to their engagement during prayer practice?
• How did the computer and Internet facilitate the learning of the prayer text?

Purpose of this Study

The purpose of this exploratory study is to initiate a discussion on the use of computer technology in both formal and informal education as a tool for developing the religious/spiritual personality. In particular, the study addresses how the collaborative construction of meaning, in a hermeneutic design project affects the experiences of adolescent female members of the prayer community.

Although there is much discussion about prayer and Jewish education there is a dearth of research that documents effective practices for the development of the religious and spiritual personality in adolescents (Shapiro, 1999). In addition, the only documented project, to this author’s knowledge, that addresses the compatibility of Constructionism with the affective domain is the identity construction kit, introduced by Marina Bers (1998) that facilitates the exploration of values and identity.

The goals for this study are to:

• Introduce a collaborative constructionist model that utilizes digital technology for an interdisciplinary endeavor in the realm of religion and or spirituality.

• Suggest a curriculum design that demonstrates how using a multiple symbol representation of a sacred text may contribute to meaning-making.

• Explore the integration of the “personplus” as an active agent into the community of practice.
• Provide Orthodox Jewish girls with a creative medium to experience prayer and to facilitate their increased participation in the prayer community of practice.

_Conceptual Framework_

This study is informed by Bers (1998) work on identity construction environments, Perkins (1993) distributed intelligence theory, and by Lave and Wenger’s (1991) Legitimate Peripheral Participation theory. All three paradigms are driven by the belief that learning involves active engagement in a social and cultural context (Vygotsky, 1978). The learner should not be related to as a solitary vessel to be filled with knowledge (Freire, 1998) but rather as a participant in the construction of meaningful knowledge. People, artifacts and tools are part and parcel of the process of learning that is situated in a particular environment.

I will briefly describe each of these contributions to the design of this study at this point and will return to a more comprehensive review in Chapter 2.

_Perkins Person-Plus_

The mature participant in the prayer community possesses multifaceted skills. She must simultaneously master the Hebrew language, attempt to be transcendent, choreograph prayer movements, and learn how to generate enthusiasm for a text that she encounters daily.

According to Perkins’ (1993) theory of distributed thinking and learning, “Complex tasks and concepts are likely to overwhelm the person solo” (p.94). The solution he proposes is to support the individual in her knowledge construction by placing resources outside the individual. “The surround- the immediate physical and
social resource outside the person- participates in cognition not just as a source of input and a receiver of output, but as a vehicle of thought” (p.90). Nestled within this supportive environment the person solo is transformed into a “person plus.” This scaffolded individual has an increased opportunity to execute higher order learning, such as explanation, abstraction and reflection. They are part of a learning system.

_Lave and Wenger LPP_

Lave and Wenger (1991) put forth a theory of situated learning, Legitimate Peripheral Participation (LPP), that “refers to both the development of known skilled identities in practice and to the reproduction and transformation of communities” (1991, p.55). The newcomer may not learn the community’s behaviors simply by reading them in a book or by casually observing how to act. Becoming a member is the direct a result of participating in a social, cultural activity system that they call a community of practice. Newcomers must participate peripherally in “an activity system about which participants share understandings concerning what they are doing and what that means in their life” (p.98). The knowledge of a community of practice is distributed among members of the group, in its artifacts, in its history and in its rituals.

Peripheral participation involves modified activities by persons that have been granted legitimacy, which provide exposure to the real practice. To qualify as peripheral participation, an exercise must meet three criteria; “mutual engagement with other members, to their actions and their negotiation of the enterprise and to the repertoire in use” (Wenger, 1998, p. 100). In this collection of activities, “the curriculum is then the community of practice itself” (p.100)
The theory of distributed cognition (Perkins, 1992) in conjunction with Lave and Wenger’s (1991) LPP theory grounds this study. It provides the rationale for incorporating tools for the purpose of increasing participation in both the social and meaning-making spheres in an under nourished community of practice. A rich technological surround provides the toolkit and the canvas for the personal exploration and expression necessary for participations birth mature membership in a community of practice.

*Marina Bers*

Based on the writings of Turkle (1995), Bers (1998) suggests that new collaborative digital technologies be employed for the construction of the self and for the transmission of culture. Bers (2000a) innovation is the identity construction environment, which may be framed as an online community of practice. Participants are mutually engaged in a joint enterprise, and they share a repertoire of actions and discourses (Wenger 1998). The environment that involves the construction of an external artifact serves as a powerful idea (Papert, 1980), a community, for the reification of affective knowledge and for reflection on the inner self of identity.

The fragmentation of the self in current post-modernist society, Bers (1998) reasons, may be unified through the use of the narrative. Historically, the narrative or storytelling function in religious traditions served to inculcate its adherents with values and messages of faith. As these stories are not personal and contemporary they lack the power and meaning to make an impact on young people. Discourse is a form of participation.
Bers (1998) model contributes the notion of the shared construction of narrative as a tool for meaning-making. “Narrative serves a constructive function, because it enables, through external dramatizations, to play out our chorus of voices and diverse roles” (1998, p.5). The addition of narrative to the mix of LPP and distributed cognition triangulates the effort of collaborative meaning-making through participation with a rich surround and elements containing thought outside of oneself.

In the following section I recount my lifelong experience of being a member of the Orthodox Jewish community. My experiences as a woman in that prayer community inform this study and impose a bias. They have inspired me to search for a way to make prayer more meaningful and to view my participation from a feminist perspective.

**Personal Journey**

My experiences as an observant Jewish woman began almost at birth. I was born into a family of German refugees, escapees from the Holocaust. My Father, who prayed three times a day, never missed a service. I was expected not only to attend synagogue every Saturday, but also to pray before going to bed, as well as before and after eating, and to engage in ritual behavior on holidays and special occasions.

The school I attended as an adolescent reinforced this way of life. Each morning, in my single-sex school, the girls took turns leading prayer. Our principal, a very young man at the time, was filled with enthusiasm and love for prayer. He would frequently usher the girls into the auditorium and
teach us songs from the prayers. Our group felt an incredible spirit, joy, and cohesiveness.

When the students were given the chance to lead the prayers, we would model our principal’s fervor. It was an experience of a community in practice, with opportunities to apprentice. In my mind, the intensity and spirituality of those services stand out as highlights of my elementary school education. In retrospect, I label that time as a significant marker of my spiritual education. The memory of those prayer times has become a benchmark by which I measure the intensity and effectiveness of group prayer. Throughout my adult life, as I continue to pray in the Orthodox tradition and lead groups of women in prayer, I continually seek to replicate the spiritual experience of my youth.

As a child, I proudly accompanied my father, my spiritually aware parent, to synagogue on Saturday mornings. I sat next to him in the men’s section and practiced my love for prayer. These spiritual and happy times were cut short though, for when I was 11 the Rabbi of the synagogue approached me and effectively excommunicated me from the men’s section—where the “action” was. A 12-year-old girl, according to Jewish law, is a woman and therefore, so as not to distract the male worshippers, must be segregated from them.

Now sitting in the women’s section, I observed that most of the women spent little time participating in prayers. Instead, they arrived midway through the service and chatted. In place of prayer shawls worn by
the men, the women sported new outfits and hats for each holiday. When the Torah was ceremoniously carried throughout the synagogue, before and after its reading for community members to touch, the women’s section was excluded. I felt a great loss and resentment behind the partition.

The magic of my elementary school prayer education did not continue when I entered high school. Instead of group prayer, each girl prayed individually. There was no cohesion or feeling of a spiritual community. Not only was it rote and joyless; prayer began to feel like a mandatory chore.

The environment of this high school belied the religious tenets upon which it was founded. This school invested no effort in understanding the teenage mind and culture or relating the religious instruction to its students. The atmosphere was punitive: once when we hung a poster of the rock band Santana on the bulletin board, all of our classes were suspended.

The faculty, and as a result the students, did not present themselves in any way that demonstrated true spiritual awareness or religiosity. Earnestly I struggled to re-interpret the concepts that I learned as a child. I needed to progress beyond the concept I had of God as a man with a long white beard sitting in judgment with a grade book. When I asked my Bible teacher, an elderly man who had survived the Holocaust, for a mature definition of God, he called me an unbeliever. This same Rabbi became impatient with our class one day for speaking to each other and not paying attention to him. He took his Bible and slammed it on the floor.
For me, this became a seminal turning point. The teacher had committed sacrilege. He not only ignored the law of treating a holy book with utmost respect—Orthodox Jews kiss the Bible when it falls even by accident—but he conveyed to us how superficial his own commitment to the subject was. After these incidents, I found it almost impossible to respect this Rabbi and by association, other Rabbis in positions of authority. This theme of insincere, superficial religious affiliation plagued me.

Both the synagogue and the high school I attended offered little inspiration for a woman trained in and sensitive to the joy of prayer. No forum existed to exercise my prayer skills or share my enthusiasm for prayer with other women. I soured on the Jewish religion, as it felt empty and unspiritual. I only passed through the motions of attending prayer services and observing the Sabbath with my family. Left alone to my thoughts, I refused to observe the rituals and became disconnected from my heritage. In part, rock n’ roll and humanism filled this vacuum.

I left the religious high school that I attended after my junior year and enrolled in William Bryant High School in Queens. There, I participated in my first multi-cultural group of friends. From the my small restrictive Jewish world of my childhood, I was now a modern woman, even wearing pants to school. In lieu of the routine religiosity and close-mindedness of my old school, I was now receiving a new perspective on life.

Some of my classmates came from intermarried homes, while others were Jewish or Christian but not observing. Despite the absence of
organized religion, I continually encountered some form of spiritual seeking. Even the lyrics of the songs we listened to advocated a harmonious and just world—it was the “dawning of the age of Aquarius” as the popular hippie musical Hair proclaimed.

A couple of classmates discussed the teachings and practices of Guru Maharaji. They had begun to meditate daily and tried to harness the sparks of divine energy. I joined them at one of their meetings to hear first-hand what this practice entailed. All that I remember from that time was being impressed that the word GOD stood for Generator, Operator, and Destroyer. This concept resonated for me. I finally received the answer to the question I had asked my Bible teacher. Somehow there was now a connection between my formative Jewish practice, rock n’ roll, and God. In retrospect, it seems as though this connection was stronger than I then realized. The new ideas I embraced resonated with the same wisdom Martin Buber and Hasidism taught—that sparks of divinity exist in all things equally for men and women—only these ideas were being taught to me under a different guise.

Concurrent with this spiritual revelation, I read Germaine Greer’s *The Female Eunuch*. As a result of the book and my life experience, I decided to be a proactive feminist and to never change my last name should I get married. When I resumed practicing Judaism years later and I became active in women’s prayer groups, I was happily surprised to encounter a like-minded population.
As a freshman in college, I became very friendly with a young Jewish girl from New York who was a disciple of Swami Sachadandana. She mediated twice daily and was a seeker of truth. She had a spiritual practice that I felt was decidedly more attractive than the religious rituals of my Jewish community. It instructed her to see the beauty in the world and to connect with the divine energy all around her.

The next thread in the tapestry of my development occurred when I spent the weekend with my cousin. On Sabbath afternoon, we studied from one of the Jewish philosophy texts that she had used in Israel. The author, Eliyahu Kitov, viewed the observance of the Torah and its commandments as a vehicle for spiritual enlightenment. The book discussed the difference between the material and spiritual worlds. Its theory proposed much of what I had come to understand as the lynchpin of Eastern religions. Awestruck, I underwent an epiphany. I began to search through the corpus of literature that addressed a spiritual practice within my own religion. Although I had been immersed in the Jewish religion my entire life, it was not until that Sabbath afternoon that I understood how I could be spiritual within its framework.

The summer after my freshman year in college, I chose to be a counselor in Camp Ramah, a Conservative Jewish sleep-away summer camp in northern Wisconsin. I wished to continue exploring the concept of being spiritual within a Jewish framework. The environment of this camp,
sponsored by the Jewish Theological Seminary, was significantly more spiritual than the Orthodox institutions I had previously attended.

On Friday night, as the sun was setting, the entire camp gathered around the lake to usher in the Sabbath with joyous prayer. The remaining prayer services were held in the synagogue, a beautiful wooden building, round and mostly glass, surrounded by green woodland. Nature provided a wonderful backdrop against which to feel the divine presence. More importantly, the services were egalitarian, unlike the Orthodox environment of my youth.

For the first time in my life, I was called to the Torah to receive an honor. Having observed the men in my congregation doing this for so many years, I knew the Torah blessings by heart. Now nothing stood between the Torah and me. It belonged to me as much as it did to my male peers. I was exhilarated—a bird freed from its cage, empowered, no longer banished from the heart of spiritual activity.

The programming at Camp Ramah stressed education and humanistic values. In this setting, I had the good fortune to meet Professor Bezalel Porten from Hebrew University, who introduced me to the concept of prayer as prose. His approach to the ancient text encouraged critical and literary analysis. In his seminars, participants took the long square printed Hebrew pieces of liturgy and rewrote them as poems. I chose my favorite daily prayer that expresses how God gives man his soul each day anew. I saw patterns and rhyme in the text that I had never perceived before. In
addition to understanding the literal meaning of the prayer, I appreciated how the author’s choice of words created drama, emotion, and movement.

Here, too, was an avenue for meaning-making, which I had never internalized as an opportunity to nurture spirituality.

Interacting with and recreating the form of a prayer resonated with me. I found meaning where I had seen none before. I fostered an appreciation for the structure of prayer. The idea that the words of prayer were poetry that could be shifted and recreated stayed with me for a long time. It revolutionized my approach to the liturgy and eventually gave birth to the idea for this study.

The summer at Camp Ramah was seminal to my religious/spiritual development. I chose to rejoin Jewish life while also taking care to create personal spiritual opportunities for myself. I met an unorthodox Orthodox Rabbi, Shlomo Carlebach, who encouraged spiritual striving for both sexes. In his synagogue, I reclaimed the fervor and joy of my prayer in elementary school. This rabbi encouraged my participation as a woman and empowered me to organize separate Torah readings for women within the congregation. In addition, I joined the then-nascent Jewish Women’s Prayer Network in 1975 and have been an active member ever since.

Despite my own success at finding a spiritually fulfilling avenue of prayer within the Orthodox community, as an active member of this community I am an eyewitness to the fact that the predicament in the majority of synagogues and schools remains unchanged from the way it was in my youth. A small group of Orthodox
women are attempting to bring about change. However, the majority of women remain passive, still choosing to arrive late to synagogue in their finery.

Looking back over my personal journey, I feel a need to self-reflect on why it is I am a person with such strong spiritual yearnings. The literature on spirituality is clear that many people who have experienced trauma have higher spiritual intelligence. Trauma includes a spectrum of pain and suffering, such as being ill, losing loved ones or incurring losses in a multitude of ways. I believe that my spiritual hunger is a direct result of being a second-generation Holocaust survivor.

Both my parents were refugees from Germany. In 1938 on the “Night of Broken Glass” my father suffered incarceration in a concentration camp. He remained there for six weeks witnessing the brutal humiliation that the Nazis employed against the Jews. The images of a public hanging, of being hit in the shins with a Nazi’s gun and of how his friend shared a chocolate bar with him seemed to float in the background of his everyday adult life.

My father was released from Buchenwald because his father had the Iron Cross for fighting in World War One. My father disobeyed the rules and accepted a note from a fellow prisoner and brought it back home in his pant’s pocket. This was unbeknownst to my grandmother who quickly sent the pants to the dry cleaner. The dry cleaner called the Gestapo to report the incident. They came to pick up my Father to take him back to Buchenwald. However, it was X’mas eve and there was no one to escort him. Instead of waiting till after the holiday my Father took the visa for Panama, they had
an assortment of visas, and recited a prayer when he crossed into Switzerland.

He had no intention of going to Panama and got off the boat at Ellis Island. There he was thought of as an enemy alien and was imprisoned with a guard standing watch. A few years later he joined the US Army and was forever grateful that the judge at Ellis Island gave him a reprieve.

My mother was forced to immigrate alone to England at age 17, not knowing if and when her parents would join her. When she returned to Frankfurt, for a summer break to work in the Bertha Pappenheim Home for Unwed Mothers, the officials confiscated her passport.

On the “Night of Broken Glass” the Nazis herded everyone on the sprawling Pappenheim campus into one building and set fire to all the surrounding buildings. The terror of not knowing what would ensue is etched in the fabric of my Mother’s soul. And, I often wonder if her anxious demeanor is not in some small measure attributable to that time period.

My maternal grandmother heard that if you had a number to immigrate to America, which they had, then you were able to apply to Britain to request a stay there. This necessitated proving that you had enough money to cover the time period. Fortunately, my grandfather had funds in Switzerland. Thus, the family moved to London and eventually immigrated to New York. Their belongings, on the way to America, were blown up in Rotterdam.

I cannot remember a time not knowing that my family had lost their relatives, wealth, and a sense of security because of Hitler. Always under their existence was a
profound, subtle undercurrent of loss and fear of disaster. Our life in New York paled in comparison to the rich and happy extended family life that existed in prewar Germany. The relatives who survived scattered to all parts of the globe: Australia, South America, and Israel.

The consequences of my parents’ displacement and humiliation had repercussions in my day-to-day life. Survivors of the Holocaust often suffer from post-traumatic stress syndrome. Left untreated, the symptoms linger and are transmitted to their descendants. As a result of my ancestors’ experiences, I believe I inherited a pit in my stomach reserved for the collective pain of the Holocaust. However, I have a fierce determination to find meaning in my life in the face of inexplicable human cruelty.

Frankl (1963), a survivor of Auschwitz and author of *Man’s Search for Meaning* relates how concentration camp prisoners who were able to grasp at shreds of meaning in their lives were more likely to survive than those who were hopeless. If I am afflicted on some small scale by the ghosts that haunt the survivors of the Holocaust, it only makes sense that what redeemed them may be my redemption as well. Frankl’s (1963) theory that the search for meaning is a basic human need is certainly true in my life. And for me prayer is a vehicle to that end.

*Structure of Dissertation*

This thesis is comprised of five chapters. The first chapter provided the background for the study and the perceived need for the research. This was followed by the purpose of the study and the research questions that guided the inquiry. A short
description of the conceptual framework and the theories that ground this study were presented. Lastly, I shared my personal journey as the raison d’etre for this study.

The second chapter is the review of the literature that informed this study. From the bodies of literature on spiritual and prayer education, art its relevance as both a semiotic medium for meaning and for the development of the spirit, and on Constructionism and its permutations I was able to position my vision for the study.

The third chapter recounts the previous iterations of the project and provides the rationale for an action research design. The research participants are introduced as is the setting and opening process of the research.

Chapter four presents the results of the data outlined in the previous chapter in the context of the narrative of the intervention. The final chapter discusses the results and generates conclusions as well as suggestions for future research projects.
CHAPTER 2

REVIEW OF LITERATURE

The literature review began with a search for materials that discussed utilizing constructivist technology to enhance spirituality and/or religious practice. When this specific search yielded no results keywords such as: spirituality, technology, prayer, constructivism, cyber, religion, meaning-making, children’s spirituality, art and meaning were combined to access the relevant material.

Databases including Atla, Eric, Worldcat, and Aleph yielded examples of utilizing media to enhance meaning-making in literature (Whitelaw & Wolf, 2001) to construct identity (Bers 1998, 2000, 2001a, 2001b, 2003) and to increase understanding in prayer (Bloom, 1970; Brown, 1981). The literature addressed the need to educate for spiritual intelligence (Brill, 2005; Goldmintz & Schnall, 2003; Lantieri, 2001; Palmer; 1993) the challenges of contemporary prayer (Brovender, 2001; Heschel, 1954; Steinsaltz, 1996) and theories that advocated utilizing technology constructively (Bers, 1998; Jonassen et al, 1999; Papert, 1980), collaboratively (Damon & Phelps, 1989; Salomon, 1993) and as a tool for distributing cognition (Pea 1993; Perkins 1993).

The rationale and foundation for the design of PrayerrLive is interdisciplinary. Three threads, spiritual education, Jewish Prayer and Constructionism are woven together into the loom of discussion of how best to increase the meaningful participation of novice members of a community of practice through collaborative
technology. Additional resources that address learning and that have been stimulating, such as female literacy practice and collaborative learning will pepper the discussion.

The shifting situation of women in the major monotheistic religions has been an issue since the beginning of the Feminist revolution in the 1960’s. There is a complex literature that addresses the impact of this change, which might be said to be the larger backdrop of this study. However, I have chosen not to include this broader corpus on gender and organized religion as it is not at stake with the specific Jewish Orthodox population of this study.

The first topic, spirituality and the concomitant spiritual education, has gained popularity since the dawning of the 21st century in part as a response to 9/11, the destruction of the World Trade Center by terrorists (Hess, 2005, p. 12). Parker Palmer (1993), a Quaker and prolific writer, is revered as the contemporary master of spiritual education. He and others (Hay & Nye 1998; Lantieri, 2001,) advocate a holistic approach to education that considers the student’s soul as well as his mind. This approach advocates educating the whole child compassionately so that she may live a meaningful life (Palmer, 1993; Steinsaltz, 1996) and conduct herself responsibly and respectfully (Alexander, 2001) in the world.

The literature on constructionist technology (Papert, 1980; Jonassen 1996) and problem based learning (Kolodner et al., 2003), frequently deals with science and math. The success of these prototypes, both in their situating instruction in a real world context as well as in challenging the learner to construct knowledge experientially, inspired me to experiment applying their theoretical underpinnings to
the affective domain. One scholar, Marina Bers (1998, 2000, 2001a, 2008a, 2008b) specifically addresses the use of Constructionism for the development of identity and positive youth development.

Jewish prayer is a subject that has been written about for over a thousand years. Hundreds of books, articles, dissertations, and curricula discuss and advise how to educate for prayer, although no studies confirm the efficacy of a specific model. A paucity of research has been conducted on young adolescents’ prayer in the modern Orthodox Jewish world. To the best of this author’s knowledge there are no studies or curricula that specifically address young female adolescents and their relationship to prayer in this venue. The historical antecedents of Jewish prayer, literature that addresses the centuries old struggle for meaningful prayer (Brovender, 2001; Heschel 1954; Rosenberg, 1996) and several innovative curricula inform this study.

Each of the three topics in this review is positioned to answer a specific question. Spirituality and the human proclivity to search for meaning speak to the why of this study. Why educators might think seriously about implementing pedagogy that instruct students to be cognizant of their impact on and contribution to the world and vice versa. Prayer addresses the what of the study. It is a content area that in its’ purest theoretical construction asks individuals to be reflective, self aware and grateful. Constructionist technology details how to support students in their building of knowledge in a situated, personally meaningful context.
“Human engagement in the world is first and foremost a process of negotiating meaning” (Wenger, 1998, p.3). As meaning is one of the core concepts of spirituality and subsumes the other two topics it will be presented first.

**Spirituality**

The word spirituality has its origins in the Latin, *spiritus*, meaning breath of life (Elkins et al., 1988, p. 11). The creation story in Genesis 1:27, that recounts God breathing the spirit of life into Adam’s nostrils, is the source of this image. Adam and subsequently Eve were fashioned in God’s image (Genesis 2:7). These Biblical passages seem to indicate that humans are endowed with a divine spark and thus have the innate capacity to be spiritual.

There is a body of literature that aims to position spirituality as being hardwired into the brain (Hardy, 1979; Hamer, 2004; Ramachandran, 1998). However, this opus of literature, still largely speculative, is beyond the scope of this study. It is important though to gain an understanding of what is meant by the terms religious and spiritual.

**Religion vs. Spirituality**

Organized religions have historically provided practices and forums that aim to instruct how to cultivate the divinity of the human spirit. An individual that adheres and fulfills the precepts, set out by either Christianity or Judaism for example, is thought to be religious. The term religious, in the traditional sense, subsumes the term spirituality. These two terms spiritual and religious were interchangeable and up until the beginning of the 20th century primarily referred to an institutionalized based faith.
William James (1985), in the *Varieties of Religious Experience*, draws a distinction between the concept of institutional religion and personal religion. He describes religion as “the feelings, acts and experiences of individual men [persons] in their solitude so far as they apprehend themselves to stand in relation to whatever they may consider the divine” (p. 32). The emphasis is on the personal, not communal connection to the sacred.

In contemporary society, James’s definition might be reframed as a definition of spirituality (Erriker & Erriker, 2000; Wolman, 2001). In 1994, the *Diagnostic and Statistical Manual of Mental Disorders* modified its classification of psychological pathology to include two distinct categories for issues of either a religious or spiritual nature. The term spirituality, “is becoming differentiated from religion as an individual expression that speaks to the greatest of our capacities” (Pargament, 1999 p. 4).

For the purposes of this study it is important to note this distinction. Prayer may be viewed as both an institutional ritual and as an independent personal expression. As mentioned in chapter one, institutional prayer while definable as a religious act is not always a spiritual experience.

As the study of spirituality, separate from religion, is in its nascent stages there is no formal agreement on its’ jargon. Scholars attempt to describe this human quality in a tangible way with different appellations such as: Faith (Fowler, 1995) goodness (Alexander, 2001) meaning-making (Frankl, 1962) relational consciousness (Hay & Nye, 1998) spiritual intelligence (Zohar & Marshall, 2000) truthful knowing (Palmer, 1993), existential intelligence (Gardner, 1993), imaginal reality (Tolin,
positive youth development (Bers, 2008b) and wonder (Brovender, 2003; Carlson-Paige, 2001). In this dissertation, this human characteristic will be referred to as spiritual intelligence or SI. The term spiritual intelligence, (Zohar & Marshall, 2000) recently coined, complements the nomenclature of the theory of multiple intelligence (Gardner, 1983) and emotional intelligence (Goleman, 1995).

Richard Wolman (2001), a psychotherapist, faculty member at Harvard Medical School and second generation Holocaust survivor, believes that spirituality needs to be considered and measured as intelligence. In his book, *Thinking with Your Soul* (2001), Wolman suggests that spirituality be studied and examined empirically. He strongly disagrees with Gardner, who years after the initial publication of his multiple intelligences theory in 1983, capitulated that spiritual intelligence, which he terms existential intelligence, is half an intelligence (Gardner, 1999, p. 66).

Wolman (2001) designed and administers the Psycho Matrix Spirituality Inventory or PSI as a counterpoint to the lack of scientific research in the area of spirituality, and to support his position that spirituality is a personal intelligence that may be quantified and described (p. 141). This instrument side steps belief, that is hard to measure, and instead focuses on practice with the goal of identifying a person’s personal profile. Wolman believes that each individual has their unique and idiosyncratic blend of spirituality.

The matrix lists 80 items in seven categories, such as trauma, community, and childhood. Although Wolman has not formally administered his inventory to adolescents (Personal email July 2005) the PSI provides a useful rubric for
elucidating the kinds of behaviors and incidents that might foster spirituality in childhood, adolescence and adulthood.

Criteria for spirituality

Spiritual intelligence is referred to as the tertiary process necessary for “unitive thinking” (Zohar & Marshall, 2000, p. 63). Zohar and Marshall point out that a third system negotiates between serial and associative thinking in language acquisition. Thus it stands to reason, they argue, that a third system interfaces between the intellect and the emotions. “The mind thinks the heart feels and the soul mediates by reframing and recontextualizing our experience” (p. 65). Spiritual intelligence facilitates being able to utilize meaning and values in formulating thoughts and decisions.

Specific criteria exist (Emmons 1999; Zohar & Marshall 2000; Wolman, 2001) that delineate the practical manifestations of a spiritually aware individual. Central to all the definitions is that the person is self aware and transcendent. Transcendence means “going beyond the self, beyond the situation at a given moment” (Zohar & Marshall, 2000, p. 68) as well as connecting to the “community of creation” (Palmer, 1993, p. 13) to a “reality more trustworthy than our egos” (Wolman, 2001, p. 26). Every day occurrences may be imbued with meaning when they are viewed as part of a greater whole (Emmons, 1999).

The SI person behaves virtuously by being grateful and forgiving (Emmons, 1999). She appreciates diversity, is comfortable thinking independently and as a result she does not to succumb to peer pressure, (Lantieri, 2001, p. 18). She performs service to the community as she harbors a sense of vision, accountability, purpose and
compassion (Zohar & Marshall, 2000). In fact, ethical behavior has been strongly linked to spirituality (Hay & Nye, 1998, p. 17).

Saul Wachs, a veteran educator with a particular interest in prayer, in his volume Teenagers, Spirituality and Prayer in the Jewish Community Secondary School (1995) presents the Jewish theologian, Neil Gilman’s definition of spirituality. According to Gilman there are three types of Jewish spirituality; intellectual, behavioral and pietistic. Intellectual refers to learning classic texts, the storehouse of God’s will. Behavioral is the careful performance of mitzvot, (commandments) and the execution of acts of moral and social significance. Pietistic, based on formulations by the philosopher Martin Buber, refers to renewal, the ability for “an ever new articulation and formulation of his feeling, that transcending his conditioned being yet bursting from its very core, there is something that is unconditional” (Buber & Glatzer, 1996).

Scholars, parents, educators and clergy share the vision and hope that children should learn and integrate many of the behaviors described above to enable them to mature into content and productive adults. The intellect alone they argue, limits perception of the grander picture of the universe, as it strives to analyze and break down information into its’ relational parts. “This fragmentation creates a competitive self centered outlook” (Palmer, 1993, p. 11) the antithesis of community. The soul or SI aims to “connect disparate pieces into a meaning laden truthful whole” (p. 13).

Great Britain instituted the Education Reform Act in 1988 that called for promoting the spiritual, moral, cultural, mental and physical development of pupils
(Erricker, 2000; Hay & Nye, 1999) to address the above concerns. The National Curriculum Council (1993) in the United Kingdom delineated spirituality as:

Something fundamental in the human condition which is not necessarily experienced through the physical senses and/or expressed through everyday language. It has to do with the universal search for individual identity - with our responses to challenging experiences such as death, suffering, beauty and encounters with good and evil. It has to do with the search for meaning and purpose in life and for values by which to live.

This broad description encompasses the spectrum of meaning-making, the ultimate questions of human existence and the more mundane questions that face students on a daily basis. For instance, how do students react to news of terrorism? How do they deal with being ostracized by a group of students at school? Why is one parent stricken with cancer and another who seems less righteous allowed to live?

This study focuses on the spiritual aspect of personal meaning-making in the context of participation in a social and cultural community. It also explores how the construction of meaning may be fostered in educational environments. The litmus test of this instruction is whether students will be able to appreciate “the spiritual in the mundane and recognize the divine in the ordinary” (Sokolow, 2005, p. 267).

_Educating for Spirituality_

Rabbi Dr. Steven Glazer (1999), editor of the book _The Heart of Learning_, suggests that spirituality in education “is about intimacy with experience” (p. 2). Palmer (2003) validates this idea with his concept of truthful knowing, his term for spiritual education. The knower and what is known achieve an intimate relationship through the co-participation “in a community of faithful relationships with other persons and creatures and things” (p. 8). It is through this type of education that persons are able to “reclaim the spirit of their original created divine image” (p. 2).
There are various attitudes and strategies as to how one may accomplish the task of nurturing and educating for spiritual intelligence. At the time of the writing of this dissertation there were no research studies that tested the effectiveness of any particular methodology or intervention. In many instances it seems as though advocating for spiritual education is code for school reform.

Lantieri (2001), the author of *Schools with Spirit*, argues that spiritual intelligence should not be learned through curricular units like those being introduced to foster emotional intelligence. Rather, due to the all pervasive nature of spirituality, the school should provide an ambiance with a spiritual tone by incorporating nature, silent time and spontaneity into their existing programs. The single focus of educating only the intellect might be broadened by attending to students’ feelings, by encouraging questions of meaning and through an appreciation for diversity (Lantieri, 2001).

The literature on spiritual education suggests that the teacher is a key player in establishing an educational environment that is meaningful and nurturing. This educator must be aware of her own spiritual journey (Bailey, 2007; Brill, 2007; Kessler, 2007; Palmer, 1993) and be self-actualized enough to be non-judgmental and open hearted. The teacher or facilitator should care more deeply about the affects of the learning on her charges than about completing the academic curriculum. Her responses to classroom situations should be grounded in spontaneity, flexibility and creativity (Barab et al., 2005; Kessler, 2001). A feeling of love should permeate the instructional space.
According to the philosopher and theologian A.J. Heschel, “What we need more than anything else is not textbooks but textpeople [italics from original]. It is the personality of the teacher which is the text that the pupils read; the text that they will never forget” (1985, p. 237). The self-aware, kind teacher may facilitate spiritual education through the use of various pedagogies, tools and subjects.

A variety of non-discursive curricula, such as literature or history, if they are presented with awareness of the ramifications to the inner life of students, may afford opportunities for self-reflection and personal meaning-making (Fisherman, 2006; Goldmintz, 2003). A host of creative endeavors such as writing, drama, computer animation or music provide symbols and metaphors, “language that takes students easily to depths that are otherwise hard to discuss” (Kessler, 2001, p.117). These tools may provide “emotional privacy” and a neutral territory for increasing learning through self-reflection and comparison (Conte, 2001, p.81). Students may refer to the characters in their works that embody or represent personal issues and concerns instead of speaking about themselves directly.

*Aesthetic spirituality*

Wachs (1995) positions the aforementioned activities as belonging to the aesthetic model of spirituality, a subset of the pietistic model. He feels that the aesthetic model has a unique power to affect adolescents. He cites that the arts allow teenagers to transcend the spoken and written word and that for many teenagers musical and artistic intelligence are the most developed part of their brains. This insight is validated by the increasing numbers of teenagers who ubiquitously utilize mp3 players in the course of their daily activities. Wachs (1995) envisions multi-
disciplinary pedagogy that incorporates artistic endeavors as a fruitful approach for spiritual education

Chaim Brovender (2005), a leading contemporary, scholar, Jewish educator and founder of WebYeshiva, posits that literature, and music might also be helpful in teaching the student the skill of “unraveling the human experience, by substantiating that there is “something special’” (http://atid.s467.sureserver.com/art/rcbart1.mp3). Brovender believes that many students are not in touch with their feelings of awe and wonder and consequently have not internalized the concept of something bigger outside of themselves. He advocates instructing students in the vocabulary of feelings, colors, images, and sunsets to enable them to extend beyond the intellect to the “something special.”

