

ConneKt | Vignettes
*Aligning the Complementary Needs of Foster
Children and Senior Citizens in the United States*

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Abstract

The foster child and senior citizen populations in the United States exhibit critical mental health vulnerabilities as a result of symmetric isolation on the margins of society. ConneKt|Vignettes, a web-based, story-building, social networking forum is proposed as a means of aligning the complementary needs of these two populations. Via customized interfaces, narrative construction tools, and social networking support, ConneKt|Vignettes reduces the traditional technical divide, promotes technical literacy, facilitates therapeutic personal narrative creation, and encourages social constructivism, all for the purpose of reestablishing meaningful connections with society at large. Although ConneKt|Vignettes offers benefits across economic, social, and moral domains, it represents only a partial solution to be used in conjunction with targeted physical and psychological therapy. Furthermore, the viability of the this proposal depends on sustained development based in grounded Action Research.

Introduction

“The world is open!” Curtis Bonk's mantric refrain succinctly expresses the inspiring vision that information sharing via web-based technologies is emerging as the primary avenue for advancing social change (Bonk, 2009, pp. 2-3). One form of information sharing, the exchange of personal narratives, is critical to the promotion of interpersonal understanding and social integration. Nonetheless, access to the corpus of human narratives is inherently limited, due to the existence of marginalized populations. Even in the United States, de facto marginalization results in groups that are inhibited from fully participating in the social exchange of personal narratives. The result of such isolation is exemplified in the cases of institutionalized foster children and senior citizens, groups that collectively suffer from increased rates of depression and forms of mental illness. Although their circumstances differ in detail, they each seek and merit meaningful interaction and reintegration with society.

What follows is an analysis-backed proposal for a web-based solution that provides a forum for personal narrative exchange and social interaction between senior citizens and foster children residing in group homes. The proposal is presented in the context of four instructional design criteria for assessing the problem domain and establishing measures for expected effectiveness: Audience, Behavior, Conditions, and Degree (Kim 2009b). Furthermore, the proposal is evaluated according to six guiding design considerations: Situation Specificity, Cultural Sensitivity, Practical Usability, Theoretical Applicability, Economic Scalability, and Viable Sustainability (Kim, 2009a, p. 418).

Background

Audience and Conditions: Foster Children in Group Homes in the United States

The foster care system in the United States serves a population of approximately 520,000 children a year (ABC Primetime [“ABC”] 2006, p.1), many of whom have suffered abuse, neglect, or abandonment (American Academy of Child and Adolescent Psychiatry [“AACAP”] 2005). On average, foster children undergo three temporary placements over the course of three years before permanently joining a family via reunification or adoption. Nevertheless, cases of 20 to 30 individual placements are not uncommon, and as many as four percent of foster children never join a permanent home, ultimately aging out of the system (“ABC” 2006, pp. 1-2).

Approximately 100,000 foster children reside in group homes or similar institutions as they await adoption or reunification (“ABC” 2006, p. 2). These establishments provide a full-time, structured, supervised living environment, typically operated by a non-profit organization receiving funds from the Aid for Families with Dependent Children (AFDC) and Emotionally Disturbed (ED) state childcare programs. Although these funds provide for basic care, allocations addressing mental health and educational services are significantly limited (California Alliance of Child and Family Services “CACFS”, n.d.).

This precarious world of inconsistent placement and a paucity of stability yields conditions for vulnerability. According to AACAP, approximately 30% of foster children exhibit severe emotional, behavioral, and developmental problems, and many more struggle with feelings of abandonment, helplessness, and uncertainty about the future (“AACAP” 2005). These factors conflict with traditional education, as foster children are more likely to be suspended or expelled from school as a result of behavioral or emotional problems. Furthermore, foster children are less likely to engage in school-related and extracurricular activities (Child Trends Databank [“CTD”] n.d.).