Heschel (1954), and Brovender (2005), separately discuss the relationship between art and the spirit. They suggest that the artist’s creative vision fills the vacuum created by a silent God. Heschel asserts that a prerequisite for artistic creation is “experiencing the world in a spiritual fashion” (Heschel, 1954, p. 118). When an artist creates she reproduces the splendor of God’s world in a personally meaningful manner. She interprets the scene, negotiates meaning and reifies her image of God’s beauty in the world. Beauty, which here signifies an artistic representation not an aesthetic judgment, may engender a sense of awe and mystery (Brovender, 2005).

Artwork is the reification of participation (Wenger, 1998). A work of art is relevant to both its creator and to the person viewing it as an “experience of meaning” (p.51). The individual who views an artwork both participates in the artist’s meaning
and at the same time she negotiates her own private meaning. Thus, when a student creates and becomes an artist, if only for a short period of time, she might experience this awe and wonder.

There is a soul space that exists between the artifact and the individual. As such, art works are referred to as “third things” (Palmer, 2001, p. 166) places of formation that mediate between participant and facilitator. The actual materials, media or content are secondary to the message conveyed by the producer and to the message received by the viewer.

The imaginal reality, or the imagination, is what imbues art work and poetry with meaning. Art and poetry do not totally exist without the individual’s soulful participation and interpretation (Trolin, 1986, p. 109). Imagination is the tool that becomes activated in the meaning-making process.

Sokolow (2005) in his article, *Teaching Spirituality in Day Schools and Yeshiva High Schools*, notes that the imaginations of contemporary students have been constricted by the pervasiveness of multi-media in their lives. He suggests combating the numbing effects of television and video by “retrofitting of the imagination through a technique called ‘Guided Imagery’ eduspeak for visualization” (2005, p. 254). This exercise would be a creative work-out where the mind originates and focuses on a visual image with the purpose of arousing or connecting to a sensation. Mental images are the mechanism of cognition (Prinz, 2002)

Sokolow, however, does not report on instances that this exercise yielded the activation of the spiritual spark in any students. Nor does he suggest with which age group, how, what or when exactly in the course of a school day this event may
transpire. He agrees that art as well is an effective medium with which to develop students’ spirituality.

Mitchell’s (1986) philosophy of the image, presented in his book *Iconology*, reinforces Brovender’s (2005) and Heschel’s (1954) notion that art may be spiritually significant. The word idea is traced to the Greek word to see (p.5) and as such supports the theory that consciousness is constructed through “pictorial production, reproduction and representation” (p.16). The Hebrew word for image “*demoot,*” likeness (Genesis 1:26) “is a matter of spiritual similarity” (p.31).

Both Brovender (2005) and Sokolow (2005) bemoan the lack of a robust arts curriculum in the Jewish day school. By positioning the arts as a vehicle for spiritual and/or religious development, they suggest that administrators and educators view art not as an independent extra curricular activity. Rather, the meaning-making component afforded by the creative experience should be linked to may disciplines. The arts should be meaningfully integrated into the general curriculum to unite the knower with the known. Several curricula, presented later in this chapter, propose integrating art to imbue personal meaning into Jewish prayer.

Some scholars, rooted in institutional religion, argue that spirituality cannot be taught as it is a personal experience. However, they maintain that students may be instructed to experience ritual meaningfully and with a positive affect (Bailey, 2007). Krathwohl’s Affective Taxonomy (1964) was applied to the teaching of the Jewish traditions in an effort to imbue students with their affect. Bailey generated the ritual of prayer as an example for this model.
In the first two stages of Kratwohl’s (1964) taxonomy, “getting the student’s attention” and “encouraging a positive response,” Bailey discusses his opinion on prayer practice and frames it as a positive experience to inspire students to share their feelings. In stage three, “developing a commitment to practice,” both Bailey and his students journaled on their prayer practice and noted the content of their supplications. Class and teacher then discussed their findings communally. In stage four, “the conceptualization,” the participants rewrote blessings into their own words. The final stage, “internalization” had no prescription and was projected to follow, as a natural consequence, the other four stages.

In Kratwohl’s (1964) linear model, which is instituted from the top down, students are expected to internalize the affective knowledge at the very end as a natural consequence of the process. In a constructionist model of engagement (Bers, 2001a, 2008; Papert, 1980) or in creative exercises (Conte, 2001; Wachs, 1995) students begin the internalization process as soon as they are working. The second stage in Kratwohl’s model, “Encouraging a positive response,” sounds disingenuous. What about the student who doesn’t feel like being positive? Might she not be inhibited to share feelings in a climate that professes disinterest in hearing complaints (Bailey, p.7).

The heavy involvement of the teacher, as the sage on the stage, runs contrary to the thought that students are more apt to share with their peers than with an adult (Wachs, 1995). This model also does not take into account what people traditionally do not like about institutional religion, that there is an authority figure between them.

Finally, the heavy reliance on a verbal mode of communication precludes exploring the subject using multiple modes and perspectives. Some students don’t participate in class discussions while others may participate too much. Kratwohl’s (1964) framework, generated before the digital age, does not accommodate the theory of multiple intelligences (Gardner, 1983). This simplistic model seems to be out of sync with the post-modernist cultural climate of the 21rst century.

Rewriting the words of the blessings is an approach that has met with success in other venues (Bloom, 1970; Wachs, 1995). Bailey (2007) however, does not detail this aspect of the curriculum with examples of the content or with a description of the participants’ reaction to the exercise.

A more useful and less rigid pedagogical tool, when considering instruction to support SI, is the division of spirituality into four distinct groups of behavior (Brill, 2007). The four experiential categories are as follows. “Thinking: Study; having a sense of a higher purpose of order. Feeling: song and celebration; stories; togetherness. Being: Meditation; silence; ritual. Doing: Self- perfection of character; moments of dedication; submission” (p.12).

The utility of this subdivision is that it provides a rubric for examining existing practices within a school environment and for aligning proposed pedagogy into specific categories. This model also honors the reality that spirituality is an individual construction and as such a menu of interventions should be offered (Goldmintz, 2003).
Technology and spirituality

Digital technology has been suggested by one scholar for the furtherance of education for the spirit. Hess (2005) in her book, *Engaging Technology in Theological Education*, states that digital technology is increasingly being incorporated to further theological study. As an educator, she has successfully created and implemented digital curricula for study of Christian theology.

Although theology is a subset of religion, for the purposes of this study, Hess's (2005) deliberations are relevant in that she has clearly thought through many of the theoretical issues. Due to the paucity of thinkers who combine the fields of spirituality study with digital education Hess’s ideas (1999) are a valuable asset to this discussion.

The design of curricular materials that address matters of the spirit, she says, requires not only factual information, "knowing that" but more importantly "knowing how" (p. 3). Knowing how involves active participation. Hess (1999, p. 100), like Palmer, discounts the "objectivist myth of learning" where knowledge exists outside of the learner and is delivered by the expert. Instead she envisions a model where knowledge or "the great thing" is in the center surrounded by persons, students and teachers alike. This paradigm of learning, where there is equal access to knowledge, and respect among the participants, engenders a dynamic and relational process, like a community.

In the design of technology for faith communities Hess suggests incorporating the last three elements of the Wiggins and McTighe (2001) curriculum model for deep understanding. The first three steps, "explanation, interpretation and application
"are features that are familiar to other educators (Perkins, 1992). The last three, "perspective, empathy and self-knowledge," are the additional ingredients required for a "relational, embodied enterprise" (p. 40) or curriculum. Perspective positions the knowledge as relative within the larger context of the world. Empathy addresses the learner’s emotional response. Self-knowledge includes the personal relevance of the learning and the affect that it precipitates on the self.

The Wiggins and McTighe (2001) is rubric also provides a framework with which to assess the learner's journey. For example, in the category called self knowledge the range in understanding is scaled from innocent, to the highest level, named wise. This type of evaluation does not involve judgment. Its utility is not in the traditional giving of a grade, but rather the assessment if goals are being met or if more intervention is indicated.

Evaluation… should never be used to judge, but should be used developmentally, to guide learners to the experiences and the assistance they need to develop further as members of the community capable of drawing on, and ultimately contributing to, the full range of its resources (NLG, 1996, p. 22).

This benevolent understanding of evaluation is an example of what might be termed school reform in that it resembles the constructive feedback that one might encounter in the workplace.

Collaboration as a Transformative Tool

Collaboration, in situated learning, involves not only persons in the but also the artifacts, the political climate, and the history of the community. Learning is viewed as participation with the other (Lave & Wenger 1991). Practice and the
dissemination of knowledge is apt to change in response to the presence of a newcomer and their experience.

Collaboration, as a pedagogic technique, promotes a sense of community and fosters SI characteristics. Respect and careful, deep listening result from this process oriented learning. Conceptual insight is attained within this model of learning as students feel secure discovering with a peer and they enjoy a high degree of mutuality and equality (Damon & Phelps, 1989). Students express themselves more freely and are more likely to generate explanations without the fear or being labeled wrong by the teacher.

“When the circulation of knowledge among peers is possible, it spreads exceedingly rapidly and effectively” (Lave & Wenger, 1991 p. 93). The dialogic exchanges create learning dynamic that is social and cultural. Peer-to-peer learning is the traditional model of Jewish study.

Collaborative learning as a vehicle for transformation has been a feature of the Jewish tradition since Talmudic times (Holzer, 2006). This dyadic process is called *chevruta*, an Aramaic word, from the Hebrew root meaning friend. The Talmud (Babylonian Talmud, Taanit 7a ) presents a discussion based on the verse “Is not my word like as fire” (Jeremiah 23:29). The interpretation positions fire as not igniting by itself. Likewise, the Talmud posits, words of instruction are only kindled and understood through the dialogue of a pair where there are opportunities for intersubjective challenges and transformation (http://listserv.os.biu.ac.il/cgbin/wa?A2=ind0812&L=MIFGASHIM&P=4659).
Palmer agrees that collaboration provides an avenue for the cultivation of the inner life. “Truth is found as we are obedient to a pluralistic reality, as we engage in that patient process of dialogue, consensus seeking and personal transformation in which all parties subject themselves to the bonds of communal truth” (Palmer, 1993, p. 68).

Palmer calls education that addresses the whole child and that is not competitive and solely rationalist, “prayerful” (p. 10). The analytic skills necessary for learning are complimented by the relational mind set that prayer ideally presents, seeing beyond. Palmer acknowledges the importance of teaching factual information and considers these secular texts sacred as they reveal what may not be seen and make our world transparent. He suggests that this factual information be received as a gift, or as a means, to construct relational meaning from our experience and participation in the world (2003).

In summary, living a religious and/or spiritual life has been shown to promote well being. There are different types of spirituality that might be integrated into an educational setting to promote spiritual activity. Educating the spirit may be achieved using discussion, arts and other disciplines when they are mindfully presented.

The general tenor of the spiritual learning environment is open, personal, non-judgmental and process oriented. The school setting is infused with compassion which replaces brusque right and wrong regurgitive answers. The end result of an education that incorporates and pays attention to SI is the creation of balanced, empathetic, hopeful individuals who positively contribute to society (Hay & Nye, 1998) when negotiating through life.
The concepts of self-awareness, and the desire to connect to a reality larger than oneself is also a goal of the formal Jewish prayer community of practice. The literature on spirituality and that on prayer both address service of the heart. According to Palmer “While my senses discriminate and my mind dissects, my prayer acknowledges and recreates the unity of life” (Palmer, 1993, p.11).

Palmer’s definition of prayer serves as a cultural and universalist bridge into the following section that discusses Jewish prayer as it relates to this study. The historical antecedents of today’s community of practice, the obligatory meaning-making component and women’s community participation are presented. Following the discussion of the philosophy of prayer a number of initiatives for prayer education are reviewed.

Jewish Prayer

Jewish prayer is rooted in a tradition that distributed worship unto a rich social and cultural surround. Artifacts embodied meaning and the genders had equal access in a colorful communal setting.

Before, 410 BCE there were no formal liturgical texts in the Jewish tradition (Maimonidies, 1962 ). Individuals prayed in the language that poured forth from their hearts. The Old Testament records instances of prayer that were uttered in response to events, needs and awareness. For example, Noah (Genesis 8:20) expresses thanksgiving after the flood. Isaac and Rebekkah individually petition for a child (Genesis, 25:21) Jacob acknowledges God after being given the name Israel (Gen 31:54) and the Jews in Egypt communally cry out to God (Exodus 2:23).
In several instances a sacrifice accompanied prayer such as, Cain (Genesis 4:4) and Abraham (Genesis 15). This model of “distributed” prayer, that may be framed as a “person plus” experience (Perkins, 1993) was the prototype for worship in the Tabernacles of the Israelites in the desert (Exodus 26) in Shiloh (Joshua 18) and in the temples in Jerusalem (1 Kings 6:1).

The sacrificial service, simply called the avoda, (work) was administered by the Priests and Levites on behalf of their constituents. In addition to three daily offerings, there was a menu of sacrifices for holidays and personal events (Leviticus, 3: 7) such as thanksgiving, guilt, childbirth and sin (Leviticus, 4:3). Individuals constructed their prayer socially, with an artifact, and under certain conditions they participated by laying their hands on the sacrifice (Leviticus 4:4).

The current mode of formal textual prayer was instituted by 120 sages, the Men of the Great Assembly after the destruction of the First Temple in Jerusalem. Ezra, the spiritual leader at the time, felt that the Jews in the Diaspora were losing their Hebrew literacy and as such needed to have a fixed text to maintain the sense of an established prayer community. The lynchpin of this textual worship is “ha’tefillah” (the prayer) which refers to the Eighteen Blessing Prayer (Weiss, 1990, p.15).

The term avoda that referred to communal prayer, in a rich multimodal surround replete with artifacts and musical accompaniment, was amended to “avoda she’balev” work of the heart (Babylonian Talmud Ta'anit p.2A). The onus for infusing meaning into the fixed text three times a day, six days a week (Sabbath has its’ own special prayers) now resided in the individual’s relationship to the text. The
shift in venue, from the Temple to the local synagogue or home, shrank the opportunities for “reification” and for the social “negotiation of meaning” (Wenger, 1998).

Daniel Gordis (1995), a contemporary Jewish writer and educator, suggests on a positive note that the fixed words enable the community of prayer to participate and to share in a joint conversation. Jews historically were often banished, persecuted and wandering, carried their portable words wherever they dispersed. Books could be burned but words could never be stolen. He and others (Gillman, 1989; Greenberg, 2005) envision the words of the liturgy as emotional and spiritual tools to be accessed by individuals.

The work of the heart or meaning-making component in prayer is mandated in the literature. Maimonides and Judah Halevi (Zlotowitz et al., 1986) argue that without the negotiation of meaning, one has not fulfilled his requirement to pray. “Prayer without kavannah (meaning-making) is like a body without a soul” (Abarbanel & Lederman, 2007). The process of prayer is also framed as collaboration with God in the form of a meditative dialogue (Donin, 1980).

The Rabbis encouraged individuals to read past the text and to formulate their own words in order to add newness to the prayer (Karo & Karasik, 1964). This strategy is consistent with Wenger’s (1998) idea that the production of new patterns into an existing practice creates meaning. Recontextualizing or hybriding texts are techniques espoused by new literacy scholars as well (NLG, 2000) and require higher order thinking skills, such as reflection and critical framing. It is evident by what
follows that cultivating interpretive skills and extending the literacy of a text that one encounters repeatedly is a challenge.

The inherent difficulty of sustaining meaning and concentration in a fixed liturgy is addressed in both medieval (Abarbanel, 2007; Maimonides, 1962) and contemporary literature (Kirzner, 1991; Steinsalz, 2001; Hammer, 1994; Simon, 1996; Kadish, 1997; Brovender, 2001). Scholars observe that the outcome of praying with a static text has been “a ‘leprosy of fluency’ (Buber in Lieber & Harlow, 2001), “a loss of spontaneity of devotion” (Heschel, 1954, p. 65) and a lack of creative thinking. The result in many public prayer venues is that the “words of the prayers have lost much of their power to inspire fervor” (Heschel, 1954, p. 25).

This illness, leprosy of fluency, whereby worshippers read the text cursorily assuming that they have mastered it, plagues the modern Orthodox prayer community of practice. Jews have difficulties relating to prayer and “it is rare for them to pray in the meaningful way that was intended” (Kirzner, 1991, p.18).

Heschel (1954), in his volume *Man’s Quest for God*, and others (Brovender; 2001; Finkelman, 2001; Steinsaltz, 1996; Simon, 1996) declare that contemporary public worship is devoid of the intended intensity and self reflection for which it was designed. “People appear to be mumbling mechanically and finish their prayers so quickly that it appears to preclude any kind of fervor or concentration on content” (Simon, 1996, p.190).

Kadish (1997), in his work, *Kavvana: Directing the Heart in Jewish Prayer*, theorizes that there are three different types of prayer and that within each type *kavannah* (meaning-making) represents something unique. The first category “Simple
Prayer”, Kadish and others (Tur Orach Chaim, 98; Steinsaltz, 2000) define as petitionery prayer, akin to a child asking a parent or a subject soliciting a king to grant him a favor. The expected literacy proficiency is comprehension of the literal meaning.


**Women and prayer**

Women, through out the ages, have participated in male prayer cultures while simultaneously adapting and creating new literacy practices within them. In royal families in the Middle Ages, it was common practice for the Queen to receive an illuminated Book of Hours, a Christian prayer book. The volume traditionally incorporated her name and the names of other family members. The text was then personalized and adapted to specify items for supplication (Manion, 1998).

Special prayer texts for Jewish women called *Techines* were written in the 16th century in Yiddish, the women’s vernacular. The *Techines* were mostly written by women and addressed female concerns in the first person voice, such as the safe return of a traveling husband, long life for a child, and prayers for visiting a cemetery. The tone of these prayers is intimate, practical and emotional (Breger, 1993). The use of these feminine anthologies was widespread in both Western and Eastern Europe and they are still available today. That the women generated their own literacy is
consistent with women of other cultures whose language evolved as a result of participation in a culture (Street, 1995).

Literacy changes in response to cultural needs and societal pressures. In the mid 70’s modern Orthodox women responded to the burgeoning secular feminism by convening and establishing an umbrella organization for single sex prayer groups. While single sex prayer groups had been in existence in single-sex schools for at least 20 years these prayer groups did not read from the Torah (Weiss, 1990). The Torah scroll, as previously mentioned, did not leave the men’s section (Nusbacher, 1999).

As aforementioned Orthodox Jewish practice mandates that men pray three times daily, preferably, in a quorum of ten men (BT, Brachot, pp.33A). Women are obligated to pray only once a day, (BT, Berachot 20A), without a quorum. Due to their exemption from communal prayer women are ineligible to lead prayers publicly in a mixed gender setting (Karo & Karasik, 1964, Shulchan Aruch, 15:4). A partition separates the sexes in the synagogue. Typically, women and girls go to the synagogue only on the Sabbath unless they are in school or summer camp (Nusbacher, 1999).

The history and development of the Jewish feminist movement is beyond the scope of this study. However, the reverberations and consequences of modern Jewish Orthodox feminists, male and female, have brought changes in the culture that is relevant to this study. The most glaring contribution is Jewish scholarship. There is a very marked increase in female access to classics texts, such as the Talmud, which were previously closed to them (El-Or, 2001).

Tamar El-Or (2001), an Israeli anthropologist, conducted a study at a midrasha (post-high school religious seminary) for young women at Bar-Ilan
University. Her investigation, conducted as a participant observer, focused on identity, learning and participation. She applied Lave and Wenger’s (1991) Legitimate Peripheral Participation learning theory as a lens for analyzing the relationship between learning and participation in the modern Orthodox community. This theory she argued attended to the myriad of socio-cultural contexts of the learning and facilitated a critical framework for her study.

Her findings, presented in the book, *Next Year I Will Know More*, point to a positive relationship between learning classic texts and increased opportunities for participation in the culture. Her words describe the twenty – forty year old religious modern Orthodox female so well that they are included verbatim.

Students who seek to broaden the range of their participation in the religious beyond that of their mothers do not want to break out of this world. They want to remain within it but to plumb its depths…The broadening that they have already accomplished and that which they see before them, turn the world of religious practice around, turn its gates and gatekeepers from invisible to visible. The systems that channel the quality and quantity of participation turn from transparent and generally understood into a bare social structure about which questions may be asked (p. 288).

Other Feminist thinkers (Biale, 1984; Raphael, 2005) agree that literacy, deep knowledge and understanding of the classic religious texts provides power within established religious traditions, such as Judaism.

*Jewish Prayer Education*

Jewish Day Schools throughout the world are charged with educating children in the traditions of the Jewish people. Although there is a range in the theology and intensity of observance in these schools, the curricular matter is relatively uniform. Jewish history, Bible, and Hebrew language are content-based subjects that may be taught with methodologies similar to those in secular subjects.
Jewish prayer, however, is not only a subject. Worship is an integral, active part of religious daily practice and a ground for the rest of the education. Prayer is the only subject where the student is called upon to have faith (Steinsaltz, 1996).

For the purposes of this study the literature reviews focuses on how to educate for meaningful Jewish prayer and not prayer for all religions. The review I focuses specifically on those interventions that focus on higher order meaning-making. Material from several of the Jewish denominations are included, as the Orthodox movement has produced the fewest instructional resources. Perhaps the paucity of resources is the result of prayer being viewed as a non-negotiable facet of daily life.

The Jewish educational community has devised many curricula that aim to teach prayers. Although emotional attachment and other affective objectives are listed as part of the goals, phonetics, the order of the service, and the English translation of the liturgy comprise the majority of the material (Greenberg, 1938).

Saul Wachs, in his 1970 dissertation, *An Application of Inquiry Teaching to the Seedur*, scrupulously reviews the teaching guides and curricula that were produced by the Conservative movement up until that point. His analysis concurs with my findings that the focus of prayer pedagogy has been on the mechanics, not on identity or feeling.

Wachs (1970) does site one example of students using technology (markers and paper) to personalize the prayers (p. 66). “Prayer: A Creative Approach” in The Synagogue School Newsletter quotes Mrs. Joel Bloom who was teaching 11th and 12th graders as saying, “Although the traditional service is very familiar to our young people, it exerts neither the emotional nor the intellectual pull to hold them” (Bloom,
1970, p. 4). She executes a project whereby groups of students “reword the prayers to fit their responses to modern problems.” Reporting on the efficacy of the intervention Bloom stated, “I think that they understood the service, as they never had before” (p. 8). Her analysis supports the contention that students, when encouraged to apply higher order thinking to liturgical hermeneutics, may have a transformative experience.

Wach’s later work (1995), which discusses students’ inner lives, as reported earlier in the chapter, appears to integrate and elaborate on the above finding. He recommends several strategies to inspire adolescents in mandatory prayer practice in Jewish Day Schools. Key to all the suggestions is variety, such as providing a menu of types of prayer service and changing the content of the service to focus on different selections of the liturgy. Permitting students at times to pray alone while they are in school, he says, conveys a message of trust and varies the worship experience for the student.

Like others (Bailey, 2007; Bloom, 1970; Weiss, 2001), Wachs reports on the efficacy of having students write their own prayers. Composing prayers that speak to a wide audience and that will withstand the test of time he says enables students' to appreciate the complexity of the task that stood before the authors of the prayer book.

Schools should develop exit skills for prayer. This would lead to the generation of educational objectives for comprehension and prayer geography that would be incorporated into the Judaic studies curriculum. Forums for students to voice their opinions, not only positive as Bailey (2007) suggested, are needed to address prayer issues, including those that are non-academic.
Wachs appears to understand the importance of a spiritual approach to this religious ritual. He never loses sight of the adolescent psyche and he displays empathy toward the oft times mundane chore of praying in school.

Dr. Steven M. Brown, currently a Jewish day school principal, formerly dean of the William Davidson School of Education at the Jewish Theological Seminary, is a seasoned scholar on the topic of educating for Jewish prayer. He is the author of “Higher and Higher: Making Jewish Prayer Part of Us” (1996). Brown demonstrates a keen understanding of the issues facing educators who wish to instruct novice prayer practitioners, such as the need for personal meaning-making and viewing prayer as prose. Although the volume informs this study in myriad ways, that I will detail shortly, it is written specifically for use in a Conservative Judaism setting. The audience of this study possesses a different culture and skill set.

In Brown’s workbook, students conduct a personal needs analysis through a series of exercises and inventories. They are asked to identify their reasons for praying, what part of their daily time is spent doing Jewish things and what values they hold to be important. Brown incorporates materials from Howe’s (1975) values clarification to inform his questionnaires.

Students are asked to identify the roots or history of their personal feelings (p.7). This exercise adds depth and breadth to the pool of life experience from which the student may draw his introspection. Likewise, when teaching the concept of wonder (Heschel, 1954) and gratitude (Wolman, 2001) for God’s world, Brown (1996) elicits the students’ personal thoughts through an open ended writing assignment.
The user is asked to locate his personal concerns in the prayer text. The integration of the self into the prayers sets the stage for personal meaning-making in that it teaches self-reflection, a requisite for level two, Rational or meaningful prayer (Heschel, 1954; Kaddish, 1997; Steinsaltz, 1996).

Brown’s comprehensive treatment provides much resource material for teaching beyond the basic concepts of Jewish prayer into the affective domain. The section on language presents activities for learning what symbols are and elicits the creation of metaphors. There is much scaffolding for skills acquisition and the tone of the workbook is friendly, inviting and non-authoritarian.

In 2001, the Partnership for Excellence in Jewish Education (PEJE), aware that mandated daily prayer is an issue for all Jewish Day Schools, published Noteworthy Practices in Jewish Day School Education Volume Two Tefilah (2001). The featured articles were culled by asking the heads of Jewish Day Schools for submissions as well as following-up on leads from educators with a broad knowledge of the field. The most constructivist practice from this collection is the Loose Leaf Siddur by Brown (2001, p.51).

The Loose Leaf Siddur is utilized in a Conservative summer camp setting, with a diverse age range. It is based on the premise that students will find the prayer book more meaningful if they are initially presented with only minimal liturgical text. The evening before each new prayer is introduced the campers cut out the blessing and add it into the loose leaf. The following morning a special presentation introduces the new prayer theme. Then in their classes the campers study the prayer and add personal expression to the prayer such as a drawing or an article, scrap book
style. At the end of the summer the loose leaf is filled with much of the traditional prayer. The liturgy has been personalized and distributed. The camper is proud of their project and brings the liturgy back home after the summer.

The bucolic camp setting as well as the opportunity to work on the project in different venues throughout the day adds to the robustness of the project. Although Brown does not explicitly discuss the collaborative nature of the project, it appears that there might have been a group dynamic. The campers appear to be engaged in the same project at the same time. In the informal setting of a summer camp it is likely that participants would be sharing their work as they fashion their personal prayer book.

The model of starting out with minimal liturgical text is an accommodation that would not be feasible in the modern Orthodox camp setting. Modern Orthodox campers arrive at camp with the mechanical knowledge base of the prayers from their schools (Steinsaltz, 2001). They are already victims of the “leprosy of fluency” and the religious politics of camp would not allow it (Silverman personal interview November 2008).

The introduction to the PEJE volume lists three, out of the 25 noteworthy practices, as designed to increase meaning-making and foster spirituality. The first article by Laurence Scheindlin (2001), headmaster in a Jewish school and advocate of spiritual education, writes that he wishes the students to experience true “avoda she ba’lev,” worship of the heart when they pray in school. Scheindlin’s objectives are articulated in words, such as “enable children to value their inner lives, enable
children to develop a language for articulation of their objectives, feelings, develop children’s aesthetic sensitivity and interpersonal sensitivity” (p.13).

The essay provides broad strokes for how to achieve the said objective and notes rather cursorily that “each grade has a well defined curriculum and activities notebook” (Scheindlin, 2001, p.13). It is not clear whether Scheindlin (2001) means that the class has one notebook detailing the activities or whether or not each student has their own space to work in. The description of the means for self expression, music, art, drama and “hands on” activities, support the “person plus” model of tools for meaning-making in prayer. However, there is no specific discussion as to how the technology was implemented, and in what kind of setting and with what kind of results. Even one illustration would have helped to clarify the author’s theoretical vision.

Another educator, Barbara Weiss (2001) implemented an alternative practice with students in grades 6-8. Her goal was to give the students a spiritual experience during their normal prayer time. To this end she compiled slides of nature both in Israel and in Ohio and projected them, accompanied by classical music, onto the back wall of the school’s darkened stage.

The students sat very close to the images and were instructed to “put yourself there” and “travel inwardly and find your inner sanctuary” (p.38). The students were instructed to write about their experiences “so that the person who reads your words will be brought to the place that you were” (p.38).

At the next prayer session the student’s read their pieces against the backdrop of the slides. Two examples of the students’ writings are presented. In one of them
the student sees God reflected in nature. In the other piece the student comments on a feeling of being connected to a larger whole. These two examples illustrate the notion of spiritual intelligence of feeling a personal connection to something outside of and larger than oneself. Unlike Scheindlin, Weiss does not enumerate her curricular goals. She also does not describe how she managed to convey the complex and sophisticated idea of “inner sanctuary” to adolescents. However, her methodology is reminiscent of Sokolow (2005), who proposed guided imagery as a means for developed imagination and thus meaning-making skills.

The students after a few sessions were given cameras and film to shoot their own slides. We are not presented with any additional information whether shooting the slides increased the personal meaning-making in the students’ experience. That might have provided valuable information for this study.

Weiss’s project took the place of reciting the daily liturgy, something that would not be acceptable in the Orthodox day school setting of this study. Although the notes indicate that this project was offered for several years as an elective, the reader has no way of knowing what prior experiences, religious or artistic the students have. Or what kind of “cognitive spinoff” (Salomon, 1993), lasting learning there might have been. It is also significant that these prayer sessions were an elective and not mandatory. Perhaps the only participants were those students who were visual learners and comfortable expressing themselves in an artistic mode. Or, maybe they were the students who wished to avoid traditional prayer all together.

However, for the purposes of this study it is encouraging that peers of the study’s target population were responsive to the idea of a spiritual experience,
particularly as a reaction to an image. Furthermore, the samples of original narration to the images such as “the radiant sun, Gods’ heart, always there when we need it,” (p.38) demonstrate that students in this age group possess the ability to develop associative as well as metaphorical thinking. Again, as in the previous noteworthy practice, technology, tools and artifacts are being employed to broaden literacy practice and to deepen prayerful education.

Goldmintz (2007) reports, in the Journal of Educational Leadership, that he projected slides of pre-war synagogues in Europe, in a modern Orthodox Day High School. The goal was to inspire the student worshippers and to connect them to their historical heritage. Visual images to stimulate thought in a prayer space are also exemplified in the ancient Dura synagogue in Damascus.

Visuals carry multi-layered messages (Straten, 1994) and it is important to know what the producer of the image, in this case Goldmintz (2007) intended. One wonders if pre-war Europe indicates a romanticized view of meaningful prayer or does it introduce an element of praying out of guilt. How can the students who are de facto survivors not carry on the traditions of those robbed of the opportunity to do so?

Another intervention aimed at focusing the student’s attention to the meaning of the words is presented in the PEJE volume. Rivkin employed post-it notes in order to scaffold her second and third graders’ focus on the meaning of the 18 Blessings Prayer (2001, p.25). Next to each paragraph of a blessing, the students fastened a post-it with a keyword that they wrote, which described the content of the section.

Rivkin (2001) observed that the children’s attentiveness during prayer increased tremendously. She notes that when the country of Israel was in danger the
students’ added a new post-it and focused on the prayer for peace, inserted their original prayers. This technology is an elementary example of the “person plus.” It might be useful to add additional post-its as the children habituate to the current ones and/or to discuss the outcomes with the children of praying with the keywords.

The three aforementioned noteworthy practices from the PEJE volume conform to the Talmudic injunction of constructing new meaning into prayer. The question I have on all three of the projects and for this study is how long does the newness of a tool last? Does it evolve into something else? At what point does it become necessary to change course and add a different innovation? What is the carry over, “spinoff” (Salomon, 1990) when the participants become mature members of the community of practice? Is there a key ingredient that can be harnessed to infuse new meaning?

Clifford Trolin (1986), the author of *Prayer and the Imagination: A Study of the Shemoneh Esreh*, an unpublished doctoral dissertation, provides a connecting link between spiritual and prayer education. As previously mentioned, activities in the arts, that spring forth from the imagination are thought to be useful vehicles for the exploration and expression of spiritual concerns (Alexander, 2001; Conte, 2001; Sokolow, 2005; Wachs, 1995).

The thrust of Trolin’s argument is that one’s imagination ought to play a critical role in the formation of one’s prayers. He positions the imagination, or the imaginal reality, as existing between spirit and matter and deems it to a part of the soul (p. 52). In the hope of furthering the development of the imaginal reality Trolin
devised a visualization exercise, for each section of the *18 Blessing Prayer* that is presented as a hypothetical intervention.

The engagement of the imagination during prayer, Trolin (1986) argues, is what the Rabbis envisioned when legislating the precept that each person recreate the fixed prayer text anew when they pray (Maimonides, 1962). Through the worshipper's application of this imaginal reality she participates with the meaning and emotion intended by the liturgy's authors. She collaborates with and extends their collective dreams and wishes by hybridization (NLG, 1996) or a re-imagining of the text.

Trolin (1986) is in agreement with the scholars who advocate learning, or interfacing with knowledge in a holistic manner, involving mind and soul (Hess, 2001; Palmer, 1994). Like Palmer and others (NLG, 1996) he faults the scientific revolution for causing people to position meaning outside of themselves and for limiting and standardizing truth claims. The goal is to reclaim aspects of the primitive mind set that imagined the world and thus carried an internalized sense of meaning (p. 23). The individual engages in a spiritual training program through her continued imaginal involvement with the images and the poetry of prayer that ultimately results in the recreation of a self with a higher consciousness (p. 107). This is a specific application of the guided imagery proposed by Sokolow (2005).

In order to possess an imaginal reality, or soul space, the individual must be contemplative (p. 81) and have the correct intention in her heart during prayer (p.126). The performance of a *mitzvah* (commandment, good deed) may also cause the formation of an imaginal environment and develop an empathetic attitude. This
idea corroborates both Jewish thinkers (Wachs, 1995; Bailey, 2007) and secular scholars (Alexander, 2001; Emmons, 1999; Wolman, 2001) who position the meaningful performance of *mitzvot* (service, good deeds) as a pathway to spiritual experience.

Several projects have been presented (Bloom, 1970; Brown, 2001; Weiss, 2001) that document the efficacy of using visual representation to enhance printed liturgical text and to cultivate new meaning-making experiences. The connection between literacy and secular knowledge follows below.

*Utilizing Art to Increase Understanding*

Art was presented, earlier in this chapter, as a potential vehicle for spiritual education and development. In this section, art is presented as a tool for increasing or extending meaning.

The topic of visual representation is broad and may be approached from the vantage points of disciplines as varied as philosophy, semiotics, art history, children’s literature and psychology. For the purposes of this study the discussion will be limited to an investigation of visual representation as a means for exploring and interpreting text.

As a response to the contemporary primacy of digital culture, several scholars view literacy as a composite venture, which extends beyond the traditional definition of comprehending words. Terms such as multimodal meaning-making (NLG, 1996, p. 19), new literacy (Gee, 1996; Street, 1995), and transmediation (Suhor, 1984) suggest that individuals employ a variety of media to extend and comprehend the meaning of the written word.
This study utilizes the construction of images to enhance meaning-making of text within a socio-cultural context. Mitchell’s (1994) understanding of the dynamic participation of the visual image speaks to the appropriateness of fusing a sacred text with a picture. He writes: “Images are not just a particular kind of sign but something like an actor on the historical stage, a presence or character endowed with legendary status, a history that parallels and participates in the stories we tell ourselves” (p.9).

Creating art to enhance the understanding of a literary text is presented by Jessica Whitelaw (2001), a sixth grade reading teacher and Shelby Wolf, Professor of Education at the University of Colorado. They describe the experiences of sixth grade students, who illustrated segments of Lois Lowry’s *The Giver*. The motivation for employing an artistic technique was to encourage students not to rush through the book and to “stand back from the text” and reflect. This parallels the goal of encouraging students’ not to pray by rote but to consider, interpret and reflect on the text more carefully.

The authors’ cite Rosenblatt’s (1978) transactional theory, an aesthetic approach to reading, whereby the individual “focuses on the private as well as the public aspects of meaning” (p. 292). This approach is analogous to the suggestions of both medieval and contemporary rabbis that individuals insert private and spontaneous words into their prayers.

Whitelaw and Wolf (2001) propose a three tiered process for responding artistically to a literary work; envisioning, composing and interpreting. In the envisioning phase the reader comprehends, in a literal way, what the text is saying by drawing on images previously associated for specific words. Composing, the second
and constructive phase, has students author meaning by constructing images from their head onto paper. During the final step, interpreting, participants collaboratively interpret their work as well as the artwork of their peers. This last step brings new images to mind and starts the three-step cycle all over again. The authors reflected that the discourse during the project, not only during the presentations, was a “dynamic and integral part of the creation process” (p.61). The intersubjective meaning-making procedure of this exercise facilitated a closer reading of the text.

Students spent several months reading the book and working on The Giver project. The project began with instruction in the elements of art so that the class would share a common visual language. They trained for the project by first creating a demo based on the design elements that they had learned and wrote an accompanying paragraph to explain their artistic choices.

The students charted the emotional plot of the story on a graph. Several points of the novel were named and then labeled for their emotional value. This checked for comprehension and allowed for a mathematical and logical analysis of the emotional tenor of the prose. This technique might be applied to sacred texts to indicate the feeling expressed in the prayer.

Paper shapes and collage were designed by the students to construct ideas and meaning. The authors remarked that the shapes would often represent more than one concept. For instance, a triangle might represent both a tree and an obstacle in someone’s path. Color was employed to indicate mood and setting. The tactile component of this intervention connected the user to the text in a physical way.
These paper collages that were produced over time needed to be stored and cared for. When sharing their works students relied on the one piece of artwork that was not very large. This might have impeded the class’s viewing, reflection and feedback process. As there was one copy produced by more than one child there was also the issue of ownership at the end of the project.

The introduction of digital technology might have solved some of the technical issues such as the replication and manipulation of the artwork in The Giver project. “One can bridge time and space” (Suthers, 2006, p.326) with the use of the computer. Artwork produced in schools generally deteriorates over time, languishes in a backpack and are lost. Projects saved digitally may be stored in multiple locations and in several formats.

Suthers (2006) advocates the use of Computer-Supported Collaborative Learning to facilitate intersubjective meaning-making, such as the project instituted by Whitelaw and Wolf. He maintains “the collaborative creation of a joint structure is the essence of meaning-making” (p. 321). He suggests designing constructionist technology to act as a “forum” where ideas would be exchanged discussed and analyzed jointly (p.323).

When discussing interventions for meaning- making it is important to note the strengths and weaknesses that each gender possesses. The literature on gender vis a vis collaboration or as regards artistic expression is beyond the scope of this study. However, given that our culture is shifting into the digital age and into what Gee (1999) calls "new capitalism" it is important to assure that "no child left behind"
addresses not only access issues but also how gender differences are accommodated for in computer literacy.

Recent studies demonstrate that girls’ relationship to technology is different than boys (American Association of University Women, 2000). AAUW Commission on Technology, Gender, and Teacher Education co-chair Sherry Turkle writes, “The computer culture has become linked to a characteristically masculine worldview” (p.7). The preponderance of computer games are designed by men and are tailored for male culture, which includes virtual participation in violence and sports. The software does not address the social, creative and dialogic activities that girls are more comfortable with (American Association of University Women, 2000).

*Tech-Savvy, Educating Girls in the Computer Age* (2000), the report prepared by the AAUW Commission, recommends that computer activities for girls should be generated to include opportunities for girls to be designers and producers of technology. The subject matter that they produce should stretch across the curriculum and be multi-disciplinary. In addition the report advocates collaborative work that encourages social interaction, within a constructivist design, and provides with multiple resolutions (AAUW, 2000, p. 36).

The construction kits designed and promulgated by Marina Bers conform to the above criteria. Through her digital environments youngsters are able to design media, to reflect on their selves and to create a community through collaboration. She is one of a few thinkers who are using digital technologies for participatory learning in the affective domain.
**Constructionism**

*Marina Bers*

Constructionism (1980) is an extension of Piaget’s theory of “constructivism,” where knowledge is not pre-packaged by an instructor but rather constructed by the learner. Seymour Papert, the founder of Lego Mindstorms, introduced Constructionism with the Logo Turtle project in the 80’s. His theory is that learning is best accomplished when the learner constructs an external artifact that may be shared with others and then refined. He wrote that the process of constructing a representation of knowledge “leads to a model using a cycle of internalization of what is outside, then externalization of what is inside and so on” (Papert, 1990, p.3). Through reflection, assimilation and abstraction the learner refines her understanding.

Marina Bers, a former student of Seymour Papert and Sherry Turkle of the MIT Media Lab and currently Assistant Professor of Developmental Psychology at Tufts University, has done extensive work on digital environments that combine Constructionism (Papert, 1980) with religion (1998, 2000), culture (2003), identity (2001, 2008), and civic responsibility (2008).

Bers’ paradigm began as the narrative construction kit (2000), and has been renamed Identity Construction Environments ICE (2008). She added the feature of identity construction to the pre-existing concept of the computational construction kit (Papert, 1980; Resnick & Brickman, 1999). Bers’ projects all feature the creation of external artifacts for the purposes of generating reflection, (SAGE, 1999, Con-science, 1999) developing community (Zora, 1999, Kaliedescopes, 2003) and exploring heritage (Con-science 1999, Zora 2008).
Bers’ initial article, co-authored with Rabbi Sergio Bergman “A Constructivist Perspective on Values” (1998) is informed by the Jewish philosophy of A.J. Heschel. Traditional texts, according to Bers and Bergman’s, are not static. They should be considered a “pre-text and con-text” (p.6) that begs interpretation and new meaning from our life experiences.

The authors suggest that in contemporary post-modern society the traditional transmission of culture and identity from one’s family and community is no longer the norm. Learning these rich traditions, which the authors refer to as “values,” should be constructed in a manner that is fitting for a fragmented society metamorphosed by technology. This paradigm of learning one’s familial traditions digitally may be applied to the arena of religious practice, in the post-modernist age that we live in.

The narrative plays a significant role in Bers’ projects performing both “a descriptive and cognitive role in organizing the self into a coherent unity” (1998, p. 5). Individual’s make meaning out of their experience through voicing their narratives (Bruner, 1986). Whether it is through story telling, online portraits of themselves (2003) or avatars (2008), participants in Bers’ projects reveal thoughts about their inner lives and share them in a community. They “talk about and talk within” their practice (Lave & Wenger, 1991 p.109).

While most of Bers’ projects are inter-denominational “Technological Prayers” presented in Robots for Kids (2000) describes a project with a group of parents and children who used the Lego robotics kit to construct Jewish themed
artifacts. This pilot study occurred in a progressive synagogue in Argentina, where co-author Bergman is the Rabbi.

The project-based learning was designed to coincide with the Jewish high holy days. It was implemented, in immersion fashion, over a six day period with a number of fourth and fifth grade children, their teachers, and parents. The group numbered 18. The children were excused from their regular classes and the parents took off from work.

The process of working to create the exteriorizations involved collaboration, journal writing, gallery sessions for sharing and some introductory formal instruction on both the holidays and on the use of robotics. After an initial trial session with a smaller robotic activity, participants designed their projects by trial and error. Each dyad presented the rationale for their finished product to the group. As in the Kolodner (2003) gallery sessions, when the children explained their work to their peers several issues emerged that led the groups to refine their design or to alter the meaning of the artifact.

On the fourth day of the project the children explained their projects at a school open house. Bers relates that the children felt extremely proud of their accomplishments and were extremely competent in explaining the intricacies of the robotics.

The project culmination took place preceding the synagogue’s Friday Night Sabbath service. The cohort composed and distributed a collective prayer that expressed gratitude for being able to participate in the project and appreciation for working with one another. In addition, each group prepared a blessing or wish that
related to their project. Composing a blessing may be viewed as the personal
construction of prayer.

The robotic artifacts were displayed in the vestibule of the participants’
synagogue, the macro community of practice. The above is an example of infusing
an established religious practice, the Friday night service, with an innovative
constructionist meaning-making practice. The technology and the established
community of practice were in a symbiotic relationship.

from the Jewish philosopher and theologian A.J. Heschel’s framing of the Sabbath as
such. Bers explains that the Sabbath provided her with a “powerful object to think
with” (Papert, 1980). She hopes users of the identity construction environments
(ICE) will share the feelings of “self-reflection, creation, creativity, communication
and participation in a community” (2008, p.341) that she experienced upon entering
the synagogue. The transfer of religious sentiment onto a technological practice gives
weight to the premise that technology may harbor and cultivate a spiritual "person
plus" (Perkins, 1992).

Spiritual values such as making meaning of one's life, gratitude, connecting to
others, seeing oneself in the context of a larger reality, and thinking for oneself are
all aspects that have been integrated into Bers ICE's. There have been projects in a
hospital to create community and empathy for its’ teenage dialysis patients (2003), a
forum for a college community’s civic awareness and (2008) positive youth
development (PYD) (2008) with the intent of developing adolescents who are caring,
contribute to society and have moral integrity (p. 148). Bers amended the acronym PYD to PTD, for positive technological development.

Bers ICE, called Zora, has gone through several iterations in response to the content that she wishes to focus on. Users in Zora participate in a virtual community and as such they engage in social behavior, such as chatting or arguing, with their peers. However, they go beyond dialogue in the virtual environment by constructing virtual temples or cities that are populated by interactive objects and characters. Users draw on the vast resources offered by the Internet to express their personal identity. Stories and information, important to the user's message or identity, may be embedded in objects and characters. Thus, the ICE is a showcase for the person-plus (Perkins, 1992) and distributed self (Turkle, 1995) that promotes self reflection and introspection.

Participants of Bers' ICE's are primarily teenagers who may associate values with artifacts in their design of the environment. One such example is a 16 year old female who produced a virtual temple with several traditional Jewish artifacts including a television with a picture of the film "Schindler's List." She associated the value "documentation" to the picture and explained how the film was personally relevant to her family. A fellow user entered her temple. An online chat ensued about the film and then she was invited to visit his Lutheran Temple.

Bers' ICE's do not follow a set curriculum. Rather, through connection and discussion there is resultant action. Users analyze, think and reflect when both when they create their environments and when they negotiate meaning through their social interactions and participation. Bers has not conducted extensive quantitative research
on her products but does on several occasions describe their positive effects on building community, self confidence and identity.

Most of Bers' work has been executed in informal settings such as short term workshops. Her model for technology matches the recommendations of the AAUW Commission. It is inter-disciplinary, open ended, provides social interaction, appeals to both genders and promotes active design.

A second group of designer scholars are creating an environment to facilitate active participation. The content area is global awareness.

*Quest Atlantis*

*Quest Atlantis* (Barab, Thomas, Dodge, Carteaux, & Tuzun, 2005) is a multi-user virtual environment (MUVE) designed to be socially responsive to the continued growth of individuals and communities. The authors position this MUVE, intended for 9-12 year olds to improve the world, at "the intersection of entertainment, education and commitment" (p. 87). Play, challenge and curiosity are all allegedly imbedded in this program that includes both online and offline components such as comic books, board games, quests, a 3-D environment and unit plans.

Special attention was paid to developing a MUVE that would appeal to girls (p. 103). Features such as multiple female role models, narratives, characters and the ability to collect objects were designed to appeal to the female user.

In contrast to Bers' ICE's, *Quest Atlantis* is intended for elementary school use and has been implemented in dozens of sites both in the United States and globally. The authors have undertaken numerous experimental studies, which they brand as
design ethnography, to determine how best to fuse the digital reality of today's student with opportunities for learning in school.

Significant findings on the effectiveness of Quest Atlantis include: Users who participated in Quest Atlantis for many hours at home beyond the academic requirement. Children who constructed their knowledge understood the material better than those who were taught in a traditional model. Individuals developed skills, such as digital photography or writing in response to the MUVE. This, the authors claim, had a transformative impact on the individual’s self-image and lives.

In conclusion, what is most interesting and perhaps groundbreaking is the creators of Quest Atlantis referring to this initiative as a "sociotechnical structure" (p. 86). The combination of these two spheres points to the social construction of learning (Vygotsky, 1978) and that technology may support the creation of caring communities that stretch beyond local borders.

Bers (2008), Barab et al. (2005) and Suthers (2006) state in their articles that the use of constructionist technology for socially meaningful learning is an area of study that is in its infancy. While Bers is more concerned with identity construction, Barab et al. focus on solving community concerns as a context for teaching multi-disciplinary skills. Suthers (2006) concentrates on furthering the theory and study of meaning-making afforded by notational computing.

All parties, who draw inspiration from Lave and Wenger (1991), are interested in harnessing technology as agency for transformation and for increased participation. This is achieved through the use of narrative and by drawing on the
creativity of the users. The self is intimate with experience and the knowers and
known are compassionately united.

The next chapter details the methodology of this study. The documentation
on spiritual activity, as noted earlier, is scant. Part of the difficulty that I faced as the
researcher of an inner process was that there are limited ways to accurately quantify
someone else’s inner processes.
CHAPTER 3

METHODOLOGY

Research Design and Process

Introduction

This exploratory study investigates the collaborative construction of a multimedia interpretation of a prayer selection by modern Orthodox Jewish adolescent girls, and how it affects their literacy in and attitudes toward prayer culture. The objective is to explore methods for improving legitimate peripheral participation (Lave & Wenger, 1991) in their prayer community of practice by positioning the female student community member as a “person plus” (Perkins, 1993) supported by technology.

On a meta level this study also seeks to suggest to educators the efficacy and wisdom of integrating computer instruction into students’ religious and spiritual explorations. The suggested approach is based on theories of Constructionism (Papert, 1980), art as a gateway to religious development (Brovender, 2005) and the distributed self (Perkins, 1993; Turkle, 1997). This study is intended to serve as a precedent for future endeavors in the marriage of computer technology and spiritual education.
Definitions

The following definitions will prove useful in sharpening the reader’s understanding of how terms, repeatedly used in this study, were defined and applied by the researcher. Collaboration refers to the joint venture whereby two participants, assumed to be equal in their authority and ability to contribute, pool their resources and share the responsibility of planning, the common goal of creating and evaluating an external construction.

Meaning-making is understood as the conscious attribution of significance to a thing such as a text, an event or an image. It involves the act of interpretation and of situating the thing in its cultural, cosmic or social context. In this study there is mundane meaning-making such as making the meaning of the color yellow signify the sun. But, there is also meaning-making of a spiritual/religious nature that involves deeper existential issues, such as the purpose of one’s existence.

Qualitative Methodology

The specific area under study, what kind of learning happens when students create illustrated prayer collaboratively, is an area that I have been exploring for close to two decades in various iterations, as will be discussed. The multiple constructed realities around the subject of prayer that are particular to each participant, the small number of participants, and the longitudinal framework of the prayer curriculum development are all factors that recommend a qualitative methodology for this study (Leedy, 1996, p. 110).

This study explores utilizing technology as a means to combine Constructionism with religious or spiritual subject matter. The value of the
technology in the process was to significantly enrich the information environment that the cohort could draw on to inform their reflection and construction. This is a topic that has not been previously reported in the literature to any great degree. Only Bers (1998, 1999, 2000, 2008), whose prolific work addresses the construction of identity, presents a couple of qualitative case studies on the use of technology in an affective domain. Thus, this study is exploratory in nature.

This chapter chronologically presents the methodology used in this study. It begins with a recounting of four prior iterations of this project executed over a period of twenty years. The findings and changes will be discussed as they relate to the current research design. A short discussion on the relevance of the action research model for this study follows. The research purpose and questions are then addressed. Finally, the instruments employed in the research, their justification, the plan for data analysis are discussed. A description of the research setting, the participants and the process are then elucidated. The chapter ends with a description of the role of the researcher and the study’s limitations.

*Action Research*

The genesis of this study is personal and two–fold. The motivation to create an intervention for female adolescent Orthodox girls is borne out of a dissatisfaction that I experienced as a practitioner with the current positioning of the female prayer community of practice. In discussions with other educators (Fredman personal interview, 2005; LookJed listserv, 2004), I confirmed that my own observations were not unique. A number of educators and scholars saw the same issues demonstrated by
adolescent girls during prayer in modern Orthodox Jewish day schools (Brown, 1998; Nussbacher, 1999).

Second, as a computer instructor in a middle school setting, I experienced the conundrum of what content area would best utilize technology’s ability to integrate multiple spheres of an individual’s social and culture’s identity. This combination, my vested interest in the female prayer community and the use of computers for an affective purpose, led to the creation of an intervention curriculum that addresses both of these concerns.

The application of the study’s innovation concerns a local problem in a local setting (Leedy, 1996): How to afford Orthodox female adolescents increased opportunities for legitimate peripheral participation in their prayer culture. The term “action research” was coined by Kurt Lewin (1946). “Action research is concerned with action, (solving concrete problems in real situations) and research (trying to further the goals of science),” (Robson, 1993, p. 60). As such, action research is appropriate for this study, which grapples with a specific problem and also generates a paradigm for the pedagogy of children’s inner lives.

The process of action research is iterative by nature, as was the development of the project in this study. “Action research involves a protocol of cycles of various phases with the goal of instituting change” (Robson, 1993, p. 438). Each of the four phases in this research model is flexible in that they may undergo modification in their implementation. This method of research is responsive to a real world setting, such as a classroom, where changing course, due to external factors, may be accommodated with flexibility. The four typical phases are:
1) **Planning:** Diagnosis of the problem, objective for action.

2) **Acting:** Design of a response both to the problem and to the investigation of the pertinent literature.

3) **Observation:** Methods similar to those of an ethnographic study, such as field notes, videotape and narrative

4) **Reflection:** Checks on the success of the enterprise and disseminates the findings back to the setting where the problem originated and beyond into the body of knowledge in the field.

The iterations that I describe in the next section show the development of this action research project from its nascent stage to its current development.

*Study Prologue*

*Phase I.* As a novice Judaic-studies teacher entering the field of instructional technology in 1980, I taught a class on the Book of Psalms to female modern Orthodox high school students. The curriculum stated that students were to master both the literal and historical meaning of the Hebrew text. The teacher I had replaced approached the material linearly and the students spent much of their time translating the Psalter’s words from Hebrew to English. Context and meaning were absent.

Recalling my own boredom with this approach, I decided to approach the Psalms with my mentor Professor Porten’s methodology to text. Armed with an overhead projector, I transcribed the Psalm into poem form on a transparency and used color to indicate parallel constructions in the verse. It was the 80’s and this was done freehand.
The students were assigned a final project of similarly mapping out a Psalm in poem form and then creating a collage that illustrated the words. The poem and collage was an interdisciplinary project that demanded reflection and higher order knowledge (Perkins, 1992).

Until this point in their religious studies the students had examined the ancient commentaries and were tested on the classic interpretation as well as on the literal translation of the Hebrew words. They were unexposed to methods of learning that addressed their personal relationship with the religion and its texts and that demanded rigorous thought and reflection. The students reacted with surprise and guarded enthusiasm. The idea of being creative with ancient text was a new heuristic for them.

These 11th graders rose to the challenge of the project. They produced magnificent collages that both demonstrated their understanding of the Psalmist’s expression and applied the ancient words to their modern world. The images they used, culled from magazines and newspapers, embodied the meaning for them on a contemporary level. The meaning of the words became personally relevant. I videotaped the collages and asked students to narrate voiceovers of the Psalm. Distributing the collages to videotape created a permanent record of their work and enabled others to view the work more easily.

This success led me to recreate the project with a daily prayer text. Based on my observations of the students’ prayer time, I realized that the Hebrew text they recited every morning was lifeless. My hypothesis was that this occurred because they did not understand the words in any personal context and that they did not see it as prose. I speculated further that through the process of illustrating the words of the
prayers, the students would be compelled to reflect on the meaning of the words as they had done in the earlier Psalm project.

I began the prayer project with the section of the daily service simply called “The Prayer,” named such as it is the linchpin of all Jewish prayer services. This is the same prayer used in all subsequent iterations. “The Prayer” consists of 18 blessings and is formally called the Eighteen Blessing Prayer. Two students were responsible for one blessing. They were to represent the meaning of the blessing by shooting a slide for each phrase of the blessing.

The girls were given storyboard sheets. On the left they wrote the phrase and on the right they wrote what image they desired. They could either photograph an image using a 35mm camera and slide film or they used could select an image from a book or other artwork and shoot a slide on a copy-stand.

Again, the students were taken aback at the thought of combining their religious studies with art. They had never experienced combining artistic expression with ancient text. The students created excellent projects and remarked that the experience of interacting with religious texts in a “hands-on” manner was eye-opening and satisfying. As a culminating activity, we assembled the slides together in a show to represent the entire prayer.

This project was guided by my intuition and not grounded in any scholarly literature. I chose visual representation for that is the modality that speaks to me. I also tacitly knew (Polanyi, 1966) that combining an ancient artifact, such as prayer, with the experience of learning about photography, a unique way of seeing, would provide a new lens for the text and consequently the ritual.
Phase II. In 1982, I left the high school to become the audio-visual director in a new progressive modern Orthodox Jewish day school, SAR Academy. This school, built in the 70’s, was architecturally designed for the open classroom model. The school does not have interior walls and it is carpeted throughout. It is quite common to see small groups of children sitting and working on the floor. The atmosphere at SAR was one of warmth, creativity and child centeredness.

The school had an in-service program at the beginning of the year where the principal presented a slideshow produced in Israel that illustrated Psalm 104. The theme of that Psalm is how God is revealed in the beauty of nature. The images in the slide presentation portrayed the splendor of flora and fauna in Israel. A poetic narration and music evoked emotion for the meaning of the psalm. This production inspired and encouraged me. It indicated to me that there was interest in extending the boundaries of literacy and that there was a market for illustrated prayer.

At about this time, I was finishing my M.A. in Instructional Technology at Teachers College, Columbia University. I was planning to continue to pursue a doctorate and to create a prayer video, with teaching materials, for my dissertation.

My research interest encompassed discovering whether or not viewing the words of the liturgy accompanied by images would have an impact on students’ devotion, meaning-making, or, as it is called in Hebrew, “kavannah”, while praying. My assumption was that watching the prayer video would increase students’ awareness and stimulate reflection on the meaning of the words.

In the new school, SAR Academy, I initiated the prayer project in a mini-course for eighth grade students that I co-taught with the principal. The principal, a
romantic who had been close to my spiritual mentor, Reb Shlomo Carlebach, taught the meaning of the text through discussion and lecture while I coordinated the project.

The male and female students were randomly paired and each pair of students chose a blessing from “The Prayer.” They were given storyboards to map out the phrases and illustrations for the blessing. As in the previous iteration images could be photographed or taken from books.

The students especially enjoyed working with the technology and photographing images. Our equipment consisted of a 35mm camera and two copy-stands: one 35mm and the other, a Kodak Visual Maker. The words of the blessings were handwritten with permanent marker on 2X2 slides. I instructed the students in the operation of the camera and copy stands.

With a 21st century perspective of multi-media in schools, the technical limitations of this and the previous iteration are clear. Due to technological constraints, the prayer phrases were not superimposed on the slides. The students either recited the Hebrew words when the slide image was projected or wrote the Hebrew words freehand on a slide that was projected immediately prior to the image. This did not strongly synthesize the connection between the words and the visual representation for the audience. The poem form of the prayer was not obvious.

The reliance on slide film as a medium also set limits on this project. There was both a time and cost factor. Sharing, copying and developing slides was dependent on a private photo lab. The time lag between shooting the slides and viewing them detracted from the dynamism and momentum of the project. As each slide cost money to produce there was a restricted number of times one could shoot
the same slide. In addition, the only tool students had for modifying an image was Mylar tape. The twenty students in the group shared one Carousel projector. Using the copy stand, which required close-up rings and manual focusing, was a backbreaking tedious task. As a result, there was an abundance of down time, no opportunity for easy revision and the project took a long time to complete.

As the facilitator, I would check in with the various groups to monitor their progress and to offer feedback. They utilized English-Hebrew prayer books to get the literal translation of the text and then discussed in groups of two or three what might constitute an appropriated image. The criteria for a good image, in addition to its representational quality, also included composition as they shot many of the images themselves.

At this time I became aware of the social process through which the students selected the images. This narrative process of negotiating an image that took place in the group meeting met my educational objective of having the students “own” and “play” with the words. The students were engaged in conversation (Vygotsky, 1978). They were personally involved in meaning-making, through their interpretation of the text in a social, cultural context (Bruner, 1990).

At the end of the mini-course the students presented their projects to their peers. A short feedback session followed. The students were able to explain the personal meaning of the prayer by justifying the selected images. The project was then screened to the whole junior high after prayers one day.
The participants collaboratively associated with the ancient words to extract the meaning from their own lives and schema. This observation, as well as the development of technology, shifted the focus of my dissertation.

The hiatus between the original idea of producing a prayer video and the actual work that continued on this project was about 15 years. During that period, the nature of the audio-visual field completely transformed. In fact, the very term audio-visual became anachronistic and was replaced with multi-media. The “digital age” had dawned and with it came a host of new creative and educational opportunities.

A wide range of new media, enabled by sophisticated and affordable technology, has been increasingly integrated into American culture. With these tools, the exchange and creation of new information was much simpler and more cost-effective than ever before. The origination and dissemination of images flourished and multiplied in the hands of “regular people” (Mitchell, 1994).

This new reality addressed a number of the problems that I encountered in the earlier experimentation with prayer illustration. Digital photography solved the problem of distribution and reproduction as well as the time lag between photographing and reviewing images. A scanner replaced the backbreaking copy stand. The Internet provided access to libraries of images in seconds. Simple editing programs enabled students to customize and combine images for specific needs. The computer enabled prayer words to be embedded on the image slide, with borders, in various fonts and colors to reinforce its meaning. Finally, and perhaps most significantly, the computer distributed intelligence (Perkins, 1993; Salomon, 1993). It
acted as a repository for the prayer book, for Hebrew and English type, sound, image, thought and music. Numerous applications provided templates for individual projects.

Upon my return to Teachers College in 1996 I became involved with digital technologies. I expanded my Socratic or discovery approach to teaching to include the notion of constructing knowledge as a form of learning. By applying the constructivist theories (Jonassen, Peck, & Wilson, 1999) that I was learning, I realized that the prayer project would have to be constructed by the students if it were to be personally meaningful. Viewing someone else’s finished product was too passive an activity and not as personally meaningful as searching for associations and constructing it personally via narrative with a peer (Bruner, 1990; Suthers, 2006). Successful learning demands a creative and active process with self-involvement (Papert, 1980; Duffy & Jonasson, 1992).

The dynamic interaction between students, culture and representations is key to generating meaning from the prayer’s text. The semantic underpinnings the words for prayer, in Judaism work of the heart, and in Greek leitourgia (liturgy), work of the people, validates the pursuit of a constructionist approach for teaching this subject. The introduction of constructivism as a learning theory resulted in a role shift. Instead of being a video producer I became the designer and facilitator of a construction kit.

Phase III. In the third iteration of this project in 2002, I worked with a class of sixth graders at SAR Academy, the same school as the previous phase. This modern Orthodox day school featured a rich, multi-layered “surround” (Perkins, 1993). Eighteen students participated in the project that was held in a state of the art
computer lab. The computers were networked and connected to the Internet. One computer, for the instructor’s use, projected onto a large screen at the front of the room. The students presented their constructions to the whole class at that station.

The students worked in the lab once a week during their computer specialty period. In addition to the traditional artifacts of prayer at their disposal, they were also provided with a networked PC. Each computer included the Hebrew word processor Dagesh, with the entire prayer book as a drop-down menu, as well as bookmarks for visual materials on the Internet and Microsoft PowerPoint. I facilitated the project as the expert in computer technology, Hebrew language and Jewish liturgy. The students were also free to consult resources in the school such as the library or a teacher.

Prior to the beginning of the unit, students filled out a Likert scale survey that I designed. They were asked to respond to items about their feelings, practices and understanding of prayer. Seventy-five percent responded that they enjoyed praying daily, but less than 25% felt they comprehended the meaning of the words.

As an introduction to the project, I scanned a few pages of a recently published Grace after Meals (Haruni & Munischor, 1999) booklet that had been illustrated with photographs. Orthodox Jews recite the Grace after Meals after eating bread. It is one of the more popular communal prayers and is therefore a good candidate for illustrative accompaniment.

The images served both as an example and a departure point for a discussion on how to associate image with text. The students viewed the pages and, as a group, critically discussed the merits of the images, answering such questions as: What does
the photograph communicate? Is this visual an appropriate choice for the words? How might we improve on this page? What do you think about the design?

Similar to the previous iteration of the project, each pair of students worked on a single blessing that together formed *The Eighteen Blessings* prayer. Pairs of students collaboratively constructed their understanding of a specific blessing using Microsoft PowerPoint. (It is interesting to note that the students wished to work with members of the same sex.) The dyads discussed how to break the prayer prose into phrases and typed them into Hebrew on a slide. They translated the phrases into their own language and typed the English on the slide as well.

Based on the group’s results for the comprehension of prayer text, an average of 25%, I added the task of translating the blessing from the Hebrew to the English vernacular, to the project. I believed that writing the English alongside the Hebrew would reinforce the meaning and deepen the literacy. Finally, the students jointly selected an image that illustrated the phrase and inserted it onto the slide. Other than these four requirements, the students were free to choose their own font types and to design the presentation in any way that was pleasing to them.

At the conclusion of the activity, the groups presented their work to the class for critique and discussion. In this phase the students explained their project in front of the other students and discussed the choices that they made for the presentation (Kolodner, 2003). The class was skilled in reviewing their peers’ work and had to follow a specific formula when critiquing another dyad’s work.

The tenor in my computer classes was one of love (Palmer, 1993). I attempted to not judge the students for their shortcomings and personalities. I aspired
to create an atmosphere where the students would feel safe and supported. To this end, I taught them how to depersonalize their critiques by never couching their comments as an attack on the individuals or as a value judgment on the quality of the work. Rather they were to use the following opening. “I think it might have been good or different if….”

I demonstrate the success of the strategy with the following anecdote. The science teacher relayed to me that one of her students, upon watching a PPT, that she had created, commented, “It might have been better if.” Impressed by the student’s respect she asked him why he phrased his critique in that manner and found out that he had assimilated the lesson from our computer class. This constructive and positive form of feedback is consistent with those principles laid out by spiritual educators (Lantieri, 2001) and others (Barab et al., 2006). A relaxed, non-judgmental approach gives the student the freedom to make mistakes and to experiment.