Upon emancipation, foster children are far more likely to experience poverty, homelessness, and depression in comparison to the general population. In fact, a study of former foster children in the Pacific Northwest found that the rate of post-traumatic stress disorder among former foster children was nearly twice that of afflicted United States war veterans (Rowe 2005). Additional surveys have found that as many as 30 percent of the homeless and 25 percent of those imprisoned in the United States were once in foster care (“ABC” 2006, p. 2). One posited contributing factor to this social maladjustment is the lack of adequate support structures for emancipated foster children (Choi & Lee 2009). In contrast, foster children receiving informal support following emancipation exhibit increased self-efficacy and rapid adjustment (Choi & Lee 2009, n.p.).

Audience and Conditions: Senior Citizens in Group Homes in the United States

Senior citizens, aged 65 and above, comprise roughly twelve percent of the US population. Between the years 2011 and 2030, the number is expected to double with the advent of Baby

Boomer retirees (US Census Bureau [“USCB”] 2005, p. 1). Seniors of this generation are generally characterized by stoicism and a desire for personal autonomy (Long Term Care Planning Network [“LTCPN”] 1998), although these desires are at odds with the deterioration of mental and physical acuity that accompanies old age (Witkop, n.d.). Accordingly, nursing homes in the United States care for approximately 1.5 million senior citizens, while assisted care facilities house another 800,000. These institutions provide variously structured living environments, fundamental services, supervision, and medical care (“USCB” 2005, pp. 67-68).

In contrast with numerous world cultures that exhibit a veneration of elders, senior citizens in the United States largely suffer from marginalization and devaluation. The prevailing ageism that results in the isolation of those perceived to be “past their prime” further exacerbates the unsettling state of advanced age, where loss of loved ones, drastic changes in lifestyle, and newly acquired financial hardships are commonplace (“LTCPN” 1998). Increasingly, seniors exhibit tendencies toward withdrawal and depression, particularly in nursing homes and convalescent hospitals, where approximately 25% of residents exhibit clinically relevant depressive symptoms (“LTCPN” 1998).

Supportive Psychotherapy and Personal Narratives

By far, the most prevalent vulnerability common to both senior citizens and foster children is risk of depression due to isolation. Institutional approaches to combatting depression, in addition to traditional biological and psychological treatments (“LTCPN” 1998), increasingly include social and reflective solutions. One prevalent approach, supportive psychotherapy, is often described simply as “talk therapy,” underscoring the importance of providing a forum for subjects to verbally express their feelings to one or more individuals (“LTCPN” 1998).

Similarly, the construction of personal narratives is hailed as an important therapeutic and metacognitive tool throughout the lifecycle (Pennebaker & Seagal 1999). Individuals of all ages may derive myriad benefits from narrative exchange, including communication, education, inspiration, and establishment of connections. For vulnerable populations, narratives may also provide mechanisms for personally reshaping fractured lives that have endured significant loss (Dyer n.d.). For senior citizens, narrative creation is often accompanied by realizations of survival, the tremendous scope of a full life (Choy 1996), and the preservation of a legacy (Dyer n.d.). Similarly, foster children may engage in the construction of personal narratives to gain deeper understandings of self and place in the world.

Despite the benefits of personal narrative construction, there exist barriers to entry, particularly among senior populations. Deterrents commonly take the form of misconceptions, including the beliefs that personal narration requires the creation of a comprehensive memoir, exciting subtexts, or professional writing talents (Witkop n.d.). Deteriorating motor skills and inexperience in utilizing technology may also hamper the writing process. Finally, many seniors fail to share their life stories because they are never asked to do so (Witkop n.d.).

Technical Literacy

The well known technical deficit in senior citizens (Witkop n.d.) is also manifested, to a lesser degree, among numerous foster children (Finn et al., 2005). Given the pervasive interweaving of technology throughout American society, this lack of technical literacy may serve as a barrier to social participation. This disconnect is exacerbated in groups with limited mobility, a characteristic that applies to both institutionalized senior citizens and foster children, as they enjoy even fewer opportunities to connect with society at large.