The prayer illustration project took 6-8 sessions. Concurrently, the students encountered the blessing that they were working on twice a day in school while praying. Max, a bright, charmingly mischievous boy, chose the ghoulish resurrecting of the dead blessing. He remarked that the blessing that he was working on had become his favorite, and whenever he encountered it during his prayers, it held special meaning for him. One could argue that on a daily basis he, the “person-plus,” legitimately participated in the community of practice in a peripheral way (Lave & Wenger, 1991). With both prayer and the multimedia project occurring within the same time span, Max was able to consider the meaning of his blessing in a situated real context.
Phase IV. I conducted another iteration of the project during the spring of 2004 with a new sixth grade computer class. The setting was the same as in phase III. I changed the format of the project by instituting a practice activity (Kolodner et al., 2003). This gave the students an opportunity to hone their meaning-making skills on a smaller project. Their assignment was to collaboratively illustrate a short two to five word morning blessing in Microsoft PowerPoint.

Prior to the start of the activity, I had students fill out the profile that I had designed for the previous iteration. In addition, they completed Steven Brown’s (1996) prayer inventory. These profiles encouraged the students to reflect upon their personal prayer practice. It set the stage for a discussion on the meaning-making, or “kavannah”, aspect of prayer. I also garnered additional information about this populations’ prayer attitudes and practices.

The students executed the projects and we reviewed them as a class. Most of the projects were very literal. To convey the morning blessing of “Who gives sight to the blind”, the students designed animated eyes that opened and closed. I realized that I needed to teach them the idea of multiple layered meanings. For example, giving sight to the blind may also be understood as a metaphor for an individual seeing the light or understanding something anew.

As a way to preempt only superficial or literal understandings of the prayers, I reworked the PrayerLive curriculum to include a lesson on how to think and represent an idea metaphorically. Students used a concept map in the form of a flow chart or Venn diagram to model ways to associate-out from an object.
After the exercise with the Morning Blessings the students did a second project. This time they took the prayer for the land of Israel. Each dyad, selected by me, was assigned a sentence. They translated the text into English and wrote out the phrase in both languages on a slide. They negotiated for the meaning of the text and then reified their understanding in an image that was juxtaposed on the slide. The exercise was successful. All of the students completed their projects and the whole prayer was presented at a school function for Israel’s Independence Day the following evening.

Two students volunteered to sew all the presentations together into one PPT. It took them quite a while and they were assisted by the Director of Technology. The presentation complete with titles and music was screened and the students felt very proud of their accomplishments. Several students requested copies of the piece for their records.

Conclusion

Each iteration of PrayerLive exists as a discrete experience for all those that participated in them. They also exist as part of action research. But more importantly for me they represent a growth process and maturation as a researcher. I can now explain, beyond my initial intuitive reasoning, why this intervention fills several educational vacuums and why it has repeatedly been successful in different venues.

The previous phases of the PrayerLive project were successful in that learning was demonstrated in the technical domain through the mastery of photography, visual literacy and computer skills. In the affective domain participants learned how to create additional meaning and the social skills necessary for collaborative construction.
In all of the iterations the students enjoyed the activity and many of them contributed of their own time to work on the project. The various groups were proud of their accomplishments, particularly when the works were publicly screened in their schools.

Before I begin with the most current iteration of the PrayerLive project I will restate the purpose of the study and the specific research questions.

**Purpose of the Study**

The purpose of this study is to:

- Introduce a collaborative constructionist model that utilizes digital technology for an interdisciplinary endeavor in the realm of religion and or spirituality.
- Provide Orthodox Jewish girls with a creative medium to experience prayer and to facilitate their increased participation in the prayer community of practice.
- Suggest a curriculum design that demonstrates how using a multiple symbol representation of a sacred text may contribute to meaning-making.
- Explore the integration of the “person plus” as an active agent into the community of practice.

**Research Questions**

This study investigates the effects of a multi-media prayer curriculum on female adolescents and aims to address specific questions whose answers will drive the redesign of the project. The research questions investigated here are:
How does meaning-making activity contribute to adolescent Jewish girls’ literacy and practice of prayer through a project intended to enhance their relationship with liturgical texts?

- How do these students collaborate with each other and the ancient text on the computer and the Internet?
- How does the multi-representation of the Jewish prayer content contribute to their engagement during prayer practice?
- How did the computer and Internet facilitate the learning of the prayer text during this project?

**Description of the Study**

In a camp setting during summer vacation, eight girls who agreed to participate in the study were randomly assigned into pairs. Each dyad designed and executed a PowerPoint presentation, which portrayed their interpretation of a particular segment of prayer. Throughout this social construction, each student verbally engaged in a narrative with her peer partner that was videotaped. The individual narratives, pre and post activity profiles, personal interviews and the completed multi-media projects provided data for this study to address the question of how to approach education for the development of children’s’ inner lives.

Research for this study was conducted in a modern Orthodox Jewish summer camp in Pennsylvania, home to 650 campers and 175 staff members. My assistant and I were employed as webmasters and lived in the camp for a month.

The camp is very similar, demographically and in religious ritual practice, to the Jewish day school where previous phases of this project took place. According to
the Camp Director, 30% of the campers attend the school where iterations II, III and IV took place.

The camp facilities are rustic. The cabins where the campers live and the main buildings where meals and activities take place are not air conditioned. Many varieties of bugs share the large open spaces along with rabbits and the occasional bear. Campers called *chanichim*, the Hebrew word for the ones to be educated, may not use the pay phone to call home, have cell phones or laptops in camp. The camp session lasts for four weeks and during that time the camp coalesces into a spirited community that frequently dances and sings at meal times and on the Sabbath.

All of the campers, who range in age from 9-14, must attend prayer services three times a day. The boys officiate at the segregated prayer services while the girls do not. This inequality parallels the campers’ prayer experience in both school and synagogue. The camp setting is pedagogically beneficial as it allows for immersion learning in an informal atmosphere (Brown, 2001).

The Camp Director was both supportive and enthusiastic about hosting the study. He shared his opinion that numerous campers appear uninspired by the prayers based on his observation that campers try to “ditch” prayer services. (Silverman based on personal conversations, July, 2005, November, 2008). His concern echoes those of Heschel (1954), Simon (1996), Steinsaltz (2000), Brovender (2001), Fredman (2005) and members of the Lookjed e-list community (2004). He does not discern a difference in prayer engagement between the genders.

The criteria for participation in the research group for this study was being female, attending a modern Orthodox day school since first grade and being 12 years
old. The cohort, who participated in the PrayerLive project, faces the challenge of religious maturation, particularly as they are a community of practice within their male peers’ community of practice.

The study’s participants were ripe for a transition into a new developmental and faith stage, as detailed previously. This transition might be scaffolded and supported with participatory activities (Wenger, 1998) to avoid the pitfall of becoming spiritually disenfranchised ((Fredman, personal interviews, 2005, 2007; Pipher, 1995). The Orthodox female adolescent, as a newcomer to the mature prayer practice community, and at risk for losing a connection to her traditional practices, needs to learn, experiment with, and to experience various aspects of real practice (Lave & Wenger, 1991, p. 1).

There were 40 twelve year old girls in the camp. After gaining approval from the Camp Director, I received approval from the Director of Education. I was directed to the camp’s Head Counselor to select potential subjects from a list of all the 12-year-old girls in camp. My only stated criteria were that subjects were not to have been my students during the school year and that I did not know them personally. I requested eight girls as this is the number my dissertation sponsor suggested. Others suggest that for CSCL research a small number is preferable as there is a surfeit of interactions that need to be studied and documented (Suthers, 2006).

The Head Counselor provided me with a list of campers. When asked how she selected the girls she responded that she chose those campers whom she felt would benefit from the project that went to different schools or had strong negative feelings about prayer (Speigelman, personal conversation July 2005). I approached
possible participants to ask if they might be interested in the project. Proportionality in the population was not of primary concern for the findings, as the target population of the study is a circumscribed group. This sampling may be described as non-probability yet purposive.

I explained the nature of the study to each of the potential participants and asked them if they wished to be involved with the research. There were two campers who preferred not to be involved. The eight girls who were interested each received and read the IRB. They phoned a parent to request permission to participate in the study. I spoke to one of each participant’s parents. After the parents verbally agreed, the researcher received the signed IRB permission from the participants via fax or on visiting day from the parents.

This purposive sample (Robson 1993, p.135) was comprised of eight young women who each attend a different Orthodox day school and who possess varying degrees of knowledge of both the subject matter and of designing multi-media on the computer. The variety of backgrounds and diverse origins of the cohort provides for the study’s generalizability. Participants were randomly assigned a partner to collaborate with.

**Design Specifics**

**Instruments.** The instruments used to collect data for this study are:

1. Pre and post activity profile
2. Field notes and observations
3. Videotaped record of the work of each dyad
4. Videotape of pre and post-activity group discussion
5. PowerPoint projects

6. Interviews with participants

These instruments reported on the collaboration between the cohort, on the students’ prayer practice and on any affective or “cognitive spinoff” (Salomon, 1993) that may have resulted from participation in this study. In addition, the data describes the students’ attitude towards prayer before, during and after their participation in the project (Appendix C & E). Finally, the individual slides of each group’s PowerPoint presentation were reviewed and categorized as evidence of their meaning-making activity (Appendix H). I will discuss each instrument in the section that follows.

As there was no pre-existing data on the prayer practice of modern Orthodox adolescents I deemed it necessary to investigate this group’s prayer profile. I administered a pre-activity profile to the cohort in order to establish a clearer sense of their pre-existing attitudes, practices and experiences with prayer up until the time of our meeting.

The pre-activity profile (Appendix B) was designed to be a concise and thorough instrument to document the participants’ practice, attitudes and history regarding prayer and spirituality, prior to the project. The profile contributed color to the painting of a composite picture of the participants.

The profile was revised from earlier versions administered in phases III and IV (see phase section for details) and was informed by the literature review. I looked for a pre-existing survey that queried adolescent prayer practices. In the volume “Higher and Higher,” a text for students on Jewish prayer, Brown (1996) generated a prayer inventory that I administered in previous iterations. This inventory was
thorough and contained guidelines for what types of questions to construct. However, many of the items specifically addressed a Conservative Jewish population and were not relevant. Brown’s format of three responses choices invariably led my previous respondents to answer in the middle, to sit on the fence.

I received permission from Richard Wolman (2001) to include some of the items on spirituality from the PsychoMatrix Spirituality Inventory in the profile. He has not administered the PSI to children or to adolescents.

The pre-activity profile, that I created, was reviewed by an expert in the field of Jewish women and prayer. She astutely suggested that I query the participants how they celebrated their rite of passage, the *bat mitzvah*. This life cycle event she argued would reveal part of their experience of being a Jewish female.

The five categories of information on the profile were:

1) Prayer Practice
2) Prayer Literacy
3) Spirituality
4) Orthodox Jewish Woman
5) Learning Style.

Prayer literacy items were included to establish the cohort’s Hebrew fluency, their use of the English translation when they prayed and their meaning-making strategies. Items included: When I pray, I get certain images in my mind at specific parts of a prayer. I reflect on the meaning of the words when I pray.

Questions on spirituality were inserted to determine whether there was a spiritual component to the individual’s prayer practice and to garner a sense of their
spiritual intelligence. One of the items asks whether the participant experiences a beautiful sunset as a spiritual event.

Participants were asked to write about their bat-mitzvah celebration and their feelings about being segregated during prayer times. This information described their experiences as members of the female prayer community of practice. Lastly, the cohort was asked to report on their learning style to indicate whether they were predisposed to meaning-making through images.

The pre-activity profile was divided into three sections. The first section was multiple-choice. These initial questions ask participants to report on their practice such as; how many times a day do you pray? How many days of the week do you pray?

The second section required responding to statements by marking an area in a line between strongly agree and strongly disagree. The third section was a series of six open-ended questions that required written answers. Examples of these questions include: If you could run tefillah in your school for 12 and 13 year old girls how would you organize it?

The researcher read through the profiles. She then met with each participant individually to clarify any vague or illegible answers.

Data analysis. The responses to the pre-activity profile (see Appendix C) were transferred to a Microsoft Excel spread sheet that listed each participant’s response in table form. Each participant was represented with a number and responses for all the items are presented numerically in the same format. Multiple choice items were grouped by frequency and then calculated to reveal the average for the group.
In the second section, responses were entered on a continuum where the left side was labeled strongly agree and the left side strongly disagree. The blank space for the responses was five centimeters in length and the spot that the respondent marked was measured with a ruler. The responses were calculated into decimals and then percents. Each participant was represented with a number and responses for all the items are presented numerically in the same format. These numbers were tabulated for their average. I evaluated the results of the group as a whole and also reviewed the individual responses to reveal a composite picture of each participant.

The responses to the open ended questions were also entered into the Excel spread sheet. The responses were sorted and grouped according to the categories listed above. Within the categories, similar items were associated. The responses clarified each other, enabling more robust findings and thoughtful analysis. In the section that follows I have integrated responses from the profile to introduce the reader to the participants.

Participant profiles. There are several noteworthy characteristics of this study’s research group. Due to the highly individualized paths of developing prayer practices, it is important to note those elements of certain subjects’ backgrounds that might particularly influence their spiritual or religious practice. Wolman (2001, p.135) suggests a correlation between trauma, childhood experience and spiritual awareness.

Layla, blonde, blue eyed and very dynamic, was born and raised in a Hasidic, ultra-Orthodox home. When she was six years old, her parents divorced and she remained with her Hasidic father. Of her prayer practice she writes, “I wasn't raised
with my Mom. I always prayed that I can live with her. Then when I was nine it came true and I moved to my Mom.”

Layla’s mother renounced religion but sends her to a modern Orthodox school and camp as per the custody agreement. Layla wrote, “I used to be Hasidic. Now I'm not even religious. Since I changed I’ve wanted to keep Shabbat (Sabbath) but couldn’t. I have tried many times but it was too hard because everyone else in the house was watching TV and I was extremely tempted and broke the rules.” Layla, despite her apparent struggle with her religious practice, was very knowledgeable and interested in the subject of prayer.

Sarah, perennially cheerful, moved from New York to Jerusalem with her family when she was nine years old. She is fluent in Hebrew and as such feels more “natural” or at ease in prayer language. Sarah fashioned herself the Hebrew expert. However, it is interesting to note that on a number of occasions she was unable to connect words from the prayer text to Modern Hebrew, until I scaffolded the connection.

Sarah displayed a certain pride in being an Israeli citizen. She notes, “After looking around me I started realizing how lucky I was and that a lot of my friends’ (in Israel) don't have what I have.” Uprooted from the life that she knew, Sarah had adjusted to a new life with new friends, as well as to a new culture. She has three older brothers.

Ariella, polite and reflective, lost her grandfather after a long illness, six months before camp. She acknowledged that her most meaningful prayer experience
was, “The day before my grandfather died. I thought that davening (praying) would push off his death.”

Samara, quiet with a wry sense of humor was also affected by the poor health of a close relative. She responded on the pre-activity profile that her prayer was intensified as a result of relatives’ infirmity as well. She wrote, “My brother was sick for over a month. When I said refaenu (the blessing of “heal us”), I tried really hard to talk to Hashem (God) with the best kavannah (devotion). I did the same [for] my five year old cousin with cancer.” She continues, “I actually cried while I was davening because it was really hard for me to realize that someone who I really loved was really sick.”

Galit, a swarthy muscular girl, had been diagnosed with diabetes two months prior to camp. While in camp, she monitored her intake of food, checked her insulin level and frequently visited the camp infirmary. She commented that, “When I got diabetes my davening (praying) became a lot more meaningful because I knew how amazing Hashem (God) is to have been able to make our bodies work so well. And, He can take away things so easily.” Galit wrote that her best prayer experience was, “the Shabbos (Saturday) after I left the hospital because I felt a deep connection with Hashem and I was so thankful to be alive.” Her relationship to food, to her body and to her mortality shifted.

The three other participants were Galila, a very bright, fastidious girl used to excelling. Omrit, the granddaughter of Holocaust survivors, has a happy-go-lucky personality. Nediva, a twin, was quiet and had to be encouraged to participate in group discussions.
All of the respondents, except for Layla, who said that blessings were of no comfort to her, indicated that blessings contribute to their personal relationship with God. Ariella wrote “My life has meaning because of the blessing ‘that God created the creation’.”

Sarah shared, “I remember one night I was lying in bed saying the night time davening and I asked Hashem for something. I wanted to know if it would happen and I asked for a sign. Then I got the sign and it happened. The next day I davened well.”

The most prevalent answer indicated that blessings are a comfort as they ensure that God is keeping watch and preventing bad things from happening. The girls expressed this idea in regards to praying for a sick loved one, as mentioned in the beginning of the chapter. This is simple petitionary prayer (Kadish, 1997; Steinsalz, 2001).

Gratitude was the second-most prevalent answer for why blessings are comforting and how prayer is meaningful. Nediva said, “When I was going on a family trip [I had the best davening] because I was excited and wanted to thank Hashem for that chance.” She also expressed feeling joy when she blesses God with thanks.

In a practical vain, Omrit said that God will appreciate the gratitude and as a result will continue to answer her prayers and to provide for her needs. Gratitude also motivated one participant to increase her efforts at prayer.

“A few years ago we were in Israel for Sukkot,” offered Galila. “My school had a chessed (charity and kindness) mission. We joined it for a day and we went to a
girls’ orphanage. We saw girls who had so little but still davened every day and believed that Hashem would help them. I tried a little harder to daven after that because I had more than those girls but I could not daven as well and I thought I should be able to also.” Galila was inspired to pray both by the awareness that her good fortune was a gift from above and by the orphans’ prayer community.

Omrit related being influenced by praying with a community of women. “I was at the kotel (Western Wall) and there were so many Jews there. People were crying and some were singing. This gave me so much. I realized there really is no right and wrong way to daven. As long as you find the time to daven even if you say your one or two sentences, it’s ok. You just have to find time.”

The feelings mentioned above, such as gratitude, awareness of a higher being and the sense of belonging to a community, are all attributes of a spiritually intelligent person (Hay & Nye 1998; Emmons, 1999; Lantieri 2001). It seemed that the participants, despite their negative feelings about mandated prayer, which will be discussed in detail later in the next chapter, considered themselves to be in a relationship with God. Moreover they believed as had the participants in prior iterations of the study that their prayer had the potential to effect change in their life as well as in the lives of others.

I queried the group about their feelings on being segregated from the boys during prayer and sitting behind the partition. The majority of the participants wrote that they are fond of the mechitzah (partition) that separates the sexes because they feel more comfortable in a single-sex setting. Their reasons included not having to worry about impressing boys, having the freedom to act naturally and not having to
worry about “looking stupid when I cry or close my eyes.” Two participants responded that the partition helps them to focus their concentration and to not get distracted. These findings reinforce the hypothesis (Pipher, 1995) that without boys in certain settings adolescent girls are more at ease. They flourish and do not compromise their intelligences. Sarah, who has three older brothers, responded that the partition is insignificant for her prayer.

I asked the participants how they would organize prayer services for 12 and 13 year old girls in their school. The following categories of activities were culled from the written responses; incorporate learning, personalize the experience, provide a supportive attitude, increase female participation, and slow down the pace of the prayers.

The most frequent response was to incorporate learning about the prayers into the regular prayer time in school. Ideas included simply providing prayer books with an English translation, producing a funny movie that explains both why we pray and the meaning of the words, a female discussion group that would explore how prayer could be “more a part of our lives,” and a teacher who would be available during prayer times to answer questions and to insert explanations during prayer time.

The second-most frequent responses were to personalize the experience and to not force, but to encourage the girls to pray. Two of the respondents stress that they would promote adding personal prayers to the regular liturgy. A third suggests prayer groups of differing levels, in assorted places, so that the girls would be free to choose the venue that suits their mood predilection for prayer. These responses indicate a
desire for more autonomy, individuation and variety in the prayer groups. This vision is shared by Wachs (1995).

One participant answered that she would keep the girls prayer in the main minyan (service) with the boys. However, she would institute having a girl, instead of a boy, deliver a short speech two to three times a week.

They were a bright and diligent group who displayed admirable responsibility and fortitude. My 18 year old research assistant Aaron, himself a product of the modern Orthodox day school system, observed the group whenever they worked. He commented that he was surprised by how seriously they took the project and how diligently they worked.

Process. Religious study features prominently in the camp. Staff members are required to go to weekly classes and many also voluntarily attend the nightly lectures. The chanichim have single sex, daily classes that are held in informal locations, such as gazebos, picnic tables and staff living rooms. Class content is usually centered on the month’s camp wide theme. The cohort attended my research sessions in lieu of attending these classes.

The group met for a total of seven sessions, an hour each, over a two week period. The nature of this particular camp is to be spontaneous and to provide unique experiences for the campers. As such, there were times when the classes were canceled or changed due to outings, color war and overnight camping trips. Both I and the cohort accommodated these shifts by remaining calm and flexible.

The group enjoyed coming to the website office as it was air conditioned and also provided access to the camp’s website. Cold drinks were always available to
them and frequently I would arrange for snacks. Participants voluntarily spent additional time towards the end of the research finishing their project. In total, the time they spent working on the research was approximately ten hours.

Group meetings were held in the small website office where borrowed chairs lined the narrow room and left little space for movement. The video camera had to be hand held, when the entire cohort assembled, as there was no room to spread open the tripod base. Conditions were rustic with limited technology resources. Coordinating four computers with Internet access simultaneously was a challenge involving negotiation and much juggling.

There were two desktop work stations in the website office. An additional desktop PC was in the staff Internet room, which is also the room where the staff drops off items that need to be sewn. I appropriated that room, which was behind my office, for one of the dyads, to the chagrin of the staff. For a fourth station one dyad used my personal laptop in the camp parents’ office, next door to my office.

The cohort was flexible, often times working on the part of the project that was available at their work station. One computer setup had Internet and no audio. Another computer had audio and Internet but no Hebrew. The lack of network capability created the need of saving to a flash drive and constantly transferring the data between machines. The upside to this inconvenience was that the participants mastered the skill of saving their presentations. They understood first hand the importance of being accurate in the naming of their files and in being fastidious in the task of saving and backing up their work.
During work time, I continuously touched base with each dyad, answering questions, dispensing positive feedback, solving technology issues and checking that the video cameras were recording the action. I believe that being in the staff areas as well as being videotaped affected the cohort feeling important and lent credibility to the project in their eyes.

I continue with the description of the process of the intervention in the following chapter. Although some will feel that this narrative belongs in the methodology chapter I have to chosen to integrate the narrative with the findings as it felt more situated and meaningful to me.

A major portion of the data consists of videotapes of the participants’ narrative during their collaborative construction of the PPT. Understanding a phenomenon from the participants’ viewpoint and its particular social and institutional context is largely lost when textual data are quantified. A qualitative analysis of recorded videotape allows the researcher to observe and interpret additional clues of engagement, such as tone of voice, body language and visual attentiveness (Kaplan & Maxwell, 1994). These facets of behavior expressed the nuances of emotion and collaboration. The videotape captured not only the dynamic interplay of the dyad but also the social and cultural ambiance of the cohort as a group.

As mentioned earlier in this dissertation, the narrative contains an important aspect of meaning-making (Bruner, 1990; Bers, 2001) by revealing the individual’s thought process. These videotapes document the cohorts’ narrative and show which member of the dyad was working on the computer at any given time. The video
provides both irrefutable evidence of the degree of intersubjectivity (Vygotsky, 1978) between the participants and data for triangulation with the profile findings.

Each dyad had a video camera dedicated to recording their collaborative work on the prayer project. The video camera was stationary on a tripod. The videos, shot on mini-DV tape, were digitized and transferred to DVD upon completion of the project. Each tape was catalogued with a number, backed up and stored in a second location.

I transcribed the tapes (Appendix F) and entered the dialogue, into an Excel spread sheet, with time code. I noted which member of the dyad was in control of the computer at any given time. I reviewed the transcriptions twice and then generated categories based on the patterns that emerged from the logs. I assigned categories to the relevant selections. The categories are presented below with a short description.

- **Literacy**: Statements that demonstrate working with the prayer text, which includes meaning-making and the selection of the visual representation.

- **Self-analysis**: Feelings statements that the individual expressed to her work partner about their work.

- **Google**: Dialogue related to searching for images.

- **Cool**: Statements that include the word cool.

- **Collaboration**: Dialogue between the dyad that did not belong to one of the other categories. The record of who controlled the computer.

- **Intervention**: When I or the research assistant spoke to a participant.

- **Design**: Statements that demonstrate working on the form or on an artistic element of the PPT.
There are several instances of overlap between the different categories and as such the transcripts were cross referenced.

Two external examiners, one female and one male, reviewed the transcripts for external validation. They were given the transcripts and the categories separately in order to sort the data. When there was a discrepancy I relied on the majority opinion.

The opening and final evaluative sessions, which included the whole group, were also videotaped. I transcribed and watched the videotape many times to pick up on tone, body movements and language and to see who in the dyad was active and when. Findings from the instrument were woven into the results discussion in Chapter four.

The post-activity profile (Appendix D) was administered a year after the cohort participated in the research project, in the same camp setting where the research took place. The eighth participant did not return to camp but filled out the profile via mail. She did not agree to be interviewed.

This profile, structured similarly to the pre-activity profile, asked participants to report on their current prayer practice and to evaluate their participation in PrayerLive. The segment of the profile where the cohort evaluated their experience of participating in the research was divided into three topic areas.

1) **Project Evaluation:** Concentrates on the various tasks of the project and asks how the respondent interfaced with the activity. Did she enjoy it? What segment did she learn the most from?
2) **Affective & Cognitive Spinoff:** Addresses whether any of the skills that might have been learned as a result of the project have presented in the intervening year.

3) **Collaboration:** Explores the effects of working cooperatively with a peer partner. What was the benefit of collaboration? What was the individual’s perceived contribution?

The responses to the post-activity profile were entered onto an Excel spreadsheet by me. Tables were created to compare the responses for each item. Each participant was represented with a number and responses for all the items were presented numerically in the same format. Multiple choice items were grouped by frequency and then calculated to reveal the average for the group.

In the second section, participants entered responses on a continuum. The left side was labeled “strongly agree” and the right side “strongly disagree.” The blank space for the responses was five centimeters in length and the spot that the respondent marked was measured with a ruler. This figure in decimals was then calculated into percents. Each participant was represented with a number for all the items responses were presented alphabetically in the same format. These numbers were also calculated for their average.

The profile items were sorted and grouped according to the three categories listed above. Within the categories similar items were associated. The responses clarified each other and enabled validation as well as more robust findings and analysis. The responses to the open ended questions were also entered into the Excel spreadsheet with the same numerical identification.
In addition to filling out the profile, seven of the eight participants were interviewed. Because a year had passed since the research intervention I sought to capture a sense of how participants related to the intervention retrospectively and how their prayer attitudes and practices might have shifted.

The interview allowed me to clarify the answers on the profile and to elicit more specific information. The interview was semi-structured as the post-activity profile was used as a departure point. In the course of the interview I followed up on some of the participants’ responses to explore information that went beyond the profile.

The interviews were transcribed and logged by the researcher into Word documents. The documents were repeatedly examined and sorted for meaningful statements that indicated the participants’ feelings about the project or attitude to the prayer community of practice. I looked for repeating themes that indicated both the commonality within this sample and the individual’s experience. The relevant parts of the interview were excerpted and integrated with the categorized responses from the post-activity profile.

*PowerPoint Presentations*

Each dyad completed a PPT presentation. These presentations were printed out in color and analyzed so as to triangulate with the other findings. The presentations were first evaluated for their accuracy in language and phrase construction, in both Hebrew and English. For an analysis of their design features such as, color, the symbolism of images and composition, I looked to the field of iconography for a systematic approach.
Iconography is the study of an image’s meaning, according to Straten (1994) in an *Introduction to Iconography*. Straten (1994) posits that there are three levels in the interpretation of meaning in an image. The first stage, the pre-iconographical description involves enumerating all the elements in the image (p. 4). The second stage, the iconographical description involves identifying and describing the theme of the image (p. 6). In the third phase, iconographical interpretation the researcher is looking for a deeper meaning (p. 10).

Straten (1994) stresses that the iconic analyst must have a solid grounding in art history to enable her to trace the connection to traditional themes, symbols and subjects. For this study I would add the caveat that it is important to be aware of both the Judaic and the popular cultural significance of the symbols as well.

In keeping with the aforementioned technique, I deconstructed the slides of each group’s PPT and recorded the individual elements onto an Excel spread sheet (Appendix G). I listed the color, font type, image and whether it was literal or symbolic. This crude analysis is based on paradigms in both the Judaic and Christian traditions for text interpretation. The Jewish concept of exegesis is known as “*PaRDeS.*” This acronym, which translates as orchard in English, represents four layers of possible interpretation: The “P” is for pshat (simple), the literal meaning. “R” is for *remez* (hint) a meaning that is alluded to. “D” represents a *drash* (exposition) a homiletic interpretation and “S” for *sod* (secret) for the hidden or mystical meaning (Backenroth & Epstein, 2006). According to both traditions it becomes difficult to distinguish between the differing symbolic categorizations as there is quite a bit of overlap.
Straten (1994) suggests that research on images incorporate ICONCLASS (p. 117), a classification system devised, and not published by the Dutch scholar Henri van de Waal (http://www.iconclass.nl/). This classification, which has nine thematic groups, has been adapted for the analysis of the images.

Role of the Researcher

The researcher has been described as a human instrument in qualitative or real world research (Robson, 1993), as it is through this person’s observations and meaning-making that the research is gathered and interpreted. Humans are excellent instruments for qualitative studies occurring in real world settings as they are able to respond immediately with feedback to unexpected situations and to verify data on the spot. They perceive situations as a whole and gather information on multiple levels simultaneously. As such, it is necessary to disclose background information on this human instrument, such as skills, biases and experience that will influence the outcome of the study (Lincoln & Guba, 1985).

As previously mentioned in Chapter One, I, the researcher am attracted to the content area of this study, prayer, since childhood. Part of my life’s work has been to keep prayer a fresh and exciting experience for myself within the constraints of an Orthodox Jewish milieu. This includes participating in new semi-egalitarian modern Orthodox prayer groups, leading women’s prayer groups, attending conferences on gender and reading the literature that deals with the topic.

My professional life has principally been within the educational confines of the Orthodox Jewish day school in a large city with a sizable Jewish population. Therefore, when I approach the topic of how to educate female adolescents to
increase their meaning-making and participation in a community of practice, I have significant expertise on the subject. However, I may also be considered a prejudiced instrument that may not be sympathetic or fair to the suggestion that young women appear satisfied with their current role. I admit to the possibility of interpretation that furthers my personal agenda.

The flip side of my extensive knowledge base and experience with the topic is that I posses high theoretical sensitivity.

Theoretical sensitivity refers to a personal quality of the researcher. It indicates an awareness of the subtleties of meaning of data… [It] refers to the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn’t (Strauss & Corbin, 1990, p.42).

I have conducted a process similar to action research as the director and producer of numerous industrial videos. The cycle begins with a needs analysis and diagnosis of the information that needs to be conveyed and to whom. This is followed by formulating a concept for the presentation of that information that is appropriate for the intended audience. Research, interviews, archival materials and live footage are then assembled, reviewed and incorporated into a script. The materials are then brought together to the editing suite where they are woven into a finished product.

The skills required for this production include good organization, being able to weed through large chunks of information and extracting the most salient material to support the piece. Intuition is the gate keeper when the story or shots don’t flow and in the selection of the sound track. My extensive experience with constructing and carrying out interviews has taught me to structure questions that address the heart of an issue and to be aware of reframing the question when it is not being answered
comprehensively or diverts from the goals of the project. These qualities lay the foundation for this study, contribute to my theoretical sensitivity (Strauss & Corbin, 1990) and lend to my credibility as a researcher.

A learning style inventory that I completed indicated that I was a visual learner who typically processes knowledge in a non-linear method. This fact combined with my professional life, concerned with conveying information in visual media, points to a possible bias in my interpretation of the data. Although I was careful and conscious not to express bias or judgment, it is possible that through the tone of my voice, in the phrasing of questions or in the interventions my personality exerted a bias.

I am involved and invested in this study, as the quandary of meaningful prayer and the Orthodox Jewish woman is a personal cause célèbre and passion for me. I held the position of a participant observer that one might find in an ethnographic study. The research in this study not only explores learning and meaning-making but also investigates the female students’ feelings and attitudes about a community of practice and prayer. As an active participant in the instruction and design I have had the wonderful opportunity of being a reflective practitioner.

Limitations

The limitation of the methodology, other than my previously mentioned bias, concerns the wording of some of the items in the profiles. I realize, in retrospect, that there are several terms, like the word “meaning,” although explained verbally to the participants, are not clearly defined on either of the profiles. Since meaning-making might connote diverse understandings to different participants the individual
responses may not be addressing the same phenomenon. Other terms, with similar ambiguity, include reflection and understanding.

The ambiance of the research setting, created by me, was very positive and loving. The participants, who were separated from their family during the intervention, might have unconsciously responded favorably in order to please me. As the official camp web master I photograph the campers and decide which photos are displayed on the daily website. The participants might have wanted to remain in my good graces to insure their appearance in this medium.
CHAPTER 4

RESULTS

In this chapter I present the results of this study. I begin with some additional findings from the pre-activity profile that sheds light on the cohort’s response to the intervention. I then detail the first two group meetings. The analysis of the collaborative work is next, which includes reflecting on the dyad’s collaborative dynamic as well as an investigation into the meaning-making of the text with the visuals.

First Meeting

I began the first session with an introduction to the project and myself. I explained why the research interested me and the anticipated process of the study. Each participant was given a clipboard, which was both a gift for participating in the research and a tool, to be used throughout the project. The eight participants then filled out a detailed profile that asked for a self-report on prayer practice and attitudes, spiritual intelligence and learning style.

For the second half of the introductory session, the group assembled and we discussed the numerous appellations for prayer in both English and Hebrew. The words were recorded on a whiteboard while group members defined the type of
prayer the word signified. English examples included words such as supplication, meditation and contemplation.

When I suggested the Hebrew words “avoda she’balev” (work of the heart), the phrase used to describe prayer by the post-Second Temple scholars, the girls reacted negatively and a passionate discussion ensued. This word, “work,” reminded them of homework and had an overwhelmingly bad connotation. The participants animatedly continued to discuss their beliefs and feelings about prayer. They were so engrossed in their discussions about their community of practice that it seemed they might have continued for a long while, had I not been forced to send them off to their next activity.

Prayer Practice

The participants’ concerns vis a vis the prayer community of practice were corroborated and clarified by the findings from the profiles and interview. One of the girls prays twice a day, once in the morning and again in the afternoon. However, the rest of the participants pray once a day in the morning on the average of six days a week, five school days and the Sabbath. The group indicated that on Sundays, when they are not in an institutional setting such as school or synagogue, most of them skip praying. There were several stated reasons for this. Galit responded, “I don’t like to daven by myself.”

“Usually I don’t go out of my way to daven”, said Galila who was a scholarly and serious participant. She adds the caveat that she goes go to synagogue on Saturday, “but I just hang out with my friends.”
Layla reported that she goes to synagogue but does not pray on Saturday. “I used to. I stopped. I hang out more.”

Samara does not pray when she is by herself. She feels that prayer is more powerful when a large group of people are praying for the same thing. For most of the girls of this study, the obligation to pray on a daily basis has not been internalized. It is dependent on external authority and community expectations.

Of all the participants, only Ariella would prefer to pray by herself. She suggested, “If I was by myself I’d be able to concentrate and not look at what other people are doing. She continues, “I [like to] daven outside and when I look up at the sky it reminds me of God and all the good and bad things that he did. I wonder why he does all of those things and I try to understand.”

School Prayer. As previously mentioned, the group responded negatively to the prayer term “work of the heart.” Their profile responses indicate that school-mandated prayer holds several issues for the participants. Ariella reported that she objects to being forced to “daven” (pray) in school or camp. “I don’t feel connected when I do it. I don’t feel like there’s a purpose. I feel like it drags everyday. It doesn’t make me interested at all. I feel that I cannot concentrate with kavannah because they go too fast.”

She related that in her school the boys and girls daven together but only the boys are permitted to lead the prayer service. Ariella reflected and said “I think that I’d feel more comfortable with a girl davening as opposed to a boy. Also, the girls tend to go slower.”
The others in the group agreed and echoed similar concerns about their school’s prayer. Omrit related how the prayers in school are said very quickly and how that affects her practice. “They go really fast so I normally just say the English. I asked her, “When you were younger did you also read the English? She answered, “I did what was I was told and davened all in Hebrew.”

“A lot of times on Shabbes I’ll read the English because it makes it more meaningful to me,” said Galit. “But not during school because I don’t have much time and the davening can go by really quickly.”

Comprehension. The pre-activity profile addressed the issue of the participants’ comprehension of the Hebrew prayer and how often they use a Hebrew-English prayer book. Half of the respondents answered that they read the English translation frequently. One quarter answered that they read the English less than half of the time and another quarter answered that they never read the English translation.

Samara who struggles with comprehension said, “Sometimes I have to read the English…otherwise it is pointless for me to say it.” Although she relies on the English translation frequently, Samara related that she often prays from a Hebrew only prayer book, as the English translation prayer books are frequently unavailable.

Omrit described her comprehension strategy. She said, “I read the English and then when I know it well enough, I can read the Hebrew.”

The results for the profile item, “when I daven I understand the Hebrew of what I am saying this percent of the time,” reveal that participants on the average understand the prayers slightly less than 40% of the time. Sixty percent of the group indicated that they understand the words of the prayer 25% of the time. Two of the
participants reported that they understand the prayers 50% of the time. The only participant that reported over 50% was Sarah, who lives in Israel. She answered that she understands 87% of the Hebrew prayers.

Galila explained her response of 50% of the time. She said “I kind of understand what the bracha (blessing in the 18 Blessing Prayer) is about, not each and every word but the bracha as a whole.”

Omrit rationalizes why she does not understand the Hebrew prayers 75% of the time. She says, “[In school] they don’t teach us Hebrew and they don’t concentrate on davening. They teach us Chumash (Bible) and Navi (Prophets).”

The cohort strongly agreed with the statement that understanding the words of the prayer text affects religious or spiritual meaning-making during prayer practice. The lowest single response was 80% agreement. They also agreed overwhelmingly that they would like to learn more about the prayers.

Bat-mitzvah. Upon reflection, my perception is that both filling out the pre-activity profile and the group discussion performed the vital purpose of giving the girls, who had recently celebrated their bat mitzvahs, an opportunity to publicly process their attitudes about prayer. As previously mentioned, these girls have been praying for as long as they can remember, since age three. Half of the participants responded that their bat mitzvah was the event that impacted on their religious or spiritual feelings. Their change in status at age 12 to full-fledged community members appears to have raised the stakes for participation in a group discussion about the female sub-community of practice.
Samara offered, “After my bat mitzvah I really don't know why it kinda changed and I can't remember why but one day I just started caring about that maybe I should start davening.”

Omrit, earnest and even-tempered, agreed and added in thoughts about her halachic (legal) responsibility for her actions. “My spiritual feelings changed when I became bat mitzvah. When I was younger and I forgot to make a bracha (blessing) everyone said to me don't worry Omrit you are not bat mitzvah yet. When I am a bat mitzvah and I forget to make a bracha, I worry oh no what will happen.”

“Now that I am bat mitzvahed,” said Sarah. “I am starting to feel a lot closer to Hashem in my life and to tefilot (prayers).” She added, “My bat mitzvah davening was my best prayer experience because all my family was there and it was all about me.”

Two of the participants engaged in a public ritual for their bat mitzvah which is generally performed by men in the modern Orthodox world. Sarah read the Torah publicly at a prayer service for women with the male members of her family sitting behind the partition. Galila completed the study of a tractate of Talmud and publicly recited the celebratory prayer usually reserved for men in the Orthodox community.

Second Session

The following day, the participants returned to explore prayer artifacts and works of art. I wanted to relate the concept of enriching prayer with media and to encourage a critical analysis of a multi-symbol representation. The computer provided a rich “surround” (Perkins, 1993) for presenting material from libraries,
museums and web pages. These materials portrayed how media were used through the ages to complement prayer.

Participants were asked to reflect on the following three questions for each piece:

1) Is the presentation effective? How does this creative endeavor add or detract from the meaning of the prayer?

2) What is the creator of this work trying to express?

3) What other technique or tool might be used to increase the power of the message?

Multi-Media Exploration

The group sat around the computer screen and looked at a page from an illuminated medieval prayer book. This sample demonstrated that art and prayer have coexisted since the Middle Ages. As per the technique for analyzing an image elucidated by Straten (1994) in the Introduction to Iconography we first enumerated the images on the page. This was followed by a discussion on the symbolism and relevance of the image to the text. We repeated the process with another facsimile from a medieval Haggadah, the text used at the Passover Seder.

Next, we evaluated an illustrated Grace after Meals booklet (Haruni & Munischor, 1999). (Grace after Meals is a liturgy recited by Jews after completing a meal where bread was consumed. Orthodox Jewish hosts customarily distribute “Grace after Meals” pamphlets at life cycle parties that include dinner. Since this volume is the first Grace after Meals to be illustrated with visuals its distribution has become widespread. As such, the participants were all familiar with this volume.)
In this small volume, the Grace after Meals prayer is superimposed on a full-page photographic background that relates either to the main idea of a paragraph or to a specific phrase on the page. The participants noticed that the image sometimes conveyed a setting in lieu of enhancing the meaning of the literal words. They also commented on the quality of the photos and felt in several instances that the image might have been improved upon.

We went through several pages of the Grace after Meals, trying to link the image with the liturgy. The group then discussed whether having a booklet like this was more advantageous for comprehension and devotion than a print only version.

Ariella said, “When I “bench” (say Grace after Meals) with that bencher (booklet of Grace after Meals) I always look at the pictures and it distracts me from the words.” On the pre-activity profile Ariella answered that while praying she frequently free associates images with the text. For her, it appears that there is a difference between the self-generation of a mental picture and a visual that is static and chosen by an outsider. Samara, who also responded that she imagines visuals at distinct parts of prayer, added her critique. “If there is always the same picture then you do not get new ideas.”

Omrit and Sarah, the two other high scorers on the visual item on the pre-profile, opined that seeing the picture concretized the meaning of the text. Sarah added that seeing examples of the text stimulated increased feelings of gratitude. Galit liked the pictures because, “they take the words and put them into a nowadays picture.”
Next we viewed the painting, Psalm 68, from the “Archie Rand Iconoclast” exhibit at the Yeshiva University Museum website. (Psalms make up a large part of the liturgy.) This artist works with traditional Jewish texts and a contemporary visual iconography. Each of the 36 verses of this Psalm is presented as individual paintings. The English text of the verse is surrounded by an abstract representation. According to a critic of the Jewish arts, “His work challenges us to devour our literature, our history and lives and make art, make meanings and begin to construct a Jewish culture (McBee, 2004).

The group, impressed with the online exhibit, repeated the procedure of analysis as before. Rand’s work, due to its’ abstract nature, lent itself to individual interpretation.

The group then evaluated artist Moshe Berger’s work at The Museum of Psalms, which is physically based in Jerusalem, and available online as a virtual museum (http://www.museumofpsalms.com). Each of the 150 Psalms was presented as clickable paintings that could be zoomed into and studied. The works were annotated with the text of the Psalm and with a description of the symbolism used in the painting. Stylistically, Berger’s style is, like Rand’s. Again I conducted an analysis with the group.

These samples of prayer and art were facsimiles of real art work and excellent examples of personal meaning-making. The next piece that combined a medium with a religious text was on Beliefnet.com, a website dedicated to the promulgation of spiritual teaching. Psalm 23, “The Lord is my Shepherd” was showcased as an
“audiovisual devotional.” This was an animated slide show that had a solemn, Gregorian like audio track.

The text presentation was very literal. When the voice over Psalmist says, “He lays me down in green pasture,” the image was a vacant expanse of beautiful green grass. The participants noted that the only text being amplified was the grass. The Psalmist and the action, of being laid down were omitted.

We discussed the poetic quality of a Psalm and the opportunities for exposition using hermeneutics. I presented the Jewish concept of exegesis known as “PaRDeS.” This acronym represents four layers of possible interpretation: The “P” is for pshat (simple), the literal meaning. “R” is for remez (hint), a meaning that is alluded to. “D” represents a drash (exposition), a homiletic interpretation and “S” for sod (secret), the hidden or mystical meaning (Backenroth & Epstein, 2006).

We watched Psalm 23 several times, pausing the show to view individual slides and to extract the meaning, intended by the author of the piece. The girls enjoyed seeing a prayer slideshow in the public domain of the Internet. They commented on the professional look of the piece. However, they reacted negatively to the dark tone of the music, feeling that it was foreboding and cheerless. The participants thought that the Psalm expressed gratitude and serenity and that the music conflicted with the meaning of the Psalm.

Within the prayer community of practice prayers, music plays a significant role. Prayers may be read, sung to a tune, or recited in a type of singsong. The pre-activity profile queried participants if they “get into” the prayers more when they are sung. Three of the participants strongly agreed that singing while two participants
somewhat agreed and scored in the middle. Galila described the positive effect
singing had on her prayer experience. “My first shabbos (Sabbath) here at Moshava,”
she said, “was the best prayer experience because when people davened they sang it.
They had so much kavannah and happiness that it made me want to join in too.”

As a wrap-up to this portion of the second session, we contrasted the strengths
and weaknesses of the various media that we had viewed. I reiterated how the current
research project was looking for not just the literal meaning of the text but for a multi-
layered and metaphorical meaning.

We jointly executed a model exercise to further reinforce the goal of meaning-
making in their projects. This served as practice for the larger project, as in the
previous iteration and is based on the Learning by Design Model (Kolodner, 2003).

I chose the “heal us” blessing from The 18 Blessing Prayer. We began with
the words “heal us” written on a whiteboard. From there we webbed ideas. Some of
the words that the participants associated were fix, heal, and complete. We elaborated
on the flow chart and linked in what might need to be healed. I then asked each
participant to think of an image to illustrate the first words of the blessing. In addition
to providing a response, which ranged from band-aid to burning hands reaching up to
the sky, each participant justified their choice of image.

Deciding on the blessings

I checked with the participants as to their competence in PPT and made sure
that each dyad had at least one person who felt very competent in this application.
Otherwise, the pairing was random and all were agreeable with the arrangement.
A short discussion ensued whether I should assign each group their blessing or if they wanted to pick one for themselves. The consensus, based on the groups’ wishing exposure to new material, was that I would distribute them. In choosing which four of the eighteen blessings would be worked on, I selected those blessings that I felt would be relevant to adolescents live. There were prayer books on hand for the pairs to review the blessing.

Three out of the four dyads switched the blessings that I assigned them for ones that they jointly selected. Layla and Ariella worked on the blessing for forgiveness that I assigned. According to Ariella she was happy with the choice as this was a blessing that she already related to.

It is interesting to note that the blessings that the participants chose very much represented areas of concern to adolescents. Samara and Nediva selected the blessing for peace and bounty. Galit and Galila’s blessing was about food. Sarah and Omrit’s was about the after life.

While reviewing their blessings in the prayer books, the dyads revealed that they were unfamiliar with the structure of the *Eighteen Blessing Prayer* and they asked me where the blessings began and ended. They also did not know how to decode the Hebrew and had trouble understanding the English translation. Many of the English words such as ‘countenance’ and ‘sustenance’ were foreign to them.

I observed the groups transposing the English found in the prayer books into the vernacular. Nediva and Samara tried to figure out a substitute for holy countenance. This was their conversation:

Nediva: Okay, so far? “Bless us Hashem, our Father, as your one and only nation, with the light of your expression.”
Samara: I don’t like "light of your expression. (She is thinking.)
Nediva: How about your holy face? (Both girls giggle.)
Samara: The light of your holy expression.
Nediva: With the light of your holy facial complexion?
Samara: Devorah, can we say light of your holy complexion?
Devorah: Holy complexion? Is that like God has no pimples? (Both girls start laughing.)
Samara: Face, holy face.
Nediva: Okay, with the light of your holy face.

There are a number of noteworthy observations. The dyad had the opportunity to evaluate and play with the meaning of the text through their search for the correct phrasing. They asked if they could use the word “holy complexion,” for God’s face. They had fun, evidenced by their laughter, going through the various permutations. They engaged in a dialogue about God, albeit about semantics. With each successive volley they built on their knowledge construction. Finally, they looked to me for authority and guidance for their spiritual concern.

All of the dyads were very involved with one another in this first work meeting. The groups asked one another questions as well. Primarily, the pairs were translating the blessings into English and writing them down with paper and pen on their clipboards. In addition, they engaged in much discussion.

Ariella and Layla discussed the philosophy of their blessing. They concluded that the prayer both praised God and beseeched Him for forgiveness. They broke their blessing down into four paragraphs. Galit and Galila spoke about what the nature of a blessing was. They also analyzed what their blessing addressed and conversed about the meaning of “Make this a good year like other good years.”

Omrit and Sarah started entering the text on the computer. Sarah, as previously mentioned, is a fluent Hebrew speaker. She anticipated being able to
translate the Hebrew blessing without a printed English translation. However, when faced with the text she was unable to correlate her knowledge of modern Hebrew to the liturgical Hebrew. When she approached me for help on specific words I gave her the modern Hebrew word that had the same root as the word in question. With that prompting she was able to do the translation.

I found it curious that Sarah was unable to correlate the words. There appeared to be a total disconnect between the two linguistic spheres. Rosenberg, in his evaluation of prayer in Israeli schools, states that the familiarity with the language component did not seem to increase comprehension or devotion among the population (Rosenberg, 1996).

Sarah expected Omrit to comprehend the English of the prayer book. She did not and was flustered at this expectation and suggested that they look up the meaning of several words on dictionary.com. After working for ten minutes, Omrit said to Sarah, “This is a lot more fun than our regular shiur (class).” The other participants seemed to share her enthusiasm. Upon exiting, five of the participants thanked me for the session.

Analysis of the Collaborative PrayerLive Presentations

The four slideshow presentations, fashioned by the participants, are dissimilar in the style and in the techniques that they employed for meaning-making. Each dyad worked in a unique manner and had its own collaborative chemistry and strategy. As such, each pair is profiled independently vis-à-vis their collaborative process and finished product.
The technical quality of the presentations and the effort that the dyads’
invested in their presentation is observable. I assessed the finished products to see if
the pair followed the directions for the project. In several cases, which will be
detailed shortly, I intervened and restated my expectations while they were in process.
The videotapes documented the girls’ methods of functioning as designers and
learners and there are numerous criteria to choose from to examine the images
(Straten, 1994; Langer, 1953; Agosto, 1999; Golden, 1990; Arizpe & Styles, 2003;

Yet, despite these rich resources, my interpretation is ultimately subjective, as
all understanding is not without bias. I was the project designer, the teacher and the
researcher. Now in this interpretive phase, I am part cultural historian, part
anthropologist and, part art historian.

The criteria delineated below are the assessment rubric for the technical
portion of the presentations. These measures match the tasks that comprise the
production of a *PrayerLive* presentation.

1) **Is the translation from the Hebrew to English meaningfully correct?**
The translations did not have to be verbatim to be considered valuable but they did
need to communicate the intended meaning of the Hebrew text.

2) **Does the slide contain one phrase or one idea?**
Each single phrase is presented on an individual slide. Did the dyad adhere to this
model? If they did not, what was their justification for an alternate design?

3) **What does the image/s that was used to illustrate the text signify?**
How do the selected images add meaning to the text that they are illustrating? Are the representations literal or symbolic? From what visual lexicon does it derive?

4) What other tools were used to convey meaning on the slide and in the presentation at large?

Does the presentation contain elements of color, text or special effects to enhance the meaning represented on the slide?

5) What is the “Gesamtkunstwerk” of the presentation?

Gesamtkunstwerk (complete artwork) refers to the total affect and style of the work as a whole (Straten, 1994).

Each presentation was deconstructed using a three-step process as mentioned in the previous chapter. 1) The elements in each slide or “imagetext” (Mitchell, 1994) were enumerated. 2) The theme or subject of the work was identified and described. 3) An evaluation of whether the work had a “‘deeper or secondary meaning that might lie within the creators’ intention” (Straten, 1994 p.10) was conjectured.

Whenever possible, a connection was forged between the dyads’ choice of design and their personal circumstance. This was achieved either from their dialogue, their responses to the profile or to the interview or by an aggregate of all three. This fourth phase of analysis, termed iconology, asks why a certain image was chosen and tries to place it in a temporal context, “The artwork appears as a document of time… and can emerge as a personal record of the artist” (p.12).

Ariella and Layla

At the beginning of their collaboration, Ariella and Layla discuss the tone of the PPT. Layla asks, “Are we trying to make this fun or like serious?” Ariella
answers, “We can make a mix of them both. I think that she wants it serious. We can make it helpful.”

In Ariella and Layla’s collaboration, as seen on the videotape, we see that Layla controls the computer most of the time. Nonetheless, Ariella is an active participant and very gracious in her comments. In a polite way, she directs Layla and yet accommodates for Layla’s pace. Layla is very energetic and the two of them are focused on the screen together for many hours. Layla in her description of working with Ariella said. “She was helpful and a lot of fun. How we chose the pictures showed we had different perspectives.” Her high regard for Ariella was summed up when she said. “I feel lucky that she was smarter [than me].”

From the researcher’s perspective Layla was just as “smart” as Ariella. However, their intelligences were different and complimentary. Layla was more impulsive and less linear. Ariella was more reflective and precise about the design elements of the presentation. They were mutually creative and shared equally in generating ideas.

The girls were both seasoned PPT users and complimented one another’s knowledge of techniques. They would demonstrate to one another how to perform certain tasks on the computer such as how to change a font size by typing in a number. Or, how one saves a picture and then inserts it into PPT. I taught them both how to change the toolbar options.

Ariella and Layla worked together very harmoniously. They seemed to be in sync as they moved through the process of creating their visual midrash (exegesis). Both girls’ grey eyes were focused almost continuously and simultaneously on the
screen for the bulk of the collaboration. They candidly expressed their feelings about the elements that they were designing for the presentation and checked with one another regularly for a reaction. Each respected the other's opinion and there was no perceptible tension between them.

Their relatively close position in space testified to how comfortable they were with one another. They communicated with a modicum of words and appeared to have the uncanny ability of sensing the other’s feeling. Each girl assumed the same chair for the four times that they were videotaped.

_PrayerLive Presentation._ Ariella and Layla’s eight-slide PPT was created for the blessing “Forgive us.” The style of the presentation is uniform. All of the images are on the right hand side of the slide and take up less than 20 percent of the area. The background color fills the screen at the beginning of each new slide followed by the entrance of the text with an effect. The image then appears with a different effect. Animation was successfully employed for dramatic and emotional affect.

This dyad relied heavily on color to convey the meaning of the text. Layla wrote in her post-activity profile that choosing the colors was fun. During their collaboration she said to Ariella, “When you think about the words forefather what color pops into your mind? Think back. Can we do black and a really light grey.” “That would be cool,” said Ariella. They experimented with many shades of grey and black.

Yellow functioned to indicate a divine/spiritual presence, as in the slide with a crown. Black, white & grey represented past generations. Pink portrayed love and the words we have sinned were written in red. Ariella explained her feelings. “I like the
fact that there are colors that helped us set a mood for each individual slide. When we say that Hashem loves us we did a warm color like red or purple.” The pair painstakingly chose each hue for the meaning that the color conveyed to them.

The girls invested a lot of thought into font styles as well. They spent a considerable amount of time looking for the right font that would express the meaning of the text that they were trying to communicate. For example, they were looking for a font that would look “holy.” Silently they looked through all the fonts until they agreed on one. They then sampled it and kept on looking until they were satisfied with the result. Ariella wrote in the post-profile that the colors and the pictures enhanced the prayer so that, “it would not be boring for others to look at.”

Forgive us holy one,  
For you have a history of forgiveness.

Meaning-making. Three of the slides had visuals that were allegories and included diverse personifications such as Bart Simpson and a Jew wrapped in phylacteries surrounded by Nazis. Four other slides were symbols. Two of the
symbols, a trio of hearts representing the text love and compassion and a peace sign for the word shalom were literal and simple. A third, a fist, is a Jewish symbol for the action of beating one's breast for atonement. The fourth symbol, a crown, is a traditional symbol for God (www.iconclass.nl).

The allegorical slides extended the meaning of the text. Bart Simpson, a popular cartoon character, is a personification of a smart-alecky kid who lacks respect for authority and “sins” by bending the rules. The allegorical slide depicts him with the attribute of a hand in a cookie jar. As the image is static he is frozen with his hand caught in the cookie jar. “A hand caught in the cookie jar” is an idiom for being caught in the act of doing something wrong (http://www.usingenglish.com/reference/idioms/caught+with+your+hand+in+the+cookie+jar.html.) It is unclear whether the dyad was aware of the expression.

The Bart Simpson illustration flanked a bulleted list of sins that do not appear in the blessing text. A red letter "x" floats on screen to cover the picture. Perhaps, the large red x was meant to signify not doing sneaky things, not getting caught or simply that Bart behaved inappropriately.

The text, “Please forgive us and our forefathers for we have sinned and doubted you” is juxtaposed with the picture of the Jew wrapped in a prayer shawl and phylacteries glancing towards the ground.
Please forgive us and our forefathers, for we have sinned and doubted you.

According to the dyad’s dialogue featured below, the black and white photograph was meant to represent a forefather. This forefather though is surrounded by a group of laughing Nazis. The attributes of the Jew’s bare feet, (according to Jewish law shoes must be worn for prayer) the Nazis and the three bodies lying face down on the ground introduced a philosophical dimension to Ariella and Layla’s interpretation of the blessing. Did they intend for the humiliation that this Jew is experiencing to symbolize punishment for sinning? Are they suggesting that the Holocaust resulted from a lack of faith?

The following dialogue explains how the image was chosen and also serves as a sample of Ariella and Layla's collaboration. After determining the background color scheme for the slide Ariella asks.

Ariella: Can we have a picture?  
Ariella: We can make an old man.  
Ariella: Should we do Abraham? Jacob also?  
Layla: (Talking about search term for Google) Grandfathers?
Ariella: How about forefathers?
Layla: (Looking at screen) Scary.
Ariella: Maybe we shouldn't do it.
Layla: How about the twelve tribes?
Layla: (Types the twelve tribes in Goggle.)
Ariella: How about generation?
Layla: Should we write WWII? They have all those b&w pictures
Ariella: This one?
Layla: (Pensive) It doesn't remind me of my forefathers. When I think of my forefather I think of an old Jew.
Layla: (Typing into Google) Black and white pix of old Jew. Does this one remind you?
Ariella: Lets see. If we went to pictures of Jews during WWII.
Layla: That's so mean.
Ariella: That's the KKK.
Layla: That’s scary.
Ariella: How about pictures of Jews?
Layla: Jews of WWII.
Ariella: We would have to make the picture big.
Layla: Can we cut out those people?
Ariella: That's good. Cut those people out. Talk about dead people.
Layla: Is this good?
Ariella: Yeah I think it is really good. It completely shows the purpose ‘cause it is a sad thing.
Layla: Should we write a caption?
Ariella: I think that they get the idea

Perhaps, when Layla asks “should we write a caption” she is responding to the intensity of the image particularly in relation to the other visuals in the show. It also appears from the conversation that the majority of dead people were cropped out of the image, as only the lower half of their bodies is left. Ariella’s acknowledgement that the image “totally shows the purpose” might suggest that the Jew is suffering for his sin and that the dyad believes that our prayer for forgiveness atones for him.

The concept of forefathers sinning does not appear anywhere in the actual text of the blessing. Another sentence that they wrote, “Forgive them, who don’t have the ability to pray to you for forgiveness,” is also not from the prayer text. The image accompanying the text is a young girl in a hospital bed being attended to by a nurse.
The imagetext (Mitchell, 1994) might suggest that the little girl’s illness resulted from her not being forgiven and that the prayers of the community might influence her recovery. The aforementioned two ideas radically change the tone and the meaning of the blessing. Ariella’s and Layla’s PPT is exegetical, a “drash,” a homiletic.

*English Translation and Phrasing.* As stated previously, Layla and Ariella did not write their text in adherence to the traditional blessing formula found in the *Shemonah Esrai* (Eighteen Benediction Prayer). Nor did they follow my directions for splitting the blessing into single phrases. They added words to the opening of the blessing and omitted the closing formula at the end. Instead of phrases they split the blessing into four sections.

The PPT text was a loose adaptation and not a true translation of the words. In addition to the three slides of created text, there is an example of an acceptable adaptation that did not change the meaning of the blessing. In place of the words of the liturgy, “You are a forgiver and a pardoner,” they wrote “You have a history of forgiveness.”

Only one sentence of the Hebrew text appears in the presentation. Again, this was not in conformity with the directions. I confronted them during their collaboration to remind them to insert the Hebrew text. Ariella responded, “Some of these weren't from the translation,” so there was no Hebrew. Layla added, “We went further than this *tefillah* (prayer) this [the PPT] isn’t just *tefillah.*” Given that these two girls expressed strong feelings about being forced to pray, I backed off, preferring not to transfer negativity to the project. I allowed them to present their vision of the blessing.
In the videotape of the group gallery session, the other participants take exception to the omission of Hebrew. Omrit, who is the grandchild of Holocaust survivors and might have personally related by the Nazi photo, remarked that seeing the Hebrew words enables her to learn the meaning of the Hebrew text. When the topic was brought up, Ariella defended the project by indicating that they did not have enough time to do it. In actuality, however, Ariella and Layla were the first to complete the assignment.

Furthermore, the data indicated that the pair took great pride in being able to express themselves freely and in presenting their prayer, as Layla said, “in a personal way.” They integrated prior knowledge, which may or may not have been accurate, into their display of the blessing. Two of those concepts are generations being responsible for one another's sins and the idea of the communal responsibility of praying for those who are unable to beg for forgiveness. Layla explained, “It’s not just forgive us but it is forgive us as a nation.” Upon hearing her explanation Ariella added, “I remember learning that what our grandparents did influences us.”

*Intervention.* When they showed me their PPT and we reached the slide of the forefathers they shared the following thoughts with me.

Layla: I love this one.
Ariella: This one, it shows a lot of meaning.
Layla: It is so meaningful, the picture and the color. We have sinned and it is like our forefather and he is like forgiven. They doubted Hashem and now they are asking for forgiveness.
Ariella: I think it feels like the Jews don't only have good times, but that they have to daven through the bad times. We are sorry for all the sins that we did. But, we are going through hardships now so we need your forgiveness and help. Some people lost hope and can't speak. [They] don't realize what is going on so we daven for them.
I felt that this dyad’s presentation was externally focused and did not involve Ariella and Layla’s personal connection to the blessing. The girls’ called me over to say that they were finished and wanted me to check their work. My response is below.

Devorah: I am not seeing that much of Ariella and Layla in your presentation.
Layla: I am not going to put in a personal issue. There are a lot of personal things
Ariella: Yeah there are a lot of personal issues that I could put it—but it’s private. There are so many things that happen in a day or in a week but it is embarrassing.
Devorah: What about some of the things that 12 or 13 year olds might want to be forgiven for. Could you insert a slide?
Layla: I don’t have patience anymore.
Ariella: Can we make it with bullets?
Devorah: Of course.

The girls’ expression of their feelings about sharing might indicate that the dyad forged personal connections internally and that there was “affective spin-in” Ariella appeared to have made meaning with the prayer project. In reflecting on her experience she mused, “It was fun but also maybe sad to do this. Like when you saw our slides it didn’t have such a happy feeling to all of it. ...Since it was “slach lanu” (forgive us) it was a lot of bad stuff…If I did something bad to my friend and when I’m saying ‘slach lanu’ I’d feel horrible for what I did…and so I’m hoping that I would be forgiven.”

**Cognitive spinoff:** Ariella felt she learned the important technique of distributing her knowledge as a result of her participation in the project. She said, in answer to the question of whether the project influenced her use of the computer, “Yes, I am using the skills that I learned from the project because now I use PPT to
divide up anything that I don’t quite understand.” Despite not following my directions of segmenting the phrases into individual slides, Ariella capitalized on the skill of parsing text and ideas.

This dyad was very eager to record sound to accompany their presentation. In the last session they tried to record their voices but the technology and time were inadequate. Nonetheless, they had a very good time trying. On the videotape we see Layla having a good time performing the words of the blessing in rehearsal for the recording session. She practices the pace of the slides reading fluently in a sing song.

In summation of the analysis for the blessing “Forgive us,” I am quoting Ariella. She said, “Like I know we can’t do this again but I wish all over the world people would be able to do these kinds of projects to help us understand it more.”

_Omrit and Sarah._

_PrayerLive presentation._ This dyad’s PPT on the blessing “Resurrecting the Dead” is 16 slides long and is animated. The opening slide presents a bold, large black title of the Hebrew name of the blessing against a dark blue background. The
English poem form of the blessing text then enters line by line in white. After the poem is revealed, each of the images from the slides glides in, framing the text. The placement of the pictures around the Hebrew text is artistically pleasing. The meaning of the prayer text is enhanced by the order that the pictures appear on the screen, the timing of the animations and the transitions between the slides. For example, the image of a house, obviously destroyed by weather, enters with a move that simulates the house falling down. A new house appears as if it is being built.

Throughout the presentation, Omrit and Sarah used bold colors for the backgrounds and WordArt for the text. The images were all from the Internet. In five of the slides, Omrit and Sarah used captions above the images to scaffold understanding and also to indicate the passage of time. Their dialogue revealed that they were unsure that viewers would comprehend the meaning from just the image. This is a classic iconographical technique (Straten, 1994).

*Meaning-making.* The hardest part of the project Omrit said was, “Deciding what type of pictures to use.” She explained why she and Sarah settled on a particular style. “We decided to put pictures that could make it simple for others to understand. We took pictures from TV and used a lot of animated pictures.”

For an iconological exposition and interpretation of many of the images in this presentation, the viewer needed to be rooted in Jewish culture, symbolism and history. Omrit and Sarah drew on their knowledge of Jewish culture and history and associated the text with traditional Jewish symbols and images.

The pair used symbols that may have multiple meanings, such as the Temple in Jerusalem or the Lion of Judah. For example, the Lion of Judah is the symbol for
the city of Jerusalem, the tribe of Judah, the Davidic dynasty and for the future Messiah (Straten, 1994). In order to interpret the slide correctly one has to know the context and/or intention of the creator (Kress & Van Leuwen, 1996).

The dyad used the Lion of Judah image to illustrate “we trust in You to revive the dead.” Their conversation opened with Omrit posing that they need to get a picture of the word “Hashem” (God).

Omrit: We have to get a picture of the word Hashem
Omrit: Let's get a picture of Yehuda (Judah) because Yehuda brings Mashiach (Messiah)
Sarah: Oooh (Sarah takes control) The shevet (tribe)?
Omrit: There's a good one there.
Sarah: People won't understand that that is Yehuda

Sarah, controlling the computer searched for pictures of Judah on Google. The dyad chose a picture of Judah that included within the image the title “Lion of Judah.” They never discussed the symbolism or the connection of Judah and reviving the dead. Perhaps they shared an implicit understanding of the traditional Jewish correlation between the heralding of the Messiah and the “Revival of the Dead.”

Throughout the dyad’s interaction, we see Sarah concerned with mechanics, such as accuracy, literacy and consistency. Omrit is more concerned with the aesthetics and creative component. Occasionally, in response to Omrit’s initiation, Sarah associates words that could be used in Google.

Sarah was passionate about one specific idea for the illustration of “You give faith to those that sleep in the dirt.” She stated this the first time she and Omrit worked together. Traditionally, “those who sleep in the dirt” refers to the dead. For Sarah though the meaning pointed to Israeli soldiers. Sarah, as previously mentioned,
lives in Israel and has three older brothers that will serve in the Israeli army. In the interaction below she reiterates her idea and expands upon it.