Fortunately, these gaps in digital literacy can be closed. In 2005, Finn et al. demonstrated that programs designed to increase technical fluency in foster children have not only been successful, but have been shown to improve performance and engagement in scholastic activities. Similarly, in a project funded by Time Warner Cable and the Wade Edwards Foundation, high school students successfully instructed senior citizens in rudimentary computer skills such as search, scanning, photo editing, email, and document creation in several short sessions (Philanthropy Journal, 2009). In both cases, the acquisition of technical literacy promoted greater interaction with, and contribution to, society.

Lifelong Learning

Across the lifecycle, formal and informal learning constitute the mechanism for remaining connected and literate in a constantly changing world. This is true for all members of society, particularly those who are marginalized. Opportunities for learning, then, represent the means by which isolated individuals may rejoin society. In this spirit, the following dimensions of learning are presented as relevant to this proposal.

Maslow's Hierarchy of Needs is a psychological theory that establishes the fundamental prerequisites for learning (Maslow, 1943). Although institutionalized senior citizens and foster children are provided with fundamental physiological necessities, the prevalence of emotional disorders in these communities suggest deficits in stability to home and lifestyle. Without satisfying this need, achievements of sense of belonging, self-esteem, and self-actualization are severely impacted.

Metacognition is knowledge concerning one's own cognitive processes (Flavell 1976, p. 232), which is a higher-order thinking skill than the cognitive faculties required to read or perform mathematical calculations. Metacognition can be developed in reflective writing, and the resulting self-discoveries may provide powerful insights that may pave the way for personal growth.

Social Constructivism is a sociological theory suggesting that individuals construct meaning via interactions in group settings. This type of learning may occur in computer-supported collaborative learning, in which participants not only employ the 21st Century Skills of communication and collaboration, but acquire technical literacy as well (Learning and Teaching, n.d.). This theory is particularly relevant to the challenge of empowering marginalized senior

citizens and foster children to not only connect with individual members of society, but society as a whole via increased technical literacy.

Complementary Needs

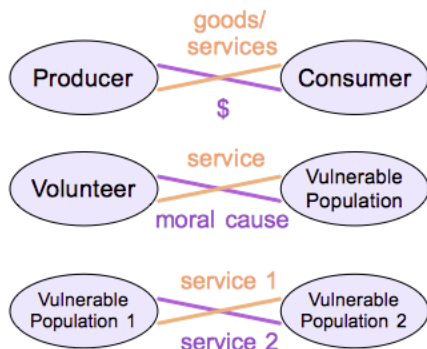


Figure 1: Complementary Needs (Bryant, 2009)

The concept of complementary needs was developed in support of this proposal to describe scenarios in which compatible populations may benefit from one another by merely exercising their individual needs. Figure 1 demonstrates the role of complementary needs in two traditional relationships, as well as a third that is applicable to the populations in question. The topmost relationship demonstrates the complementary needs of the classical economic relationship of marketplace exchange. Critically, this relationship tends to exclude marginalized populations, as it requires the consumer to possess disposable income.

The central relationship demonstrates the complementary needs of vulnerable populations and charity organizations. Although this arrangement is accessible to marginalized populations, it hinges upon the continued devotion and resource generation on the part of the volunteer group. Furthermore, such a model does not guarantee sustainability, as the provisions may only alleviate conditions rather than promote underlying change.

The final figure in the diagram demonstrates the purest form of complementary needs. In this relationship, two vulnerable populations express needs that satisfy those of the other. This arrangement offers a unique solution that is both sustainable (the resources, in the form of needs, are endemic to each population) and viable (the strength of the relationship is a function of the continued needs of the populations). Senior citizens and foster children living in group homes exhibit complementary needs of this third variety. Both groups suffer from isolation and marginalization, and are in need of meaningful interaction with others to ameliorate their conditions. While institutionalized foster children suffer from a lack of stability in environment and interpersonal relationships, senior citizens possess a wealth of relevant experiences and sufficient availability (“CNCS”, p.4) to constitute a stabilizing presence. Conversely, isolated senior citizens need to have their lives and stories validated, a role which an institutionalized foster child may perfectly satisfy.