Omrit: The next one ‘you give faith to all those who sleep in the dirt.’
Sarah: I want to do soldiers.
Omrit: I’ll just get that picture of the Six Day War.
Sarah: I think that we should also get one from today. That one was a long time ago.
Sarah: Oh that is such a famous picture. Can we have one from today too?

Omrit did not challenge Sarah’s interpretation and accommodated her wishes.

The slide has two images; a classic photograph of three paratroopers immediately after they captured the Western Wall, and a contemporary photograph of a few soldiers standing in a dusty field. Like the Superman slide and the Rachel slide, this image text has two visual components. A historical photo is juxtaposed with an image of a contemporary group of soldiers.

In addition to the Jewish content of the visuals, this presentation displays visual cues and images from contemporary American culture. Four of the slides have popular cartoon characters. As noted above, Omrit and Sarah consciously decided to use images like cartoons that people their age would relate to. Like Ariella and Layla, at the outset of the project, Omrit and Sarah discussed how they want their show to be fun and also serious.

Cartoons provided a lighthearted tone and also a readily available lexicon of images on sites such as Looney Toons. The cartoons, according to Omrit, were meant as a departure point with real images to be supplied by the viewer. She said, “I started with cartoons and pictured them in my davening and then they changed to real pictures. The cartoons are a first step.”
Omrit, when interviewed a year after the project said, “I used to think that God was Superman. I don’t anymore.”

The text “You are a hero [God] to the world forever,” is illustrated by a cartoon of Superman. Next to Superman is a black and white picture of a man in his sixties. It is not clear who the man is or what the girls thought the man represented.

In another slide, “You provide the living kindness,” a visual of an excited Daffy Duck jumping out of a pile of gold coins is juxtaposed with a picture of the girls’ bunk from that summer. In interpreting the “gesamtkunstwerk”, one may conjecture that based on the dyad’s conversation, these photographs of real persons were meant to counter and enrich the anthropomorphic personification, thereby making the image an allegory. Another explanation for the dual images might be that these adolescent girls are in an “in-between” stage. Not yet a part of the adult world and still a part of the kids world.

*Intervention.* During the gallery session Omrit and Sarah related to the group how they originally wanted to use a picture of Batman on another slide that spoke about being saved. When I had seen this image I intervened and asked them if they had ever been saved by Batman? They of course replied, “No.”

I asked them “Do you ever feel protected by God?” They responded affirmatively but said that there were no pictures that illustrated that. I inquired as to when they felt protected and Sarah answered at random times. I pushed further by saying, “Tell me a random time.”

Omrit related that she was once in a thunderstorm and heard that someone nearby had been killed and that she felt thankful that she was spared. Sarah recounted
how her father had swerved in a car on the way home from the airport and was spared a horrible accident.

The dyad made a slide depicting Sarah’s event using three images; a car driving, a car being hit and a smiling cartoon car. Over the car being hit they wrote “oops” and over the smiling car they wrote “I’m OK.”

The WordArt, of the doubled text in grey and green suggests movement and conveys urgency. The four different fonts in the one slide may signify meaning as well as the three cars facing in opposite directions.

The dyad was also unclear as to how to express “You revive the dead with a lot of kindness.” They consulted with me. For the earlier “You revive the dead,” text they used a series of three Casper-the-Ghost-like cartoons.

I posed the question. “Is there any way that the dead live on after they die? Is there perhaps some way that we make these people come alive?” They responded by
going through the Jewish rituals associated with the departed. Then they chose to portray two photographs. One was of an old woman and the second of a young girl. Both images were captioned with the same name above the picture. The meaning being that the young girl was named to honor of the memory of her ancestor.

Omrit and Sarah needed much encouragement and scaffolding in their exploration of meaning-making. They did not seem skilled at collaborating or in the interpretation of the text. I urged them to speak to one another and to engage in a dialogue about the words. This was met with limited results. However, when I elicited ideas from them, they responded.

Eventually, they internalized my demands for pictures with a non-literal, more abstract meaning. This was stated in an earlier quote by Sarah from her interview where she refers to reflecting during her prayer on what kind of image I would have wanted. The following interchange may indicate that they appreciated having a facilitator for their collaborative meaning-making.

Omrit: Devorah, Do you think if we had a picture of gymnastics and a mat for all who fall that would be good? Cause we don't know what to do for that.
Sarah: I thought of a band-aid
Devorah: That's like falling down. Are we only talking about our boo boos and falling? I am talking about falling in not the physical way. Let go of the computer. Discuss it. First talk about the idea, look at each other.”

A dialogue ensued between Sarah and Omrit that began with the idea of a house being affected by external circumstances. The dyad then considered cancer and a tsunami as an impetus for the theme of supporting the fallen. Finally, they chose a house that appeared to have been devastated by weather conditions and juxtaposed a new house along side it.
English translation and phrasing. The text was appropriately split into phrases and the translation from the Hebrew was excellent with two exceptions. Instead of the prayer text “cultivates and grows salvation” Omrit and Sarah wrote “grows saviors.” During the collaboration I explained that “saviors” are people and salvation is an act. I pointed out that their text was incorrect. However, they did not respond to my intervention.

A medieval army illustrates the text interpreting the word as saviors and not divine salvation. Although one could participate with the image and connect the saviors as part of the salvation. Thus, the meaning that the picture generates for the viewer could enhance both versions of the text and bring their interpretations closer.

The second text change is that the dyad wrote “gives faith” instead of “maintains faith”. The nuance of the sustainability of the faith is absent. The photos of the soldiers along with the edited text depart from the traditional exegetic understanding of the text as referring to those who are buried. (This particular slide was also discussed in the context of Sarah’s need to connect the text to the military.)

Cognitive Spinoff. It is interesting to note that this dyad was competitive with the other groups. On several occasions they compare the number of slides that each has produced. They were also interested in recording an audio track but were prevented from doing so due to time constraints.

Galila and Galit

Galila and Galit worked extremely diligently on their presentation of the blessing, “Bless this year.” They were focused and on task 100% of the time. The videotape shows the girls working in close proximity, creating an intense triangle
with the computer screen. The mouse passed frequently and freely between them. Their hands were close to one another and they repeatedly used body language to indicate that they wanted a turn with the mouse. They equally shared control of the computer complimenting one another’s technological skills. Both knew more than the rudiments of the PPT application. Galila taught Galit about “grouping” the elements of a slide while Galit seemed more proficient at animation.

*PrayerLive Presentation.* The presentation is six slides long and is perfunctorily animated. The presentation opens with the title of the blessing in a pale gradient of yellow and blue, light yellow shining through the black of the slide. It is dramatic and might be interpreted to suggest a divine light (http://www.iconclass.nl).

The remaining five slides are presented against a white background with Hebrew and English text displayed linearly. The illustrations consist of six symbols and two personifications.

![PrayerLive Presentation](image)
Two of the slides have a yellow light radiating from the corner. On all the slides, the text appears on the background of the screen first and then pictures come in with effects. The show has a clean and sophisticated feeling. The overriding theme is that the earth is in God’s hands and that our food is produced and delivered through His goodness.

*Meaning-making.* Galila and Galit constructed slides with a complex “gesamtkunstwerk.” Each slide has at least two visual images, or symbols that were used conjunctively to convey meaning. For example, for the words “satisfy us with your kindness,” the dyad chose a yellow background that symbolized the sun beating on a thirsty man who finds an oasis in the desert.

![Satisfy us with Your Kindness](image)

Similarly, for “Bless this year as other good years,” there is an image of a lush green field surrounded by rainfall. In the Jewish tradition, as in other cultures, rainfall is a symbol of blessing and a gift from God. This blessing is the one where
the prayer for rain and dew may be inserted. Thus, the image of rain extended the meaning of the text by connecting the blessing to the land of plenty.

One of the symbols that may be understood as a visual allegory is a pair of hands holding the earth illustrating the text “Bless the land of this earth.” In the gallery session both Omrit and Layla commented that they did not understand the abstraction at first. This forced them to think about it for a while.

Samara, who was working adjacent to this pair asked, “Where did you get such good pictures?” Galila answered,” We searched.” “And searched,” said Galit. “And searched,” said Galila.

Galila, practical as noted previously, related, “We did things very literally. So we just took the words and found pictures for them for example for produce we just took wheat. It wasn’t hard using Google. But I like clipart better. You put in the word and you get the exact picture that you are looking for.”

It is interesting to note that Galit, Galila’s partner, perceived a divergent strategy. In her view, “We tried to find pictures that were relevant to present day life and that carried a message.” In the videotape we see her suggesting more symbolic and deeper visuals.

The pair’s strategy was to go to the Microsoft ClipArt website as a first stop for finding pictures. When that did not produce the desired results, they went to Google. As was the case with the other dyads, choosing search terms yielded opportunities for associating to the text. When searching for an illustration of “a good year,” the dyad had the following conversation.

Galila: You know how on Rosh Hashanah everyone says shana tova (Happy New Year) do Rosh Hashanah.
Galit: But that doesn't mean anything.
Galila: What do you mean?
Galit: It just means have a good year-we're looking for meaning. We need a picture where there is a scene. Where there is grass growing and trees of stuff.
Galila: In the *bracha* it means a good year like crops.
Galit: So, get a good picture of crops.
Galila: But it does not show crops.
Galit: I saw one. (She takes control)
Galila: A picture like a real picture. Go to photos.
Galit: This is it photos.
Galila: Different crops produce.
Galit: Or fields.
Galila: Maybe this one.
Galit: I think we are on the right track.
Galila: A lot of different fruits. A basket.

Both girls were committed to producing a high-quality piece. They inspired one another and each was respectful of the other’s standard. Galit, who had been dubious about matching the Hebrew and English text, responded positively to Galila’s determination.

Galit: You can't have them across from each other.
Galila: Yeah you can.
Galit: It is going to be hard to do.
Galila: We can try.
Galit: Yes!
Galila: (Pointing to screen both very involved)
Galit: (Working on getting the print where Galila's finger is)
Galila: Almost got it.
Galila: That's good.

*English Translation and Phrasing.* There are several inconsistencies in the translation of the Hebrew text into English. Galit and Galila changed the object of the blessing by writing, “satisfy us with your kindness” instead of “and we will be satisfied with your kindness.” The first way is a petitionary statement while the second is an expression of gratitude. For example, instead of “All the kinds of
produce” they wrote “Our lands will be plentiful.” For the literal Hebrew text “Face of the earth” they wrote, “The land on this earth.”

It is hard to assess whether the translation was intended to be interpretive or if they could not be more precise because of their literacy. Given that both Galit and Galila are very bright and fastidious, I might conjecture that it was by design.

Three out of the five slides have three phrases on a slide, contrary to the directions for the project. Early on in the collaboration I suggested to the dyad that they break up of the prayer text into smaller phrases. As a result they added a slide with the text. Later they changed it back, preferring the meaning of the text with the three phrases together. I did not press the issue.

**Cognitive Spinoff.** In conclusion, it is important to restate one of the positive results reported by Galila cited earlier. She describes how the project taught her to listen carefully to her partner’s ideas, to let go and to not be so controlling. Sharing and being non-judgmental is a positive value and a spiritually intelligent approach (Hay & Nye, 1998).

In addition to the gains made in participation with the prayer text and in the engagement in meaning-making there was personal growth. Both Galila and Galit liked the slides that they made and felt proud of their PPT. The following dialogue illustrates their reaction to their creation.

Galila: Should we do it as a background or just a bottom? It would be a shame to cut it.
Galit: Where's the Hebrew?
Galila: It is right there.
Galila: Maybe we should just move this.
Galit: Move it up there?
(Galit and Galila switch mouse back and forth)
They are both looking at the screen.)
Samara and Nediva

PrayerLive Presentation. Samara and Nediva created a PPT for the blessing, “Grant Peace.” This blessing is the final and longest of the Eighteen Blessing prayer and as a result their show is 27 slides long. The dyad used transitions between the slides but did not animate the individual slides. The font was kept constant throughout the show and in 24 of the slides the visual is also the background for the slide. Blue is the predominate color and is often associated with peacefulness.

The dyad presented the theme of peace and goodness using many images from nature, a couple of visuals from their camp experience and clip art graphics. Out of the 25 images, 11 are photographs, 7 are clipart, one is a drawing that they made and the remainder are illustrations that they found on the Internet.

Of the 17 symbols in the show, six are literal visual translations, such as a large red heart for the word love and a picture of thumbs up, for the word good. Of the remainder, six are Jewish symbols, such as a rainbow. It represents the covenant of peace to Noah in Genesis. There are five allegories and two personifications. The allegories are not the typical kind with two or more personifications. Rather, they are aggregate illustrations that combine a number of elements to represent an idea such as the priestly hands bound in phylacteries lifted over the city of Jerusalem.

Meaning-making. Nediva and Samara discussed the meaning of the text and negotiated on an image that met both of their criteria. The following dialogue demonstrates one such interaction for the illustration, “Good in your eyes.”
Nediva: I think we should make one of a person helping another so that He is watching and it is good in his eyes. It's not our actions.
Samara: No, it has to be Him doing something good for us.
Nediva: No, He's watching us.
Samara: Go back to the one before that and may it be good in your eyes.
Nediva: Let's try friends
Samara: That's cute.
Samara: Family.
Nediva: (Types it into Google.)
Samara: Elephants they are so cute.
Nediva: Should we do that?
Samara: It is good in His eyes.
Nediva: Nature

In this instance the dyad chose an image of a family of elephants.

During the gallery session the group queried the relevance of this image. The dyad defended the image and explained that the intent was for the viewer to engage with the visual and to reflect on the intended meaning. In the dyad’s process, as shown above, the collaboration flowed from wanting to portray helpfulness to the end product of a photograph of a family plus nature.
In another instance, the pair chose a large clipart image of leaves suspended in every which way, with the text “and may it be.” The vagueness of the meaning of suspended leaves, despite the established symbolic connotation of leaves and fall, beckons the imagination for interpretation. This creative process that the viewer engages in when she watches the PPT involves the imaginal reality in the soul space (Trolin, 1986).

Nediva and Samara also gave thought to the meaning of the colors that they chose. In one instance they simply used a patterned color of pink and light blue to convey the idea of compassion. They reflected on their work frequently and were committed to producing the best show that they could. Below is one of their reflective conversations.

Samara: “I think we should change the color.”
Nediva: “Yeah.”
Samara: “A calmer color like lavender or light blue.”
Nediva: “Like what?”
Samara: “A lavender.”
Nediva: “Is that better? Maybe we could put the words on top.”
Samara: “I think it kind of blends in with this.”
Nediva: “It’s working.”
Samara: “Exactly what I thought. Click on the A. Now click away.”

**English translation and phrasing.** The PPT demonstrated that the pair understood the concept of the blessing as a poem, as they successfully separated the prose into single phrases. When they began their interaction Samara asked Nediva how to translate the words “Baruch Ata” (blessed are you) which are the first two words of all the blessings. Nediva is surprised by the question and responds by saying “You don’t know? But we say it everyday. We don’t pay attention to what we are saying.”
The text was translated accurately, except for one line. The prayer text reads “bless all of us like one” and the girls translated it “bless us as your one and only nation.” The visual associated with the text is a full-screen Israeli flag with the Hebrew and English words superimposed. Although the flag might represent unity and nationhood, it may not capture the intended meaning of harmony indicated by the text “bless us like one.” Although it is possible that they meant the country of Israel is a symbol of unity. It is not clear whether the dyad’s chosen words were changed deliberately to convey personal meaning or if they misunderstood the language.

**Collaboration.** Nediva’s computer literacy was inferior to Samara when the dyad began their collaboration. Samara learned computer skills in school while Nediva did not. It appears however, from the video, that Nediva was the one who came up with more of the visual associations to the text. Nediva wrote that she was good at explaining the bracha and thought that was her contribution to the learning.

On the technology she said, “My partner helped me with some of the computer skills.” Her partner Samara said, “In the beginning, she didn’t know a lot about computers, so it was a lot of fun teaching her. The video of their collaboration shows Samara repeatedly praising Nediva, for her improved computer skills. We showed each other things that we didn’t know, like different sites.” This exchange demonstrates mutuality and equality.

**Cognitive Spinoff.** As their collaboration progressed we see that their roles begin to overlap. Nediva in particular is aware of her learning and comments to Samara.

Nediva: Do you like the slide?
Samara: Can you click the letters away?
It's a good picture but you can't see the letters.
Nediva: I tried every color.
Samara: How about white?
Nediva: I did it so well by myself. You know it had a grey box and I colored it white.

Nediva’s enthusiasm for her new found skills and for their creation is evidenced by her behavior and comments as they review their show. She is responding to this slide.

Nediva: “I think it is really pretty.”
(She claps) “It got better as we went on.”
Samara: “Yeah - after that [slide] it got better.”
Samara: “It's little but it is good.”
Samara: “Oh I like that one.”
Nediva: “It is really good.”
Samara: “I love that one.”
Nediva: “I think it is really good. It mixes camp into it. It has a lot of meaning.”

Conclusion

The interpretation of the videotaped collaboration points to four findings:

1) Participants were engaged in conversation with the prayer text.
2) Participants increased their Legitimate Peripheral Participation within the prayer community of practice.

3) Participants created and shared knowledge.

4) Participants distributed meaningful imagetexts.

The success of PrayerLive was that participants learned the idea of meaning-making and were enabled and required to reflect on their position within the Jewish prayer community of practice. The section that follows demonstrates the effect of the intervention with the information from the post-activity profile.

**Summary**

In summation of this chapter, I would like to return to the research question presented at the beginning of the study. The overarching issue investigated was how does the meaning-making activity contribute to the adolescent Jewish girls’ literacy and practice of the prayer through a project intended to enhance the relationship with the liturgical text?

The “thick description,” an anthropological method of explaining a practice in relation to the culture and social context that it is born from (Geertz, 1973) of the participants’ collaboration and their design projects, which demonstrated varying degrees of abstraction and meaning-making, indicate that the *PrayerLive* project was an effective intervention for increasing literacy and participation in the prayer community of practice. The cohort reported that as a result of their participation in the research there were changes in their personal interface with the prayer text as well as in their attitude to the act of praying. Individual’s reported a significant increase in their comprehension and reflection.
Collaboration was rated very high and favorably. It created a new sense of community for the learners. Several of the girls noted the affordance of multiple perspectives as a learning experience. This finding indicates that they were engaging in a new literacy, which extended beyond the translation of the black and white print.

In the next chapter I will discuss my conclusions based upon the data. This analysis recommends changes to the protocol and suggests directions for future research and the dissemination of the technospiritual model.
CHAPTER 5

DISCUSSION AND CONCLUSION

Introduction
The state of technology as well as the social milieu of adolescents is radically different today than the era when the exercise of illustrating the Eighteen Blessings prayer, PrayerLive was first introduced. At that time, there had been no Columbine or 9/11 terrorism, no cable TV channels and laptops were not widely available.

The female adolescents of this study are active in this post-modernist culture and are equally rooted in a religious society that clings to tradition and demands observance of centuries old rituals. These students who are so adept at juggling multiple media simultaneously and who are on the receiving end of a constant flow of messages are still praying and approaching ritual behavior, by and large, as did their ancestors. “The privileging of linguistic meanings, especially written linguistic ones, should be seen as increasingly anachronistic given recent social as well as technological trends in our communications environment” (Cope & Kalantzis 2000, p. 210).

The Study
The overarching question driving this study was, “How does the collaborative constructionist meaning-making activity contribute to adolescent Jewish girls’
participation in a community of practice through a project intended to enhance the relationship with the Jewish liturgical text?” The three broad areas of concern reflected in the research sub-questions, as stated in the methodology chapter, and the findings that emerged from my investigation are collaboration, literacy and technology. Collaboration refers to the affects of working jointly on the construction of meaning. Literacy here is defined as participation with the text and includes comprehension as well as the individual’s affective engagement. Technology addresses the unique dynamic and affordances provided by the computer in PrayerLive. My conclusions are organized into those three topics.

True to the action model of research of this study, I will be discussing the particulars of the intervention and how individual components might be modified and improved in light of the findings. The implications of the findings for educational practitioners involved with technology, Judaica and spirituality as well as suggestions for further research will be presented.

I begin with a brief restating of the purpose for the study. The discussion of the findings of the research on collaboration, literacy and technology follow.

**Purpose and Goals of the Study**

This study suggested bridging the access gap by harnessing the power of collaborative technology to facilitate the development of spiritual intelligence. The inherent ability of the computer to network individuals, to distribute knowledge and to unify a myriad of unconnected resources suggests that some of digital technology’s potential utility parallels the criteria for a spiritually aware individual, as listed in the literature review in chapter two.
I am not suggesting anthropomorphizing the computer to consider it a spiritual entity. However, based on the findings of my study, it is my conviction that digital constructionist applications should be implemented as a powerful tool (Papert, 1981) for educating the inner lives of children and for supporting communities of practice (Lave & Wenger, 1991).

The metacurriculum, put forth in the PrayerLive exercise of this study, extended beyond imparting factual information, (literal translation of the prayers) into a pedagogy of meaning-making that encompasses higher order knowledge. The use of a rich surround, revolving around digital technology, scaffolded the learners’ performance behaviors such as “looking for patterns in ideas, finding personal examples and relating new ideas to prior knowledge (Perkins, 1992, p.82). The surround contained and distributed the newly constructed literacy.

Whereas Perkins focuses on cognition, in his discussion of the “person plus,” I applied the “person plus” theory into the affective domain. The surround, that includes the computer, the facilitator, the cohort and the daily prayers, was an active agent in the community of practice for the young women of this study. This environment facilitated the social construction of meaning, the sharing of cultural discourse and the creation of new literacy. It was a vehicle for LPP (Lave & Wenger, 1991) and for situated learning. The intersection of the learners, the surround and the community of practice produced a “transformed practice “(NLG, 1996).

Modern Orthodox Adolescent Females and Prayer Attitudes. I, like the feminists before me (Brown, 2006; El-Or, 2002; Nussbacher, 1999; Safer, 2003) focused on the Orthodox female population, both out of a personal interest and out of
a belief that these young women worship in isolation from the larger patriarchal community of practice (Nussbacher, 1999; Brown, 2006). Based on conversations with educators and on personal observations at prayer services, in the schools that the girls attend, it appeared to me that these girls were not personally invested or proactive in the Jewish prayer culture.

At the time of the writing of this study there was no data that specifically addressed the prayer practices of young adolescent Modern Orthodox Jewish girls. The findings of this thesis, albeit from a small sample, shed light on this population’s relationship to prayer and suggest how interventions that support the construction of meaning may positively impact on their lives.

Discussion of Findings

Attitude and Practice. It has been noted in the introduction to this study, that the atmosphere in the prayer services in modern Orthodox schools, as well as in some synagogues, may not be conducive for a transcendent and spiritual experience (Finkelman, 2001; Rosenberg, 1996). One of the underlying threads of reflection for this study is how the power of daily mandated prayer may best be harnessed to strengthen female adolescent spiritual development.

The girls of the cohort, who have prayed daily in school for at least eight years, have ambivalent feelings about their participation in prayer. On the one hand, they feel free to call on God to help them when they or someone they love is sick or in trouble. This is a universal phenomenon (Pargament, 2001; Gallup, 1999) that is more prevalent for girls than for boys (Tammimem, 1996; Goldmintz, 2003; Pelcovitz, 2008). On the other hand, seven out of the eight girls do not pray without
an external imperative. Two of the girls who attend synagogue on the Sabbath prefer hanging out with their friends to participating in the prayer service. Other than Ariella, who relishes solo praying in nature, none of the participants like to pray by themselves and they do not.

The girls may not pray voluntarily, yet prayer functions as a tool in their lives and they believe in its power. On the post-activity profile, three-quarters of the sample very strongly agreed with the statement “I believe that prayer has the power to make a difference in the world.” This corroborates other research findings (Mattis, 2002) that females have faith in prayer as a system for coping and for intervention.

The participants in my study reported, overwhelmingly, that prayer was a time and opportunity for them to petition God for what they wanted. In the process of discerning their needs and determining what to pray for the girls reflected on their lives. Through the post-activity interviews I discerned that there was a notable increase in five of the participants in the amount of reflection that they engaged in during prayer.

Galit explained her feelings in the interview. “Sometimes there’s a specific prayer that I relate to and I can just think about and I can relate it to something in my life. Right now…with the situation in Israel all the prayers that have to do with like rewarding or keeping people safe…I always try to relate to them. Or if I am having an argument with a friend.”

More than half the girls reported that praying for someone ill was their most meaningful prayer experience. This seems to indicate a high degree of empathy, a spiritual quality, and might also point to feeling empowered to effect change.
Half the girls acknowledged the spiritual endeavor of expressing gratitude by praying to God (Lantieri, 2001; Emmons, 1999). Galit was thankful for leaving the hospital, Nediva appreciated going on a family trip. Sarah and Galila expressed gratitude as a result of encounters with persons less fortunate than themselves.

However, the results, as reported by the cohort of this study, suggest that there was a shift in the cohort’s perception of prayer as a spiritual activity, after the intervention. Ariella, who seemed to thrive in this project, showed a 30% gain in her belief and attitude. She related, “I try as hard as I can when I pray to remember that we are doing this so that Hashem will hear us.”

“I started davening more,” says Galila. “Like in the morning I used to just sit there. I think maybe it [the project]… kind of started me thinking now that I understood that bracha (blessing) maybe I’ll even look at the other ones due to the project. It helped my tefillah be much more sincere because I started thinking about the words more.”

Layla relayed in the interview that she is a more serious daverer now that she is a teenager and that a result of the project she has begun to ask herself if there is a deeper meaning. She said “Just like when I was thinking during the project is there a deeper meaning I would think when I was davening what does it mean to me.”

Omrit related similar sentiments. “I used to not know the meaning of the tefillah and now I do… which made prayer more interesting for me. I began to take parts of davening more seriously and I started to daven more.”

“Sometimes when I am davening I think about how a bracha would look if I were using it in my presentation,” said Sarah. “For example what picture would I use?
When we did the project we would always put out pictures that related to the literal meaning and then when you would come around you would always make me think about the deeper meaning. So, when I’m davening and thinking about how the bracha would look in my presentation I think about what you would say too.”

Other participants reported that they had a more intimate and changed relationship with the bracha (blessing) that they worked on. “It’s not a bracha that I would especially feel close to,” said Galit of the blessing she worked on. “Because it’s like land and crops and stuff which isn’t really a part of our life. [But] I read it and then I remember that I did this bracha and it has something to do with me.” Galit referred to one of the images from their presentation and said, “Like the grocery bag you can relate it to your own life and how it affects you.”

Nediva wrote of her experience with the “Blessing of Peace,” “It really helped me daven more meaningfully, and have special kavannah [meaning-making] during the specific prayer I studied.”

“It only changed the part that we made a slideshow of,” Ariella responded when asked about any changes in her prayer since the summer. “If we had done that to all of davening I would completely understand it,” she said.

Literacy. Comprehension of the Hebrew is a problem for the girls of this study. They reported on the average understanding about 40% of the prayers. Half of the girls rely on the English translation frequently and another quarter use it occasionally to aid their understanding of the text.

However, they fail to bring translated prayer books to the services that they attend in anticipation of this limitation. Rather, they feel that the venues for mandated
prayer should provide these Hebrew-English prayer books as a service. It is as if they want the administrators to realize their sense of frustration and their struggle with the Hebrew language. Although many modern Orthodox day schools provide Hebrew language instruction, unless the classes are geared specifically for prayer literacy, the knowledge of the modern Hebrew vocabulary and decoding is not transferred to the sacred text. The prayer text is linguistically concentrated and draws historical references and abstract knowledge within the Jewish tradition (Dori, 1992). This was demonstrated by Sarah, a fluent Hebrew speaker, who was unable to decode the words of prayer without my pointing out similar words in modern Hebrew. An example of this is the word “M’chalkel” that appears in the blessing for “Reviving the Dead.” I reminded Sarah of the modern Hebrew word “Kalkala.” With that scaffolding she connected the Hebrew of the liturgy to her modern Hebrew fluency.

There was a slight gain in the comprehension of the Hebrew text, reported a year after the intervention. This result is not a reflection of the cohorts’ understanding of their particular blessing but rather appears to be a consequence of inquiry strategies that they employed in the intervention. Omrit, Samara and Layla indicated that they translate the words more frequently during prayer than they used to. Galila said, “I find myself thinking about what some of the words mean.”

Omrit explained that she learned the skill of associating to the prayer words to make them more personally meaningful. “I could … not only just translate it and make it my own prayer but [because of the project] I remember that we did this and we associated with things other than just what it says there. I learned that the words can be more than just words that they have meaning that we can connect to our lives.”
Galila reported that when she began the project she knew what the two first words of the blessing she was working on meant but never paid much attention to the rest. Her project, as well as her explanation during the gallery session demonstrated that she not only grasped the literal meaning of the blessing but that she had command of the symbolic and abstract meaning as well. “Explanatory power returns to the subjects under study, to overcome the alienation between the languages of knowledge built in other places and the local reality of the learners” (El-Or, 2001, p. 259).

School prayer. The group felt angry about being forced to pray in school. They felt that the mandatory praying on demand left little room for a personal readiness and mood. One of their chief complaints was the rapid pace of the prayers that are led by the males in their synagogues and schools. The rapid service impedes their thoughtful concentration and consideration of the words.

The entire cohort strongly indicated on their profiles that they experience a highly positive relationship between comprehension and meaning-making in prayer. However, if more than half the time the prayer text is incomprehensible and the girls are struggling to keep pace with the prayer leader, their ability to construct meaning might be compromised. During our group discussion, Ariella and Samara strongly voiced that praying without meaningful engagement was pointless.

In traditional Orthodox synagogues, the women arrive much later than the men and miss out on major sections of the worship (Brown, 2006). Not being counted as contributing members to the prayer quorum might be a factor on the importance that the females assign to their prompt participation. Thus, the young women of this
study receive the message from the female mature practitioners that their full participation in organized prayer groups is optional. The importance of positive role models has been shown to impact on spiritual and religious development (Finkelman, 2001; Goldmintz, 2003). (I continue to be inspired by the image of my father’s meditative prayer posture, wrapped in his tefillin in our kitchen.)

These findings suggest that there might be a lack of internalization or indwelling of the prayer ritual (Steinsaltz, 2000; Brovender, 2001; Heschel, 1954; Rosenberg, 1996; Kaddish, 1996). Prayer is certainly not regarded as a daily obligation and it is not necessarily viewed as a positive vehicle for self reflection and growth. It appears to be a coping ritual, social, and encumbered by its institutionalization in Jewish Day Schools.

The cohort’s feelings are corroborated by research on the disparities in gendered modes of prayer and of divergent modes of discourse in literary analysis. “Girls emphasize in prayer conversation with God and thanksgiving more than boys did,” (Francis, 1996 p.174). When they respond to literature girls tend to have a “discourse of feeling” while boys engage in a “discourse of action” (Cherland, 1992; Evans, 1996).

The tradition of the Jewish liturgy encourages and expects the insertion of personal words and conversation. Heschel (1954) described prayer as a time to connect with wonder and awe. But if the girls cannot keep a pace with the prayer leader, it is unlikely that they have the time for narrative. In a sense they are being asked to fit into a model that goes against their nature.
Judaism acknowledges gender differences in its requirement that women pray once a day and men three times a day (Karo, Orach Chayim. 106:2). Perhaps this hearkens back to the hunter-gatherer model. The male goes out and hunts, i.e. does the praying and fulfills his obligation. Meanwhile the gatherer, the female, needs additional time to reflect, connect and ponder the meaning of the words.

This cohort’s sense of frustration, which came to light as a result of my investigation, challenges the claims of “girls as better daveners,” (Goldmintz, 2003). The prevailing thought, in modern studies (Hyde 1992; Pelcovitz 2008; Wolman, 2001) as well as in classic Jewish texts (Nuesner, 2009) is that women tend to be more religious than men. The above claims are bereft of experiential validity and might contain a bias as they are male formulations.

While the assertion that females are more religious may be true, it is a long jump to maintaining that they pray better in school settings. What distinguishing behaviors does praying better refer to? Is praying better the observation that the girls sit quietly during the service?

Perhaps “praying better” should reflect the participant’s experience of worship. I would like to suggest that praying better refers to a commitment to practice, the ability to reflect on one’s self by making meaning of the liturgy, and the internalization of the process so that it is indeed “work of the heart.”

When the cohort responded to how they would structure prayer services in schools they suggested a variety of educational options that might contribute to better prayer. Their initiatives included personnel available to address individual concerns during prayer as well as the institution of creative opportunities, such as the making
of a film, for the exploration of prayer. Ariella suggested that the girls and boys share in delivering the customary sermons in her school.

These wishes signal an appeal for increased involvement of the self, a thirst for expanded literacy and a desire to play a part in the community of practice. None of the respondents voiced a desire for a separate female prayer group or for increased ritual function within the school prayer service that might be permissible within the Jewish legal system.

The cohort’s lack of interest in forming a separate, all-female prayer group is consistent with what is happening in the field. The camp director conveyed (Silverman, personal interview, November 2008) that in the past 20 years, female campers or staff have never requested a separate service. Likewise, recent reports by members of the Women’s Tefillah Network indicate that their services are populated mainly by women in their forties and above (www.wtn.org, retrieved 3/17/2009). I conjecture that for these girls it is more important to be a part of the larger social group of their peers then to pursue an all female prayer group (Pipher, 1994).

To sum up the findings in this section on literacy: It is my conviction that as a result of participation in PrayerLive there is a positive change in the cohort’s engagement in prayer. They invest additional time in translating and reflecting upon the text and they interface more seriously to the prayer act. The cohort is now aware that the prayer text may be personally interpreted and that imbuing and extending the meaning of the words is an option.
The Effects of Technology

Throughout this dissertation the computer has been referred to as a part of the surround, which facilitated learning and meaning-making. The cohort was able to distribute and express their knowledge in generative ways due to the use of digital technology. I corroborate the findings (Suthers, 2006) that use of the computer specifically enabled meaning-making that would not have been possible without it as a tool.