Problem Statement

Institutionalized foster children and senior citizens in the United States are situated in symmetric isolation at the margins of society. Due to the instability, uncertainty, and powerlessness inherent to these situations, both populations exhibit vulnerabilities to depression and various mental illnesses. Accordingly, they have a need to live meaningful lives characterized by positive view of self, constructive social interactivity, and lifelong learning and development.

Proposal

The needs of the institutionalized senior citizen and foster child populations in the United States may be satisfied by aligning them in a stable setting that promotes personal reflection and social collaboration. *ConneKt|Vignettes*, a web-based, story-building, social networking forum provides such a place. Packaged as a remotely managed web service with accompanying support documentation, institutions need only provide a computer with an internet connection to link their most vulnerable, isolated charges into a complementary and reflective social network.



Figure 2: Vignettes interface features

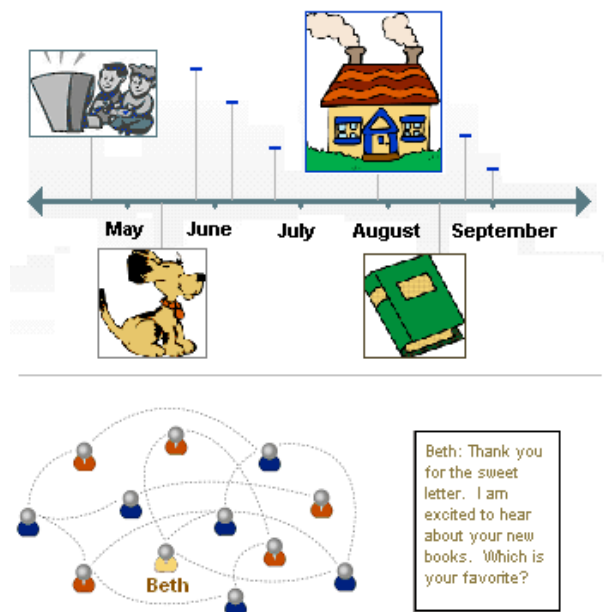


Figure 3: ConneKt interface features

As the name suggests, *ConneKt|Vignettes* consists of two distinct interfaces (see Figures 2 and 3), each tailored specifically to reduce the digital gap between user and technology, while subtly promoting the acquisition of technical literacy. Analogous to a custom CSS stylesheet, the same functionality underlies each interface, while presentation layer changes are made with respect to audience.

Vignettes presents a “photo album” model of narrative construction along with a stationery letter social networking tool for its senior citizen audience. Narratives consist of sequences of single vignettes, which may consist of images, audio, video, and/or text. Basic prompts are provided rather than blank pages in order to promote narrative building and memory recall. Examples include querying for the user's experience in relation to a memorable historical event, accomplishments of which they are proud, and their personal, philosophical beliefs. These disinhibiting tools are particularly helpful for senior citizens for whom memory may be deteriorating (Witkop, n.d.). In a similar vein, the stationery correspondence model for social networking consists of a mailbox, and procedures for creating, sending, and opening of letters.

ConneKt likewise offers tools for personal narrative construction and social networking, while employing models appropriate for its target audience. A constructionist timeline tool invites foster children to document and consider related events in their life, while a visual social networking graph provides a natural and reassuring representation of connectivity with others.

Both interfaces provide support for users to search for complementary friends along common dimensions of interest. In this process, views of other personal narratives are presented in the familiar form: photo album for senior citizens, timelines for foster children.

Situation Specificity

ConneKt|Vignettes is designed specifically for group institutions housing either foster children or senior citizens. The key environmental aspects of these populations are a general lack of mobility and potential instability. These are addressed by providing a web-based solution that maintains connections over time without requiring physical transportation. The only requirement of the institution is to provide a computer with internet access, which, if not available *a priori*, can be instituted at relatively low cost.

Cultural Sensitivity

To the level of the name itself, *ConneKt|Vignettes* has been designed to take into account the unique cultural characteristics of the target users. Both interfaces reduce the technical barrier to entry by promoting simplicity of interface over rich feature sets, while also subtly promoting technical literacy.