The computer, the term will be interchangeable with technology from here forward, encouraged dyadic autonomy by providing direct access to a rich array of resources. The tool kit included Hebrew and English text, the Internet, clip art, color, fonts, PPT and other applications on the computer. Given the rustic conditions of the summer camp it would have been nearly impossible to supply four sets of the aforementioned resources. In addition, each of the participants went home with copies of all four presentations that were duplicated onto a CD. This allowed for the further distribution of the learning to parents and other interested parties.

The technology provided space for a joint structure that could be changed. And, opportunities for the reification of meaning that could not only be reviewed at will but that could be easily altered in response to evaluation. Were the artifact created with paper and pen, a revision most likely would have meant starting over or frustration at adapting an existing design. (Remember erasing until there was a hole in the paper.)

The PPT was an exteriorization (Vygotsky, 1978; Papert, 1980) of the prayer into a “minor oeuvre” which made it “more accessible to subsequent reflection
and meta-cognition” (Bruner, 1996, p.22). Many times throughout the dyads’ work I witnessed them watching their presentations, reflecting, evaluating and modifying its elements. This process called critical framing (NLG, 1996) provided the cohort with “the necessary personal and theoretical distance” to think again about the meaning-making and to react to their collaborative construction.

As the developer of the project I felt great joy when I heard the girls react emotionally to their œuvres. Statements like “oh I love that one” or “wow we are so good at this” or “this is my favorite” happened consistently throughout the collaboration. This outpouring of feeling indicates a personal affinity and pride for both the multiliteracies (Street, 1996) that they had designed, and for their personal and social transformation of practice.

In particular the use of Constructionism and technology was highly effective. Participants noticed and lauded this methodology as departing from the usual types of computer tasks that they are presented within instructional settings.

Samara and Layla described the difference between this project and those in their school, which used technology. “We don’t usually get to work with another person,” Samara said. “It’s not so fun…The computer assignments aren’t very interesting either.” In working on this project, “We discussed the deeper meaning of stuff together. We taught each other different stuff. It was a lot of fun picking out different things together to make our project better.”

Layla told me about her experience. “Yes [this was a different type of computer project] other ones that I did in school for Torah you just write facts, this
one was interpretation, translation it was relevant. It made prayer more personal—like
I should say this will help me—felt close to me—doing it for myself.”

Throughout the collaboration I observed a close knit triangle between the
dyad and the computer. It is my conviction that this triadic configuration created a
sense of intimacy and empowerment.

The disparity between learning from a sage on the stage versus learning by
collaborative construction was voiced by several of the participants. They reported
that PrayerLive enabled them to become active learners and that they enjoyed the
opportunity to construct their own interpretations. Sarah said, “Most tefillah studies
are just learning about the tefillah by looking at examples of people who davened in
the Bible. This project was very fun to do mostly because it was different than just
sitting in a regular shiur (class) and listening to a teacher talk about a subject that I
probably wouldn’t care about.”

Omrit adds that she was able to learn as she analyzed the material by herself.
“Mostly when I learn about tefillah it is not by making a PPT and by analyzing the
prayer by myself. It’s mostly someone lecturing me and telling me what the prayer
means.”

“This really got me thinking,” said Ariella. “In all other tefillah studies
everyone has to think of davening the same way, as opposed to here where it could be
whatever I think.” She describes this project as quite different from her other PPT
projects. “Other computer projects…we had just done what the teacher told us to
do…It wasn’t really something that I could voice my opinion on. You gave us a topic
and we were able to change it. Show what we felt about it. And we were able to present it anyway we wanted.”

I found that the cohort enjoyed being able to think for themselves. With the resources so close by they were able to experiment with an infinite variety of elements such as color, fonts and images. This forced them to discriminate and to evaluate the suitability and meaning of each. I believe that they were engaged in higher order thinking, a skill that is difficult to teach (Perkins 1995). By thinking I refer to the ability to apply knowledge in new situations and to abstract information.

“I got to make my own interpretations of things and not have it taught to me,” Galit wrote.

*Images.* When asked on the post-activity profile “which of the six steps in creating the prayer presentation taught you the most?” The groups’ number one response was “deciding which image to use.” Based on the data it appears as though deciding on the image provided the opportunity for rich conversation (Vygotsky, 1978), negotiation and for personal meaning making. The computer supplied images that were professional and attractive. Participants did not have to rely on their own artistic ability. This is an affordance that was crucial to the integrity and look of the presentations.

Layla remarked that the use of art and design positioned this study of prayer as pedagogically unique. She said, “This is a great way [to learn], connecting art to Torah. Everyone loves art, everyone likes creating something and playing with these things…When you want to teach someone something you relate it to something they like and they will be able to relate to it.”
Although what Layla primarily sought to express was how she enjoyed the artistic component of the project, her choice of the words “playing with these things” fits well with the Vygotskian idea that engaging in play is developmentally beneficial and significant.

Play creates a zone of proximal development of the child. In play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself. As in the focus of a magnifying glass, play contains all developmental tendencies in a condensed form and is itself a major source of development (Vygotsky 1978 p 92).

Samara also refers to the notion of playing in her description of the process of choosing an image with her partner. She said, “We looked at them [the words] out of the box. We played a game. Like how do you connect glass and tree? Glass is made of this and then you connect them in all different ways.” She continued by explaining how they would mine for a non-literal and more sophisticated image. “First we thought “peace” would be a peace sign.” She continues and explains that “We thought of things that are peaceful and calm.” It is clear from Samara’s reporting and the videotapes that searching for an appropriate image included much association to the words and concepts of the blessing. This is reminiscent of the “metaphorical thinking” game popular in the Middle Ages (Straten, p 28). Due to computer access the dyad was frequently able to mine images that complimented their creative thinking.

Omrit explained that using images concretized the words of the prayers and affected both her feelings and her meaning making of the blessing. She said, “When you make things that are real with pictures it gives you more kavannah- it is scary.”
The “real images” brought the text alive and imbued it with personal meaning and emotion.

Galit summarized that her favorite part of the project was, “Bringing the *brachot* (blessings) to life. We tried to find pictures that were relevant to present day life and that carried a message.” She also reported that finding images that conveyed the “right meaning” was the most challenging part of the project.

Vygotsky (1978) in describing Leontiev’s experiment of using pictures to aid children’s recall of words wrote, “Normal children recalled twice as many words when the pictures were available as memory aids as they did without them” (p.49) He continues, “For the young child to think means to recall but for the adolescent to recall means to think” (p.51). Research from this study corroborates this finding. Participants vocalized the thinking nature of the activity.

On both profiles the cohort was asked if they associated images to the words when they engage in the prayer act. They reported that a mental image, “a holistic highly integrated kind of knowledge,” (Perkins, 1992, p.80) that they created presented itself repeatedly when they pray. This juxtaposing of text, memories of the collaboration and the ancient black and white text converged and created new meanings.

Six out of the eight girls responded that the images that they selected to illustrate the words of their blessing often enter their minds during prayer. According to Samara, who described herself as an “extremely visual learner,” “the pictures from the PPT always stick out in my head when I am saying *Shemona Esrai* (Eighteen Blessings prayer), even the ones my friends’ made that we watched.”
Galit agreed and said, “There is always the picture of the grocery bag we used in the PPT in my mind when I say a specific word in the prayers.” Layla also reports that one specific image of “the guy *davening* in olden times,” recurs in her thoughts. Ariella said, “Yes. Since I did some parts of *Shemona Esrai* I now have the pictures in my mind of the slideshows we made.”

Galila responded that she also thinks of her project but said, “I don’t normally think about the ones the other groups did though.” She explained that if she would have heard the discussion about the reasons for the images that the other groups had selected she might have remembered them more clearly.

The images that the participants recall are representations that convey a personal, interpretive, non-literal meaning of the text. The grocery bag, Galit said, reminds her that prayer is relevant to her everyday life. For Layla the old Jew is a symbol of her forefather, forgiveness and her responsibility to past generations. I would like to put forth that these are the “affects of” working with technology. Like Salomon’s “effects of” (1993) working with technology there appears to be a residual feeling or meta-affect as a result of the project.

As aforementioned in chapter four, the individual participants gained computer skills as a by product of working with the computer. For some it was learning a new technique like ghosting an image for others it was a more new found comfort with technology. It is my conviction as well that Google played a significant role in the meaning-making activity.

While I suggested a few websites where the participants might find images I did not legislate that they had to be from the Internet or could not be from clipart. In
fact, had any dyad requested photographing photos for the presentation I would have acquiesced as well. However, as indicated by the participants’ reporting and by the videotapes of the collaboration, the dyads relied heavily on Google to locate images that would illustrate the words of the prayers. This technique had both drawbacks and pluses.

Galit voiced a positive angle when delineating the difference between drawing and surfing the Internet for images. She said, “When you see a picture on the Web you can say hmm I never thought about this one before. Maybe we could use it. But while you are drawing you have to do the exact thing that you exactly wanted.” The images distributed on the Internet acted as stimuli for thinking about the meaning of the text.

Some of the participants experienced a sense of frustration with Google. Samara emphatically stated, “I hate Google more than anything. It’s so hard. Like the key words are the hardest things.” It may have been difficult to rephrase the idea that the dyad was looking for but from a pedagogical perspective it was a higher order thinking operation.

In the videotape we see Samara and Nediva struggling with various forms of the word “kindness.” Searching for a word involved thinking of synonyms, reframing and putting a new a spin on the meaning that might yield the results that they were looking for. This exercise gave breadth to the concept that they were looking for as they were required to associate with the text.
Galila, practical as noted previously, related, “It wasn’t hard using Google. But I like clipart better. You put in the word and you get the exact picture that you are looking for.”

To sum up the effect of technology in this study: The computer enabled the integration of resources for both input and output, which empowered the dyads to construct meaning autonomously. The quality and look of the presentations was greatly enhanced due to the applications available on the computer. Reflection, evaluation and iteration were easily facilitated by the use of the computer. The participants learned and practiced an array of computer skills. Digital technology facilitated a wider distribution of meaning-making than would have been possible without it. Galila described her experience. “I really liked it. I loved getting to work on the computer in camp and also working with a partner, said Galila. “It was also fun getting to see everyone else’s work.” She relates that when the group critiqued her work, “They said things that I didn’t realize.”

Collaboration

The definition of a community of practice is that members are practitioners, belong to the same community and that they share a commitment to the domain (http://www.ewenger.com/theory, Retrieved 3/12/09). The population of this study, due to gender and age, form a discrete community of prayer practice nestled within the larger communities of prayer practice, such as those at camp, school, and at synagogue. They belonged to a community of learners. They jointly practiced constructing meaning by creating multi-media and they were all committed to and experienced in the field of Jewish ritual.
Their dedication to this community is evidenced by none of the girls missing any of the sessions for the duration of the project. The cohort spent from three to six hours of their personal time, beyond the requirement, completing their projects. Work was not controlled by the clock but by a drive to produce a project that they were proud of.

Although the pairing was random, there was a high degree of harmony between the individual dyads and between the cohort. In one individual case I observed a slightly irritated participant, subtly indicated by tone and body language. There was also only one instance of a dyad’s brewing sense of competition. Neither occurrence disrupted the collaboration as may occur when individuals work together (Damon & Phelps, 1989).

The data points to the fact that the participants unanimously agreed that the best part of the project was the collaboration. The sharing of information, thoughts and skills taught the participants much and also created a sense of community. The participants’ narratives, while constructing their midrash or interpretation of prayer text, helped them realize what they were thinking. The verbal interaction generated self-awareness (Bruner, 1996).

Ariella expressed that as a result of being part of a community of learners she felt validated and said, “There are other people who have the same problems…I’m not the only one that feels confused about davening or doesn’t understand. It really helped me to understand it [Shemonah Esrai] more and find the other persons perspective.”
“The supportive discovery learning context allows deep conceptual insight and fundamental shifts in perspective” (Damon & Phelps, 1989, p.5). Omrit realized that she could pray for little things. This engendered a fundamental change in her prayer practice. During a gallery session Nediva learned from Ariella that speaking to God might be analogous to speaking to a parent.

One of the affordances of working collaboratively seems to be the multiple perspectives on language and on practice. Layla said, “I was surprised that there were so many ways of looking at things – like that’s awesome and I never thought of it that way. And it is true.”

Omrit said, “The best part of working with a partner was my opinion against hers and hers against mine because it made us open our eyes and actually think.” This “appreciation for diversity and the willingness to face challenges to one’s assumptions is a characteristic of a spiritually aware individual” (Lantieri, 2001, p.19). Thus, it seems that undertaking collaborative constructivist exegesis may also impact on the development of the spiritual personality and in the protocol of being respectful and non-judgmental.

As a result of the collaboration, the cohort learned the dynamic nature of sacred text. Sarah realized that if a text is interpreted by two people, “it is like having two separate texts.” Working with a peer and appreciating her insight highlighted that there was no right or wrong way to interpret the words. As Nediva said, “you can think about it in their way, but also in your own way.” Particularly when the group convened for the gallery session and shared multiple interpretations, they experienced
the familiar adage that there are “seventy faces to the Torah” (Bamidbar Rabba, 13:15).

The “peer to peer collaboration” (Damon & Phelps, 1989) afforded the dyads a high degree of mutuality and equality. Their discourse was extensive, intimate and connected. Oftentimes, the learner’s “tacit knowledge” (Perkins, 1992) proved to be an asset to the pair. For example, nowhere in the dialogue is there reference to Nediva’s native superior interpretive skills. We do hear repeatedly how much she has benefited from Samara’s superior knowledge of computers. Yet, Samara clearly benefited from her alliance with Nediva.

The peer-to-peer configuration promoted self awareness of the individual’s strengths. Galila, the group scholar, described herself as a controlling personality. She reported learning to “let go” to accommodate and honor the input of her equally opinionated partner. Her practice of learning was transformed. This fundamental shift in outlook may be considered the “effects of” collaboration, a residual outcome that may be applied in the future.

I have just discussed educational, personal and spiritual gains induced by the collaboration. I believe that an additional significant benefit of the collaboration was the sharing of feelings and attitudes about prayer. Although this section appears under the heading of collaboration, the material belongs in the meaning-making section as well. The participation of the girls in a community of learners engaged in ritual practice was a meaningful activity.

David Hay (2000), the eminent British researcher, describing his research on children and spirituality says, “A particularly significant finding of our research was
the extent to which children are embarrassed by their own spiritual awareness, particularly by the time they reached the age of ten” (p.5). The aforementioned self-consciousness may have resulted from a lack of practice in articulating one’s inner feelings or from the particular questions that Hay asked his subjects.

The cohort, who unanimously voiced a desire to learn more about prayer, was not self-conscious as Hay posited. Situated in an informal technological venue outside of the religious classroom, the discourse provided a unique arena that utilized third party resources to elicit conversation (Fisherman, 2001; Goldmintz, 2003). The girls felt safe in the open, non-judgmental learning space that I had created (Kessler, 2001) and were excitedly serious about sharing with their peers.

For modern Orthodox adolescent girls there is “an absence of a forum for recognizing and pondering the choices of their lives” (Safer, 2003, p. 58). This was evident the first day of our meeting. The cohort discussed its feelings about prayer so passionately and animatedly that I had to insist several times that the conversation end. Ariella remarked that she was so relieved to learn that the other girls in the study shared her confused sentiments about prayer. No one had ever empowered the girls, or provided an opportunity for them to collaboratively explore the depths of their personal experience as members of the female modern Orthodox prayer community.

Curriculums for teaching prayer in an orthodox milieu do not address gender differences. “When someone with the authority of a teacher, say, describes the world and you are not in it, there is a moment of psychic disequilibrium, as if you looked into a mirror and saw nothing” (Bruner, 1996, p. 32).
Computer Supported Collaborative Learning (CSCL)

Meaning-making, “is in principle interpretive, fraught with ambiguity, sensitive to the occasion and often after the fact” (p. 6). Like its cousin, spirituality, meaning-making is hard to isolate and define with real precision, as it is “an active and dynamic process” (NLG, 1996). It is my conviction that the dyads succeeded in intersubjective meaning-making as evidenced by their presentations and discussions. This corroborates the research on CSCL (Suthers, 2006; Stahl, 2004) as well as Bruner’s notion that, “the maxims of meaning-making are the stuff of hermeneutics” (Bruner, 1996, p.6). Writing the prayer as a poem, translating it into the vernacular, selecting visuals for text, as well as designing the style of the presentation, were all tasks that involved re-presentation and recontextualization, steps in “the process of shaping emergent meaning” (NLG, 1996).

Equally as important is the overwhelmingly positive response of the participants to the intervention. The model of instruction that was based on principles of spiritual education encouraged the free exploration of self and planted the seeds for meditating on the wonders of the world.

Action Research

This exploratory study is presented as an action research model for incorporating prayer and technology. I will now address how I believe a future iteration should be conducted.

I have learned a lot from the experience of conducting a study on a technique or method of study that I developed over an extended period of time. The
interpretation of the data provides information as to what aspects of the curriculum work and which segments need to be revised and evaluated.

The nature of each of the iterations, from phase one to the current study, was dependent on the context and length of the intervention. The current iteration was conducted within a concentrated three-week period. In prior iterations, the students worked together in a computer lab and there were more opportunities for cross collaboration and for informal peer feedback. The following revisions should not be taken as an exact prescription, but rather as conceptual suggestions to enrich the project.

I would institute additional gallery sessions at several junctures throughout the project, where the group gathers to present their works. These forums that started and ended the study were important for the participants to speak about their personal feelings as well as to critique, in a polite non-judgmental fashion. As Galila indicated by spending more time listening to the other groups’ presentation she would have remembered, or learned more material.

The first gallery session would have the dyads present the words of their presentation in both Hebrew and English poem form, with one phrase displayed on a slide. At this juncture the group could discuss the grammar, word choice and coherence of the English translation. If a dyad chose to diverge from the one phrase per slide rule they would be held accountable to present a rationale for the phrasing.

The second gallery session would be midpoint in the project. Since the medium is non-linear, and a dyad may choose to approach their work in a unique way, the discussion would address the presentation as it stood at that point.
The third gallery session would be when the dyad felt that it was finished, or a week before the project was expected to be completed. At this juncture the dyad would explain their design choices to the group and perhaps evaluate some of their choices. This session would enable the dyads to make revisions from their peers’ feedback.

An alternate model, given a comfortable state of the art computer lab, might be to review on demand. If a group finished, or just wanted to share, they would be able to initiate a request, and a shorter session would convene.

I would institute journal writing throughout the process of the project. If the cohort kept a journal during their participation in the research, I might have been able to garner more immediate feedback and specific information about their experiences. This is a feature of other learning by design programs (Bers, 2000a, 2000b; Kolodner, 2003).

The participants might have benefited as well from the narrative of their day-to-day experience with prayer at camp, with the surround, with their peer collaborator/s and with me. Through the act of writing, the participants would be encouraged to reveal their independent feelings and critically review their interaction. Perhaps expressing the narrative would spur an idea for a future work session. Deliberations on the project’s process in the journal would also serve as a distributed record that could be considered by the individuals at the end of the project.

The journal could either be hand written in a notebook, typed on the computer or recorded on tape. Writing an online blog would be an available option, as would
posting the day’s current version of the presentation online. This is the “YouTube” generation.

If the blog was online, then other members of the project, or even outsiders, who were invited, might comment on the blogger’s thoughts and work. Participants might easily create an online, or e-portfolio. This has the potential to extend the surround to include experts, peers and/or relatives.

A sound track for the written text or blessing is a third variable that would add another dimension, or intertextuality (NLG, 1996), of meaning to the project. This layer might either be a vocal reading of the words and/or music. The participants could use either pre-recorded material or they might create their own or produce a hybrid.

While I watched Layla rehearsing the words for her blessing, I observed how careful she was to annunciate and present the text with authority. At one point she also read in a singsong cantorial voice. The recording of the text might help girls find their yet untapped voices as prayer leaders, or at least give them a virtual opportunity to experience the role.

The musical representation of a text is a vehicle for meaning and literacy. Volumes discuss the unique hermeneutic characteristics that each artistic discipline may contribute (Langer, 1952; Gadamer, 1977) to meaning-making. This body of literature, though enlightening, is beyond the scope of this study.

The audio component would impact on the gesamtkunstwerk of the presentation, as the choreography between the elements of a slide affects the totality
of the composition. It is also feasible that individuals involved in the cohort would have musical intelligence (Gardner, 1983). Connecting prayer or text with their native intelligence might shape their collaborative construction differently.

Beliefnet.com called their narrated, visual and musical piece an “audiovisual devotional.” I would reframe it as an MTV or YouTube model which speaks to this generation’s lexicon.

**Future Implications**

The evolution of digital intelligence and Web 2.0 suggest two innovations that could enrich or affect the PrayerLive exercise. One is called social tagging, or “folksonomy” (Thomas Vander Wal, 2004). The other is referred to as “mashups”.

Social tagging is a way of classifying information that uses descriptive language that everyone knows. In practice, this means that an artwork such as “Starry Night” by Van Gogh might be tagged or categorized as “mystical,” “night,” “dark,” or “swirling.” A growing number of websites, which are known as wikis, utilize this convention for public access, interactivity and collaboration.

One such site is Flickr (www.Flickr.com). This site boasts a store of over one billion images. In addition to images from random users, the site includes a growing collection of photos from The Library of Congress and an increasing number of other prestigious institutions (*New York Times*, January 18, 2009). The more expansive search terms might assist users to zero in on appropriate images for metaphoric illustration.

The mash-up is a visual presentation comprised of content that is from a third party provider found on the Web. With the use of an online mash-up editor, users can
easily recreate and retransform media. This opens the possibility that participants of a future project might choose to construct programs with video. Creating a video would involve new technical computer skills which could be embedded in a meaningful context.

The next iteration that I would like to undertake involves creating an online database, or wiki, of the *18 Blessings Prayer* presentations that I have collected since the beginning of the project. I wish to extend the project to support global interactivity that would serve to broaden participants’ literacy and viewpoints. Why not have a global village creating meaning for a shared sacred text? Communities of practice might increase opportunities for LPP (Lave & Wenger 1991) by reconstituting its members as “persons plus” who utilize the vast resources outside of ourselves.

**Further Study**

Researchers are advised to address the prayer attitudes of young, female, adolescent, modern Orthodox girls. To date, there is no extant literature on either gender with this demographic. These findings should then lead to the generation of creative solutions that would be implemented and tested, providing rich opportunities for study.

Further research might explore the gender differences when participants jointly construct meaning. Would there be a balance of emotion and action or a richer collaboration if the dyad was male and female? The different types of meaning-making that each gender would produce, by constructing transmediated presentations under the same conditions, is another area that would be a fruitful investigation.
It would be productive to create and to study the effects of an extended, 20-30 sessions long, digital meaning-making curriculum. Such a study might begin with simple meaning-making activities, such as the study of cartoons, and gradually incorporate new skills involving both the computer and higher order thinking.

Limitations

My personal feminist beliefs and my dual role as facilitator and participant observer may have influenced the results of the study. As the participants did not work in the same room, I was not always able to observe every interaction, other than on the videotape. Also, when I scaffolded, critiqued and nurtured, I was inevitably not neutral. This might have affected the girls’ positive response to the intervention. The above factors call the validity of the research into question.

The study is limited by the small size of the sample; eight participants. It is difficult to generalize these research findings to populations other than the specific demographic population where the research transpired.

The post-activity profile and interview were administered retroactively, a year after the intervention. This might indicate that the participants did not remember their experience as keenly as they would have immediately following the experience. Also, I believe that it was more difficult for them to isolate the consequences of this intervention from other influential events during the year. Due to the year gap, I did not have a follow-up interview with one of the participants, Nediva.

Conversely, the year hiatus provided the cohort with the opportunity to field test their new literacy. Had I solely relied on information immediately after the
intervention I would have possibly learned more about the “effects with” the project than the “effects of” (Salomon, 1990) the project.

Unlike the research conducted by Barab et al. (2006) and Bers (2008a) I did not have access to the potentially rich data source that may be generated by the computer. Digital logs may be created on the computer that document, with precision, the sites visited by the research participants, and how long they were on a specific page. These records might fill in the information from the narrative videotapes. Many times it was not clear to the researcher what the dyad was looking at. Since the literature suggested that participation with art and image has an affect on both the creator and participant, this data might have been factored into the analysis of the whole research experience.

Personal Reflection

As a member of several of the community of practices that the cohort belonged to, I identified with some of the issues of the study. Through this exploration I was hoping to make sense of the apathy that I had observed when young adolescent girls participated in co-ed prayer groups. It has always disturbed me that this population appeared uninterested or uninvolved with the spiritual potential that prayer presents, particularly as I draw such great strength and joy from the ritual.

Several comments lead me to believe that I touched the hearts of the participants in all the phases of the intervention. Max, of Phase III, told me that the blessing that he worked on was now his favorite. Chaya, in Phase I, recalled how working on a blessing taught her the customs of mourning. As a result, when she found herself an active participant in the mourning rituals of her Grandmother she felt
like a more mature member of that community of practice. And of course, Ariella, the iconoclast of this study, who said, “I wish everyone could do this for all the prayers.”

In the course of writing this dissertation I have encountered many adults who voiced interest in exploring prayer in ways that might transform their practice into a personally meaningful endeavor. I would like to reach out to divergent communities of practice to help facilitate self-awareness through a collaborative, fun, constructivist approach. Judaism is a relationship (Gordis, 1995) and as such it requires commitment, hard work, and struggles for growth.

The following anecdote reinforces the finding that Jewish educators, spiritual leaders and parents might provide a real service by initiating a dialogue with their female constituents about prayer. The principal of a modern Orthodox high school in New York relates that a female adolescent was sent to his office to be disciplined for not praying properly. He wrote, “I asked her what davening meant to her and to my surprise she burst into tears. She explained that it was such an incredibly important question to her- but nobody had ever really asked her about it before” (Goldmintz, 2003).

According to my Hassidic teacher Reb Eli Chaim Carlebach (ob’m), crying is a personal mikveh, (ritual bath). In the Jewish tradition, a person or thing enters a pool of gathered, live waters in order to transform their status from one reality to another.
BIBLIOGRAPHY


APPENDIX A

PRE-ACTIVITY PROFILE

Participant #________________

Prayer Profile

Please circle the answer that best describes your answer

1. How many times a day do you pray?
   
   Once           Twice           Three times

2. How many days of the week do you pray?
   
   One     Two     Three    Four    Five      Six      Seven

3. When I daven I understand the Hebrew of what I am saying this percent of the
time
   
   100%        75%        50%          25%

4. I read the English translation of the prayers
   
   Frequently     Less then half of the time     Never

Please mark a spot the on the line that describes your feelings.

5. I think about the meaning of the words of the prayers.
   
   Strongly Agree |_______________________|Strongly Disagree

6. When I daven I get certain images/pictures in my mind at specific parts of a
   prayer.
   
   Strongly Agree |_______________________|Strongly Disagree

   
   Strongly Agree |_______________________|Strongly Disagree

8. When I see a beautiful sunset or experience a beautiful day I become more aware
   of Hashem’s presence.
   
   Strongly Agree |_______________________|Strongly Disagree
9. Praying makes me feel spiritual or closer to G-d.
   Strongly Agree |_______________________|Strongly Disagree

10. When I understand what I am saying the prayer experience more meaningful.
    Strongly Agree |_______________________|Strongly Disagree

11. I believe that prayer has the power to make a difference in the world.
    Strongly Agree |_______________________|Strongly Disagree

12. When I sing tefillot I “get into” the prayer more.
    Strongly Agree |_______________________|Strongly Disagree

13. I would be interested in leaning more about the prayers.
    Strongly Agree |_______________________|Strongly Disagree

14. I sense the personality or the soul of animals like pet dogs or cats.
    Strongly Agree |_______________________|Strongly Disagree

15.a) Did you have a bat mitzvah celebration? _If yes when___________________________.
    b) What did you do for the celebration? For example-party, dvar Torah, chesed project
       ________________________________________________________________
       ________________________________________________________________
       ________________________________________________________________
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16. Please describe how your religious or spiritual feelings might ever have changed as a result of an event? For example: Bat mitzvah, trip, sickness, nature etc.

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17. The best davening experience I ever had was…….Because

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18. How does the mehitzah effect your tefillah?

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_____________________________________________________________________
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19. How if at all do blessings, brachot comfort you?

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20. People learn best in different ways. Would you describe yourself as someone who learns best by seeing information or by hearing information or by writing information. You can be a combination. Please explain

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21. If you could run tefillah in your school for 12 and 13 year old girls how would you do it? Feel free to be as creative as you would like.

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APPENDIX B

PRE-ACTIVITY PROFILE RESULTS

**Prayer Practice**

1. How many times a day do you pray?
   
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2. How many days of the week do you pray?
   
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12. When I sing tefillot I "get into" the prayers more
   
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13. I would be interested in learning more about the prayers
   
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19. How if at all do blessings, brachot comfort you?
1. If I am scared and there is a bracha like in a lightening storm a brachah comforts me because I Feel closer to Hashem
2. Whenever I say the shema I feel that nothing bad will happen and that Hashem is hearing my prayer and watching over me
3. I feel like I am thanking H for everything he gave me. After you thank someone, they feel that you appreciate what you did for them and they most likely will do it again
4. The only one that comforts me is "oseh maaseh b'raishit" because if G-d put me in this world I have a purpose
5. when I say a blessing I feel good about myself that I just thanked H for something and I have a great joy?
6. Blessing in Tefillah comfort me a little when I say them because I know that I told no Hashem what I feel so He will answer me even if the answer is no
7. They don't really I only say them if I remember because I was taught to say them
8. Make me feel closer to G-d & special & I feel like it cleans me out. Its' cleansing me - like worries have just left me and have been lifted off my shoulder

Literacy
3. When I daven I understand the Hebrew of what I am saying this percent of the time
1. 50%
2. 50%
3. 25%
4. 25%
5. 25%
6. 25%
7. 87%
8. 25%
9. 39%

4. I read the English translation of the prayers
1. never
2. frequently
3. frequently
4. less than 1/2
5. less than 1/2
6. less than 1/2
7. never
8. less than 1/2

5. I think about the meaning of the words of the prayers
1. 3.5
2. 2.5
3. 4
4. 2.8
6. When I daven I get certain images/pictures in my mind at specific parts of a prayer
1 1.5
2 1.3
3 4
4 2.8
5 4.8
6 2
7 4
8 2.5
2.25

10. when I understand what I am saying the prayer experience becomes more meaningful
1 4
2 4.9
3 4.8
4 5
5 4.9
6 4.8
7 4.5
8 4.2
4.6375

Spirituality
7. I reflect on my life, think about my life, when I daven.
1 2
2 4.8
3 3.5
4 2.5
5 4.8
6 2
7 4.5
8 3.5
3.45

8. when I see a beautiful sunset or experience a beautiful day I become more aware of Hashem's presence
1 1
2 1.8
3 2
4 4.7
9. Praying makes me feel spiritual or closer to G-d.

1 2
2 3
3 3
4 2.5
5 4.9
6 3.9
7 2.5
8 3.5

3.1625

10. When I understand what I am saying the prayer becomes more meaningful

1 4
2 4.9
3 4.8
4 5
5 4.9
6 4.8
7 4.5
8 4.2

4.6375

14. I sense the personality or soul of animals like pet dogs or cats.

1 2.4
2 0.02
3 1
4 0.05
5 0.05
6 4.7
7 0.2
8 4.4

1.6025

16. Please describe how your religious or spiritual feelings ever changed as a result of an

1 When someone is sick of chas v'shalom in my family I concentrate on davening more
and I feel closer
to Hashem. Or when something good happens or I'm going somewhere exciting my
davening is better because I want to thank Hashem for being so lucky.

2 When I got diabetes my davening became a lot more meaningful because I knew how
amazing Hashem is to have been able to make our bodies work so well and he can take away
things so easily
1) Now that I am bat mitzvahed, I am starting to feel a lot closer to Hashem in my life and Tefillot.
2) My brother was sick for over a month- when I said refaenu I tried really hard to talk to Hashem with the best kavannah.
I did the same with my five year old cousin with cancer.
3) At home on Sunday I daven outside and when I look up at the sky it reminds me of God and all the good and bad things that he did.
I wonder why he does all of those things and I try to understand.
4) My spiritual feelings changed when I became bat mitzvah. When I was younger and I forgot to make a bracha
everyone said to me don't worry Omrit you are not bat mitzvah yet. I know when I am a bat mitzvah and I forget to make a
bracha- I worry oh no what will happen- am I supposed to worry is that what everyone was teaching me?
5) A few years ago we were in Israel for Sukkot and my school had a chessed mission.
We joined if for a day. We went to a girls orphanage.
We saw girls who had so little but still davened every day and believed that Hashem would help them
I tried a little harder to daven after that because I had more than those girls but I could not daven as well and I thought I should be able to also.
6) After my bat mitzvah I really don't know why it kinda changed, and I can't remember why but one day I just started caring about that maybe I should start davening.
After looking around me I started realizing how lucky I was and that a lot of my friends' don't have what I have (in Israel).
I remember one night I was lying in bed and I asked Hashem for something. I wanted to know if it would happen and for a sign. Then I got the sign and it happened. The next day I davened well
7) I used to be Chassidic. Now I'm not even religious since I changed I've wanted to keep Shabbat but couldn't.
I have tried many times but it was too hard because everyone else in the house was watching tv and I was extremely tempted and broke the rules. When I turned 13 I have more Kavannah and respect for davening.