ConneKt offers an engaging timeline feature to not only pique adolescent interest, but to promote the educational benefits of constructing a narrative history. The personal network graph for organizing contacts is designed to promote a feeling of connectedness to a caring community, while also implicitly encoding the technical elements of social networking to promote technical literacy.

Similarly, *Vignettes* provides seniors with a simplified mechanism for constructing personal vignettes - self-created representations of life events. The individual control provided by this process satisfies the Baby Boomer ideal of autonomy of action. Also, the vignette interface gently prompts the user in order to encourage self-expression while reducing anxieties that typically manifest themselves in seniors constructing their memoirs. Both the photo book and the stationery correspondence model encourage interaction via familiar metaphors.

Practical Usability

ConneKt|Vignettes is designed to integrate seamlessly with existing social and therapeutic programs in group homes. It does not seek to replace existing programs, only to augment daily life with narrative creation and intergenerational socialization. Use would likely occur during leisure hours or during directed activities. Initial adoption may require light training to

overcome a slight learning curve, but with the assistance of a marginally competent technical advisor, such hurdles would be quickly surpassed.

Theoretical Applicability

The functional components of *ConneKt|Vignettes* promote two interrelated functions: the creation of personal narratives, and direct, intergenerational communication. Together, these features provide the users with opportunities for informal, supportive psychotherapy with an interested party. The narrative components in both *ConneKt* and *Vignettes* also promote metacognition and personal resolution of life events.

The correspondence feature promotes social constructivism, encouraging the process of making meaning by interaction. Sustained and meaningful interactions will greatly enhance quality of life for senior citizens (“LTCPN” 1998) while the informal support provided by seniors will yield greater self-efficacy in foster children. A feeling of connectedness to society may also increase as seniors and foster children acquire technical literacy by utilizing the forum. Foster children may also demonstrate enhanced school performance following sustained use.

Finally, as a social network located on virtual cloud servers, *ConneKt|Vignettes* offers a potential point of stability for seniors and foster children who experience periodic changes in living situations. The survival of the online network of compassionate friends through a tumultuous move may provide sufficient support to satisfy the need of security posited by Maslow, thereby facilitating sustained growth toward self-actualization.

Economic Scalability

Admittedly, the nature of this proposal does not suggest direct profitability. A management service of *ConneKt|Vignettes* would likely operate as a non-profit entity with the sole responsibility of maintaining the offsite web servers and developing new features based on user feedback as resources permit. Although the cost of the former is fairly low, the latter would require more aggressive fundraising. Unfortunately, charging institutions fees of use may inhibit participation, and the introduction of on-site advertising may compromise the fragile sanctity of the forum.

One nonintrusive means of generating funds would be to partner with a social enterprise firm such as Zerodivide in San Francisco, which invests in community enterprises that leverage technology to benefit disadvantaged communities (Zerodivide n.d.). Alternatively, significant numbers of public grants for programs devoted to foster children and senior citizens may be solicited.

The cost of supporting this program in the institutions is extremely low, particularly if sites can leverage existing network infrastructure. If not, the cost of a new computer and monthly internet service would likely not exceed \$1000 in the first year, and \$500 for all subsequent years. This investment may be justified by the additional uses afforded by the computers when not in use for

ConneKt|Vignettes purposes.

Viable Sustainability

The viability of *ConneKt|Vignettes* will be determined by the existence of true needs. Although existing conditions call for such a solution to address the complementary needs of marginalized senior citizen and foster child populations, future conditions may dictate otherwise. In such cases, the program would either adapt or desist. In the meantime, solutions for longterm viability may be anticipated by considering how current population members may grow into new capacities. For instance, a newly emancipated foster child may experience continued need for connectivity upon entering the world with little external support. Over time, a former foster child may feel perfectly integrated into society, but still wish to join *ConneKt|Vignettes* in a third user role, one which promotes community building. In each of these cases, the longterm sustainability of *ConneKt|Vignettes* will require continued awareness of and responses to changing conditions and emerging complementary needs.