17. The best davening experience I ever had.
1) When I was going on a family trip because I was excited and wanted to thank Hashem for that chance
2) The Shabbos after I left the hospital because I felt a deep connection with Hashem and I was so thankful to be alive
3) When my brother was sick I actually cried while I was davening because it was really hard for me to realize that someone who I really loved was really sick. He is doing a lot better now thank g-d
4) The day before my grandfather died I thought that davening would push off his death
5) I was at the kotel and there were so many Jews there, people were crying and some were singing this gave me so much G-d but at the same time made me nervous and confused am I davening the right way are they doing it the wrong way but then I realized there really is no right and wrong way to daven we all know you can't talk during davening and you shouldn't rush that is obvious. But as long as you daven it doesn't matter if you are singing or crying as long as you find the time to daven even if you say your one or two sentences you just have to find time.
6 My first shabbos at Moshava because when people davened they sang it and they had so much kavannah and happiness that it made me want to join in too.

7 My bat mitzvah davening because all my family was there and it was all about me.

8 I wasn't raised with my Mom. I always prayed that I can live with her. Then when I was 9 it came true and I moved to my Mom.

Women and Tefillah

15. Did you have a bat mitzvah celebration? What did you do for the celebration?

1 In Israel I learned about the women in the Tanach. My dvar Torah will probably have to do with them. I took a bat mitzvah class for two months and had different plays done for us about a different woman each week. They set up the class in a setting like from the Tanach and I think I understood it better than when in school when a teacher just told it.

2 I collected eyeglasses for victims of the tsunami. I partnered with an Ethiopian Israeli in Israel and learned about how she lived. I studied tractate Megillah and made a siyum and had a female vocalist singing at the party.

3 I went to Israel with my family and went to a lot of different places. I also did a bat mitzvah project. I designed a 3D card that looked like a present it was decorated in smiley face wrapping paper. I decided to do this because my five year old cousin is sick with cancer. All the money I raised went to child's tuition for camp simcha. Each of the cards cost $5.00 and the total cost for a child is $5000.

4 In camp I had a big party but more than celebrating my bat mitzvah I was celebrating all my life long learning until now. Every day I thought this learning is going towards my bat-mitzvah. This was like a life long dvar Torah.

5 I learned about all the Jewish women of Tanach. I had a bat mitzvah party. I also learned about Shavuot because I was born on Lag B'Omer. I also learned about what stopped on Lag B'Omer and what began.

6 I went to Israel. For a weekend my family and friends stayed at a hotel on the Dead Sea. I made three dvar Torahs one of which I said on Masada during breakfast. We had climbed it very early to see the sunrise.

7 I read the parsha except for two aliyyot. I gave a dvar Torah that I wrote with my Dad. On Sat. nite I had a big party. Also I did my bat mitzvah a week late because it was easier for my family to come Thanksgiving weekend. The week before I gave a small dvar Torah at our 2nd shul that my Dad wrote. My dvar Torah was about when Yaakov's name was changed to Yisroel. A big part was when my whole family came just to hear me read from the Torah. Another big part was getting my bat-mitzvah dress for the party where Shlock Rock came to play. After my bat-mitzvah on Chanukah as my small chesed project I donated 14" to locks for love. I wouldn't do it before because I wanted long hair for my bat-mitzvah. My Mom told me when I started thinking about my bat-mitzvah she asked me if I wanted to do a chesed project or lain. I read the parsha except for two aliyyot. I gave a dvar Torah that I wrote with my Dad.

8 I did not have a party but I went to Switzerland and Paris. We didn’t do anything that relates to Judaism or bat mitzvahs.

18. How does the mechitzah effect your tefillah?

1 I'm not sure because if it wasn't there I don't know if it would effect my davening so much.

2 It allows me to concentrate more on davening. I feel more comfortable around girls, more able to be myself and I don't have to impress anyone.
3 I don't have to worry about other men watching me daven because sometimes I close my eyes and sometimes I cry. I know a lot of other women/girls do the same.

4 It effects my davening because it does not make me think "I am stupid to do this in front of the boys."

5 Sometimes I wonder in front of boys did I do something stupid. With a mechitzah I feel I can daven any way I want without feeling stupid. I feel like it is more tzniut.

6 I think that it makes my tefillah better because I get distracted and look at different things during Tefillah sometimes so with the mehitzah there is less to look at.

7 The mehitzah doesn't effect my tefillahat all because I don't really care about the guys on the other side. I can talk to them after tefillah.

8 When I daven I don't think wow I'm doing a mitzvah feel like I am asking for something and I don't think of that as a mitzvah. Sometimes when I daven with kavannah I feel like I am doing mitzvah.

21 If you could run Tefillah in your school for 12 and 13 year old girls how would you do it? Feel free to be as creative as you like.

1 I would make it that if you want to daven come and do it because you shouldn't make someone do it. Tefillah has to come from you and if its something you have to do because someone is forcing you it may not be as meaningful. I would tell people to come but not make them. It's better to daven so I'd have to force them a little but not punish them if they didn't come that's hHashem's decision/job not mine. They can decide if they need to thank Hashem or not. It's their choice. If they want to thank Hashem or ask Hashem it's their choice. I daven because I want to thank Hashem for everything I have and I think it is important because he gives me everything I need.

2 I would try to jave siddurim with translations in them. I would have a corner where there would be a teacher who would be available to answer any questions in the room. I would encourage the girls to not only read from the siddur, but to add whatever personal prayers they have. I would make it clear that davening is a time to talk to Hashem and a time to bond with him, not a time to bond with your friends. I think this would reate an atmosphere where girls would actually want to pray and talk to Hashem. Because when teachers yell at you to pray it makes you feel like Hashem is forcing you to do something that you don't want to do.

I wouldn't make it all the same tune. Most of the time kids are forced to daven and get a grade that is the only reason they daven. But if you took two minutes before we started davening and talk a little about line prayer each time.

4 If I could run Tefillah I would make a stop in the middle so people wouldn't go to the bathroom during Tefillah. I would give some time during paragraphs so people would be able to catch up. I would like to have very interesting Dvar Torah in the middle.

5 With 12 and 13 year old girls I think the bestway to have everyone be into davening is to continue davening within a minyan but one to three times a week have a girl give a dvar torah instead of a boy and we can have girl discussions on how davening can be better and could become more a part of our lives.

6 If I could run Tefillah in my school I would split the Tefillah in different levels. Like there would be a few different places where you could daven. Each place would say more things or less things or different things. Each student would decide for herself which one to go to according to how she davenes and how much she can say or how long she can concentrate and stuff.
7 I would tell then to write their own Tefillah with everything they want to ask for from Hashem. Like maybe they want to go on a really huge shopping spree. While davening they can say their own Tefillah.

8 I would make a movie that explains in an interesting story about the words of davening, why we daven, how we should daven. Make it into an interesting movie. It Can’t be korny It should be a funny movie that everyone will like. For example the movie "Mean Girls" was funny and people learned from it.

Learning Style

20 People learn best in different ways. Would you describe yourself as someone who learns best by seeing information, hearing information or by writing information. You can be a combination. Please explain.

1 I learn more by seeing and hearing. When a teacher gives an example or shows it to me I understand better faster.

2 I like hearing information because then I can just close my eyes relax and concentrate on what I am trying to learn. But if I want to remember something I write it down.

3 Seeing: When I see something it kind of stays in my head. Example: When I study for test I read my notes a lot times it kind of stick s in my head.

4 I learn best by seeing because I have a thing that if I stare at it it makes an imprint on my mind.

5 Seeing and hearing. When I am seeing something I take all the information in. Like I am hearing something. It makes me feel like that person is saying it because it is important so I store it in my mind and I tell other people what the person told me.

6 I think that I learn best by hearing information. Also in school when a teacher is saying something I can only remember it if I don't look at the teacher because then I will get distracted.

7 I learn really well by writing information and hearing if the person who is teaching does it in an interesting way.

8 No, when I write things down it does not help me to remember & if I read it it doesn't go into my head at all. Possible seeing it will help in many ways because it is just like watching a movie.
APPENDIX C

POST-ACTIVITY PROFILE

Section A

Please circle the answer that best describes your answer

7. How many times a day do you pray?
   Once          Twice          Three times

8. How many days of the week do you pray?
   One     Two     Three     Four     Five     Six     Seven

9. When I daven I understand the Hebrew of what I am saying this percent of the time
   100%    75%    50%    25%

10. I read the English translation of the prayers
    Frequently   Less than half of the time   Never

Please mark a spot the on the line that describes your feelings.

11. I think about the meaning of the words of the prayers.
    Strongly Agree |_______________________|Strongly Disagree

12. When I daven I get certain images/pictures in my mind at specific parts of a prayer.
    Strongly Agree |_______________________|Strongly Disagree

    Strongly Agree |_______________________|Strongly Disagree
8. When I see a beautiful sunset or experience a beautiful day I become more aware of Hashem’s presence.

   Strongly Agree |_______________________|Strongly Disagree

9. Praying makes me feel spiritual or closer to G-d.

   Strongly Agree |_______________________|Strongly Disagree

10. When I understand what I am saying the prayer experience more meaningful.

    Strongly Agree |_______________________|Strongly Disagree

11. I believe that prayer has the power to make a difference in the world.

    Strongly Agree |_______________________|Strongly Disagree

12. I would be interested in learning more about the prayers.

    Strongly Agree |_______________________|Strongly Disagree

13. What, if anything, have you thought about the Tefillah computer project since the summer?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

14. Has doing the project affected or influenced your attentiveness and kavannah during Tefillah since the summer? If so, how?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

15. Do any images you associated with the words during the summer project present themselves now when you pray those words?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

16. Has doing the project affected or influenced your use of the computer or improved your computer skills since the summer? If so, how?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

17a. Has your davening or religious or spiritual feelings changed as a result of the summer project? If so, how?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

17b. Do you ever try to imagine what picture you would use for a word in a tefillah? Explain

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

18. Has doing the project affected or influenced any other aspect(s) of your life since the summer? If so, how?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

19. Do you ever think about the literal meaning of something and then the deeper meaning as a result of the project? Explain.

_____________________________________________________________________
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20. What did you learn when you watched and critiqued others?

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_____________________________________________________________________
_____________________________________________________________________

21. What were the benefits of doing the project with a partner?

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_____________________________________________________________________

22. When you were collaborating with your partner, how did you decide on the image? Did you try to relate things from your life? From culture or TV?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
Section B

Please answer all that apply and explain why or how:

1. Working on this project was:
   a. Fun
      ___________________________________________________________
      ___________________________________________________________
   b. Different than other computer work I’ve done
      ___________________________________________________________
      ___________________________________________________________
      ___________________________________________________________
   c. Different than other Tefillah study that I’ve done
      ___________________________________________________________
      ___________________________________________________________
      ___________________________________________________________
   d. A religious experience
      ___________________________________________________________
      ___________________________________________________________
      ___________________________________________________________
   e. A negative experience
      ___________________________________________________________
      ___________________________________________________________
      ___________________________________________________________
   f. An eye opening experience
      ___________________________________________________________
      ___________________________________________________________
      ___________________________________________________________

B2. The hardest part of doing the project was
      ___________________________________________________________
      ___________________________________________________________
B3. The part I liked most about participating in this study was
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

B4. Please rate in order of importance which part of the product taught you the most
______ Translating the words
______ Writing the words on the slide in English
______ Writing on the slide in Hebrew
______ Deciding on what image to use
______ Presenting to the group
______ Discussion with the whole group throughout the project

Have you used any of these skills since the summer in a different situation? How?
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

B5. What would you say was your biggest contribution to the project with your partner?
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

B6. What image did you choose for G-d and why?
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
APPENDIX D

POST-ACTIVITY PROFILE RESULTS

Post-Activity Profile Results

SECTION A

1. How many times a day do you pray?
   1 3
   2 1
   3 1
   4 1
   5 2
   6 1
   7 1
   8 2
   Average 1.5

2. How many days of the week do you pray?
   1 7
   2 6
   3 6
   4 5
   5 7
   6 5
   7 6
   8 5
   Average 5.875

12. I would be interested in learning more about the prayers.
   1 20%
   2 95%
   3 80%
   4 90%
   5 98%
   6 80%
   7 55%
   8 60%
   Average 72%
3. When I daven I understand the Hebrew of what I am saying this percent of the time.

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4. I read the English translation of the prayers

| Frequently | 2 |
| Less than half the time | 5 |
| Never | 1 |

5. I think about the meaning of the words of the prayers.

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6. When I daven I get certain images/pictures in my mind at specific parts of a prayer.

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7. I reflect on my life-think about my life when I daven.

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8. When I see a beautiful sunset or experience a beautiful day I become more aware of Hashem's presence.

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9. Praying makes me feel spiritual or closer to G-d.

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10. When I understand what I am saying the prayer experience is more meaningful.

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11. I believe that prayer has the power to make a difference in the world.

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13. What if anything have you thought about the Tefillah computer project since the summer?
1. I have not thought about it till I received the letter
2. I watched the powerpoint a couple of times
3. When I say sim shalom I understand the words from the pictures we used
4. I felt like it was a real learning experience and I could use these techniques in the future
5. Yes I started thinking about images I could use in other parts of davening
6. When I say the shemona esrai I think about the paragraph that I did the project about and its meaning- I don’t normally think about the ones the other groups did though
7. About how much I enjoyed the experience
8. When I say “slach nah and refa-enu I always think about the project. I do think about the paragraph when I am saying it

14. Has doing the project affected or influenced your attentiveness and Kavannah during Tefillah since the summer?
   The part of the Tefillah on which I did the project I understand much more. I understand the words
   It really helped me daven more meaningfully, and have special kavannah during the specific prayer I studied
   Yes, I actually know what I am asking Hashem for
   Yes since I did some parts of shemona esrai I now have the picture in my mind of the slide shows we made.
   Yes I began to read the English of some of the prayers which led to me having more kavannah
   It has because when I am davening I find myself thinking about what some of the words mean and trying to take my time to think about what I am saying
   No
   I do know what I am saying and I think about what I’m saying and I tend to have more kavannah

15. Do any images associated with the words during the summer project present themselves now when you pray those words?
   No
   There is always the picture we used in the ppt in my mind when I say a specific word in the prayers
   Yes the pics from the ppt always stick out in my head when I am saying shemona esrai, even the ones my friends’ made that we watched
   Yes
   Some but I tend to create new images in my mind a lot based on what goes on in my life
   The images don’t really but I still remember what the words mean
   Yes most of them
   Yes , guy davening in olden times
16. Has doing the project affected or influenced your use of the computer or improved your computer skills since the summer? If so, how?
1. They have not
2. No
3. Yes my PP’s for school are now more complex with all of the transitions and animations that I learned to add them
4. Yes because now I know how to use different parts of PPT better like custom animation
5. Yes I am bettr at creating PPT and I enjoy them
6. I mostly knew everything about how to make a PPT but it did teach me a few tricks and shortcuts that I still use such as ghosting an image
7. No
8. Not really I was always good with computers

17a. Has your davening or religious or spiritual feelings changed as a result of the summer project? If so how?
1. I have more kavannah during the parts that I understand
2. I learned that the words can me more than just words, that they have meaning that we can connect to our lives.
3. skipped
4. A little, it only changed the part that we made a slide show of/ If we had done that to all of davening I would completely understand it.
5. Yes. I began to take parts of davening more seriously & I started to daven more
6. I find myself thinking more about what the davening means for all the brachot and I feel like my tefillah is much more sincere than before
7. No
8. Not so much in my davening only in the paragraphs we did

17b. Do you ever try to imagine what picture you would use for a word in a tefillah? Explain.
1. No
2. Not really
3. No. I just try to understand what they literally mean
4. No, I just think about what the word means
5. Yes in refaenu I picture G-d healing the person I am davening for
6. I don’t really use images as much as look at the words. I break down the words and then I understand what the bracha is about
7. Yes sometimes when I am davening I think about how a bracha would look if I were using it in my presentation (for example what picture would I use.)
8. No

18. Has doing the project affected or influenced any other aspect(s) of your life since the summer? If so, how?
1. Not applicable
2. In school we learned about the amidah and our conversations during the summer helped me learn more
3. Skipped
4. Yes, because now I use PPT to divide up anything that I don’t quite understand
5. It influenced me to daven more and it helped me have more kavannah
6. Besides for tefillah hasn’t affected anything else
7. No
8. No
19. Do you ever think about the literal meaning of something and then the deeper as a result of the project?

1. Not applicable
2. I have always thought about deeper meanings so the project did not change that
3. For all the pictures we tried to do that b/c tefillah is more in depth
4. No, usually just the meaning
   I used to just read the English of the prayers but now I think about the meaning and how
   powerful the words really are
5. I am more of a literal person so I tend to just stick with that
6. Yes, when we did the project we would always out pictures that related to the literal meaning
   and then when you would
   come around you would always make me think about the deeper meaning. So, when I’m
   davening and thinking about
   how the bracha would look in my presentation I think about what you would say too.
7. No, usually just the meaning

20. What did you learn when you watched and critiqued the others?

1. Don’t remember
2. That everyone has their own interpretation of the prayers
3. Use of color
4. That everyone interprets their davening in their own way
5. Don’t remember
   I learned to compromise because I am usually a very controlling person but when working
   with a partner I couldn’t really
   do everything the way I wanted. Especially since my partner was the kind of person who also
   had a lot of input
   I didn’t learn anything that I can remember but it was interesting to see what everyone chose
   to do because
   it was so different that anything I would have done.
6. Don’t remember

21. What were the benefits of doing this project with a partner?

My partner helped me with some of the computer skills. My partner also gave me some
alternative ideas on ways
   to understand the words and think of images.
   I got to hear how another person interprets the words of the prayers and learned to open my
mind to new ideas
2. We showed each other things that we didn’t know, sites etc. and it was more fun
3. It helped me understand that what I think of davening is different that what others think
   Seeing how two people can take the same tefillah and have totally opposite opinions of what it
   means.
4. I learned to compromise because I am usually a very controlling person but when working
   with a partner I couldn’t really
   do everything the way I wanted. Especially since my partner was the kind of person who also
   had a lot of input
   The benefits were that every slide that we made had two perspectives which in my opinion
   makes the slide more interesting.
5. She was helpful and a lot of fun- how we chose the pictures showed we had different
   perspectives “wow that’s a new way
   to look at it- feel lucky that she was smarter
23. When you were collaborating with your partner, how did you decide on the image? Did you try to relate things from your life? From culture or TV?

1. Don't Remember
2. We tried to find pictures that were relevant to present day life and that carried a message
3. We decided to do things that weren’t black and white
4. From culture
   We decided to put pictures that could make it simple for others to understand. Therefore we took pictures TV and used a lot of animated pictures
5. We did things very literally. So we just took the words and found pictures for them- ex: produce we just took wheat
6. Basically we would both give an idea of what we both thought should be on the slide and then together we got to a decision on which was better. Our ideas naturally related to the above.
7. Just went to google

SECTION B

1. Working on this project was:
   a. Fun
      It was fun to make the computer project and different from the regular routine at camp
      1. I got to use computers during camp
      2. I got to work with another person
      4. Blank
      It was fun because I enjoyed working with a friend and hearing her opinion on the tefillah and it was fun making a power point
      5. I loved getting to work on the computer in cnap and also working with a partner. It was also funn getting to see everyone else’s work
      6. The project was very fun to do mostly because it was different than just sitting in a regular shiur and listening to a teacher talk about a subject that I probably wouldn’t care about .
      8. fun cos it was creative, got to choose colors

   b. Different that other computer work that I have done
      1. Blank
      2. No
      3. It was about a tefillah and in depth
      4. Blank
      5. Blank
      6. I have never done any project with tefillah on the computer
      7. Blank
      Yes- other ones that I did in school for Torah you just write facts- this one was interpretation, translation it was relevant

   c. Different than other tefillah study that I have done
      1. Blank
      I got to make my own interpretations of things and not have it taught o me- I really liked it
      2. I have never done a tefillah study before
This really got me thinking because in all other tefillah studies everyone has to think of davening the same way- as opposed to here where it could be whatever I think
Yes mostly when I learn about tefillah it is not by making a PPT and by analyzing the prayer by myself.
It’s mostly someone lecturing me and telling me what the project means.
I’ve never really done any project with tefillah on the computer
Very different. Most tefillah studies are just learning about the tefillah by looking at examples of people who davened in the Bible.
It is like studying with a friend

d. A religious experience
Yes, because I learned about prayer and that aided in my religious knowledge
Gave meaning to davening
It strengthened my kavannah
I used to not know the meaning of the tefillah and now I do… which made prayer more interested for me and I want to daven more often
It helped my tefillah be much more sincere because I started thinking about the words more
Made prayer more personal- like I should say this- this will help me- felt close to me- doing it for myself

e. A negative experience
Blank
No
It wasn't
Blank
No
Blank
Blank
No

f. An eye opening experience
Blank
I got to experience how others thought about the brachot
It led me to understand what tefillah is all about
I now look at davening in a much better and very different way
Yes because I started reading the English of some of the prayers and started putting images in my head
Blank
Blank
Yes, combining art & Torah, everyone likes it and it is easier to learn- also the collaboration- so
many ways of interpreting it- I never thought of it
2. The hardest part of doing the project was:
1. Understanding the meaning of every word instead of just the main idea of the paragraph
2. Finding pictures that portrayed the right meaning
3. We picked a really long tefillah so it took extra time to find more pics and organize the words
4. Getting my ideas to combine with my partners
5. Deciding what type of pictures to use
6. Figuring out how to break the paragraph down and the typing and placing everything
7. Thinking of what pictures to put in
8. Pictures were a lot of fun

3. The part I liked most about the project was:
1. Making the computer project and hearing my partners ideas
2. Bringing the brachot to life
3. Working with a partner. It was a lot of fun picking out different things together to make our project better.
4. Getting to understand tefillah the way my partner did
5. Working with a partner and hearing her opinion on the words
6. I liked picking all the pictures and colors
7. Being in an air conditioned room and working on the computer
8. Picking the pix and doing the colors

4. Please rate in order of importance which part of the project taught you the most:
   Deciding on what image to use
   1  2  3  4  5  6  7
   3  1  3  2  2  3  2
   Translating the words
   1  2  3  4  5  6  7
   1  3  2  3  1  5  4
   Discussion with the whole project group
   1  2  3  4  5  6  7
   4  2  1  1  5  6  1
   Writing the words on the slide in English
   1  2  3  4  5  6  7
   2  6  6  4  3  1  6
   Presenting to the group
   1  2  3  4  5  6  7
   5  4  5  6  4  3
   Writing on the slide in Hebrew
   1  2  3  4  5  6  7
   6  5  5  6  4  2  5
Have you used any of these skills since the summer in a different situation? How?

1. No
   When we discussed the amidah in school I used what I had learned over the summer
2. In school, I have to make PPT and I have to choose pics that are not just “black and white” it is hard choosing which pic
3. Yes because now I stop during davening to translate certain words
4. I became better at PPT which helped me for school
5. Not really
6. No
7. Translate look at the words

5. What would you say was your biggest contribution to the project with your partner?

1. Helping others understand the prayer
2. I helped with translating and organizing the slides
3. In the beginning, she didn’t know a lot about computers, so it was a lot of fun teaching her
4. Showing the rest of the group the way we feel
   My opinion against hers and hers against mine because it made us open our eyes and actually think
5. I was good at deciding the layout and colors and things like that
6. Knowing Hebrew and easily being able to translate everything.
7. Skipped

6. What image did you choose for G-d and why?

1. N/A
2. N/A
3. A crown- king of the universe, sky=merciful, forgiving
4. A crown with a glow around it because G-d is our king and the glow if for holiness
5. Sky because he controls everything and the sky is so large
6. N/A
7. N/A
8. A gold crown with jewels- he’s our king and our father rules over the kingdom
APPENDIX E
SAMPLE OF CATEGORIZED VIDEO TRANSCRIPTION

Nadiva & Samara

1C MEANING

3:50 S so it is give peace and compassion to….
because of your holy face ….
N it's kindliness
S we'll look it up on dictionary .com

9:10 N what should I write
tell me
S give peace

next line- I think u should capitalize hashem
N yeah

14:52 S next line with the light of ur holy face
forgot H
S because of your holy face

20:30 S (spells if or her)
N blessing compassion any commas

20:53 N yeah
S comma, compassion
S next line kindness comma

S asks to control computer

32:36:00 S we need to check how we separated the line
SELF ANALYSIS
7:00
S blessed r u hashem
s its so long
N but we say it every day
N it's much longer in english
we don't pay attention to what we are saying

37:00:00
S&N smile - we are so good at this

41:27:00
S go to our english poem
if u scroll all the way up

47:00:00
N can I x it
S it was fun
N yeah

SELF ANALYSIS
1:28:47
S which one do u like
N I like the first one
N but maybe this one we sould just put on the bottom
s u want to try both ways
S I like that

DESIGN
16:14
S go back and press tab
S because of your holy face- comma I think
N yeah
S next line- you gave us comma g-d , hashem

18:00
S torah with a capital
S do that
S the torah with life
N comma
S I guess
N what's chesed
so we'll write kindness

N you are good in computers do u take computer class

32:40:00 S we can always change the font
N I like comic
S that's what I do
s we are doing the english

39:00:00 S you are getting good at this (computer skills)

43:00:00 your getting good at computers when you get back
to school they are going to say..
S so u think we should make this one on one line
N no- should we make it double spaced

3C    INTERVENTION

1:11 D at the computer transferring show
D not interested in asimation
D would love it if you did images that were
   meaningful in your lives
1:14 D repositoning camera
S let's say that this is the picture that I want
D right click the picture

1:25 D that is something that you do
D batman isn't real that you do

1:36 d to me it looks like they are making a business deal
kindness is giving someone a drink on a hot day
**4C INTERVENTION**

1:07
D why do u think g-d is called our father

1:07:10
D does it have to be the whole nation
D u know what says nation to me is flag
S oh that's true how bout the israeli flag?

**1C COOL & SPIRITUAL AWARENESS**

36:26:00
N do u know how to make it jumpy like that
can we make ours really cool

**3C DESIGN**

52:00:00
S highlight it and on top of it
S let go for a sec
you can copy them, right click

S keep scrolling
S are people going to see thgis

1:09
MN can we add music

1:22:18
S how to make it smaller
N you know what I think we should do

1:30
N maybe we should make it…and in half
S want to make a dove and a dove
D a way to
N try making it sort of like this
1:31:49
drinks
Or you could get doves in each of the corners.
low
S want a background color of do u want to do white
4C DESIGN

47:30:00 N what about the bubble do u like it
   S up to compassion

1:01:30 N galila what do u do when u get to ditto.com
   N just go to . Com

1:04:45 S pick a color- purple
   N yeah
   S do u like any of those or do u want a different color

1:10:11 s let's change that what color do u want
   S shakes her head

1:34:00 S what is this- maybe we have to change the color
   S is it covering the…
APPENDIX F

SAMPLE OF COLLABORATION NARRATIVE TRANSCRIPT

log 7a  Samara and Nediva

N asking Devorah is this good?
D no are u kidding it is gorgeous

0:19  S it's kind of covering the baby face
N so lets move it
S you have to put it on the line and move it
N s oh that is so cute
S oh it is such a good slide
N (looking very happy) Oh I am so proud of myself

S I was thinking of a funeral for the next one
N no it can't be so sad
S how about a bad grade?

N let's see what it says
N oh there should be one of Israel that would be a good one
S holocaust- I know how to spell that
N is that too scary? Is it good?
S u can't really tell what it is don't put that it is really scary

N it sould be really nice if we could get it with an israeli flag
N controls computer
N u think we should say israeli flag
S what about a bird and the israeli flag

2:35

N is this good? it is a little bit too much

S the other group got it so it must be there

4:15  S copy u pulled it off the page
N where'd it go
S u just pull it out here and then u can make it bigger
N ok
N can u still tell what it is

S let's put it in the silde show and see
S I love it
S that's a cool picture

5:53  S I would like to get sim shalom on a cd
N we should put it a nice song

S I hate these peace and blessings
S u know those leaves before we should just do
N a nice background like a beach
N this is good should we do it
N what does it mean with your peace
S just calm colors
N yeah cos it makes you think more about it
S u got good at computers
N thanks it all because of you

S I think we should change the color

7:38
yeah
S a calmer color like lavender or light blue
N like what
S a lavender
N is that better- maybe we could put the words on top
S I think it kinds of blends in with this

8:30
N working
S exactly what I thought- click on the a- now click away
S it's a calming color

N blessed are you hashem
N so should we do something that we are thankful for
S let's see the rest of the slides and see what they are about
S oh my G-d
N who blesses his nation of israel with peace

9:27
N bless u hashem
S how about a crowd that is kind of respecting hi,
S try clip art- it has cartoonish things
S what was the thing Jamie and book
N working on computer as S goes to bathroom

10:29
N do u like the slide
14:26
S can u click the letters away
S it's a good picture but u can't see the letter
N I tried every color
S how about white
N I did it so well by myself
N u know it had a grey box and I colored it white

15:38
S two more slides oh my g-d

S yeah that's good
N typing into google

16:32
S we have so many things open
S u pasted u did not copy it
S that's a really good picture t is not even blurred
N I think that we should just move it
N yeah but then where do the words go?
S can u see it?

N all of his nation of israel
18:30
S if we have a wholecamp or eidah picture
N controlling computer
S what is this ---moshava.org
S here go down
20:00
S could we use the top picture?
S scroll down one more time

someone comes in and takes over computer

22:03
S u know what I thought of go to edah bet picture
S the climbing wall is a map of israel
N that's cute
N I feel that she will be embaressed with the picture
N cos she is my cousin

N this is a good picture
S u know what go back- wait one sec
23:28
S or we cld just take this picture
N what if we go on google I have an idea
S how bout just the top symbol
N yeah

S go on google and do the bnei akiva symbol
N this one?
S no
N which one do u want?
S that's really good picture
N I'm so proud of myself that I know how to
25:14:00
do it and it is all because of u

S let's do white
N we have to move it down
S want to make it smaller
N yeah
S where do u want to put it? On the top?
26:30:00
N ok and the words coming down

N what day was that opening tochnit
S there they are waving flags but it is not such a good picturte
N I want it to be a nice picture though cos it is the end
S just an idea
N how about a rainbow does that work
S yes it does
S sure try clipart
S let's try deleting, close that and close that

28:22:00
N no think this is all animated
S try yahoo they also have pictures
S how bout that?
N do u mind that we are wasting our time doing this
S no do u?

N is doing animation
S she taught me how to do the order thing

30:00:00
N I think it is really pretty
N claps - it got better as we went on
S yeah - after that it got better watching show
S it's little but is good ( they are watching the show)
S oh I like that one
N it is really good
S I love that one

N it has to be shown slowly
S I really like it
S how bout a yellow

32:07:00
S if u click down that color is already there
S it's ok that picture it is not my favorite
N compassionate
S we have to change that one for sure

33:20:00
S we need to write something in
keep looking
S we went to plants last time
S or father is not really plants or a leaf
N what's that leaf?
N we could make a picture of the sky but we did that already

34:29:00
N wanna do creation

N he's our father he created everything we look up to him
S maybe just write in black

35:28:00
N this we'll move down and then take this half
S put the fillin there
N and then the hebrew will be on top
S do the color black and then copy and paste
N this is fun

37:42:00
N it's good
S are we missing anything? U wanna watch it?

39:12:00
S let's go to google
N which flower
S its pretty
S I like the purple one

40:05:00
S I think this is really good just have to fix it
S wanna see the slide show I really like it
N that is fine they will think about
N whatever so there is one slide that is not the best
N with the white hebrew it might be better
s go to your eyes I love that one
S in think the ending is so good
N I am so proud of myself
N I think we should make one of a person helping another so that
He is watching and it is good in his eyes
s it's not our actions-
S No it has to be Him doing something good for us

42:01:00  N no He's watching us
S go back to the one before that and may it be good in your eyes
N let's try friends
S that's cute
S family

43:04:00  N types it into google
S elephants they are so cute
N should we do that?
S it is good in His eyes
N Nature
S the ending is so meaningiful; but the beginning isn't
S elephants are so cute I rode one one time
S ready to write the Hebrew
S we have to change it into Hebrew
N so sim shalom
S and we'll change the font after
S can't see it

45:15:00  S do u have the peom as the first slide
N recites the bracha by heart
N what are u doing? Don't put it on my I will kill u

46:54:00  S I'll do it
S chen v'chesed how do u spell that?
S we are getting somewhere

48:58:00  N it is v'rahchamim
S we're just about done-wanna see it?

50:37:00  D can I pull up a chair
N it has a lot of meaning to it
N does it make sense he is our creator he made light and dark

51:13:00  D maybe if u add the words
S it gets better as u go on
D who said it was bad
N it's like nature- does it make sense
D did u try to stretch the picture
picture looks like it is a funhouse mirror
D ahhh
N cos he is like the king
D that's gorgeous-how did u find that
Yahoo
N is the flower one good?
S is it good
N do u think it is too literal?

54:01:00 N is it ok if we stay here past
S is it good
D it's not good it is excellent
D want me to get u ice water
APPENDIX G

ICONIC ANALYSIS OF POWERPOINT PRESENTATION

Samara & Nediva

<table>
<thead>
<tr>
<th>TEXT</th>
<th>IMAGES</th>
<th>COLOR</th>
<th>WORDS</th>
<th>ICON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give peace</td>
<td>Sun rise clip art</td>
<td>text white</td>
<td>BT Bestow</td>
<td>symbol</td>
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<td></td>
<td></td>
<td>bkrd image</td>
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<td>Good things</td>
<td>thumb up</td>
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<td>symbol</td>
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<td></td>
<td></td>
<td>lt blue bkgrnd</td>
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<td>and blessings</td>
<td>priestly hands</td>
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<td>symbol</td>
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<td>over Jerusalem</td>
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<td>favor,kindness</td>
<td>crossing a blind</td>
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<td>and compassion</td>
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<td>A Torah with life</td>
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