Behavior and Degree : Expected Impact

It is expected that *ConneKt|Vignettes* will promote immediate and sustained behavioral changes among the foster care and senior citizen communities. As a result of consistent use, foster children will:

- experience diminished social isolation by connecting with and potentially bringing joy to vulnerable seniors
- feel connected to modern society by acquiring rudimentary technical literacy
- learn how to build relationships by sharing personal narratives
- experience increased self-efficacy

The degree to which change occurs is expected to be a function of time of use. For every 40 hours of participation on *ConneKt*, foster children:

- will demonstrate a statistically significant reduction in aberrant school behavior.
- will demonstrate statistically significant declines in subjective measures of helplessness, abandonment, and anxiety.
- will make at least one new contact.
- Longitudinally, will exhibit statistically significantly less participation in the "Cradle-To-Prison" Pipeline.

Similarly, as a result of consistent use, senior citizens will:

- experience diminished social isolation by connecting with and potentially mentoring vulnerable children
- feel connected to modern society by acquiring rudimentary technical literacy

- appreciate the beauty and uniqueness of their own life
- experience increased self-efficacy

Again, the degree to which change occurs is expected to be a function of time of use. For every 40 hours of participation on *Vignettes*, senior citizens will:

- demonstrate statistically significant declines in subjective measures of loneliness, and depression.
- make at least one new contact.

Importance

Providing opportunities for these marginalized populations to engage in narrative creation and to establish connections with others yields significant benefits across several broad dimensions. First, directly combating isolation may ultimately diminish the socially-borne costs of treating depression and mental illness. Furthermore, such a program satisfies the moral obligation to care for vulnerable members of society. Finally, *ConneKt|Vignettes* may, potentially, reduce collective anxiety over the potential (or inevitability) of joining either population.

Related Work

Several projects involving the pairing of senior citizens and disadvantaged youth have been instrumented for the purpose of dual edification. These include Seniors 4 Kids, a childhood education advocacy group consisting of concerned senior citizens (Seniors for Kids, n.d.); The Time Warner – Wade Edwards project in which high school students imparted technical literacy to senior citizens in a group home (Corporation for National and Community Service, n.d.); and Senior Corp, a program that pairs senior citizen mentors with vulnerable foster children. While each of these groups provides admirable and needed services, they do not perform the task of addressing the mutual needs of two marginalized, largely immobile populations.

Social networking sites, like Facebook, provide venues for users to collaborate irrespective of distance. However, these sites are fairly advanced for users with low technical fluency, and it is unclear whether or not senior citizens would be amenable to using a forum of such a public nature.

Limitations and Future Work

Despite the apparent advantages of *ConneKt|Vignettes* as a technical solution to the issue of marginalized cultures within the United States, there exist several limitations to its effectiveness. Primarily, *ConneKt|Vignettes* is not a wholesale solution to the vulnerabilities faced by the foster child and senior citizen populations. Ostensibly, a comprehensive approach of addressing biological and psychological needs in conjunction with *ConneKt|Vignettes* would be preferred.

Furthermore, there are several potential issues that can only be evaluated *in situ*, within an

Action Research framework (Kim 2009a). One is turnover rate due to limited lifespans of foster children and senior citizens within their respective institutions. Furthermore, the proposal makes altruistic assumptions about all potential participants, but it is likely that safeguards would need to be developed to monitor for and protect against online predatory behavior.

Finally, it is essential that *ConneKt|Vignettes* grow to reflect the needs of its users, a goal that can best be achieved via continuous interaction and assessment. Again, a process of Action Research would facilitate the identification of needs that extend beyond the construction of personal narratives and online social networking.

Conclusion

As demonstrated in the review of the characteristics and conditions of the foster care and senior citizen communities in the United States, these vulnerable populations are situated in symmetric isolation at the margins of society. Grounded in instructional design and evaluated against cultural principles, *ConneKt|Vignettes* represents a web-based, story-building, social networking solution that offers significant potential benefits across economic, moral, and social domains. Nonetheless, *ConneKt|Vignettes* represents only a partial solution to be employed in conjunction with complementary physical and psychological therapies. Finally, the viability of this proposal will depend on sustained development based in grounded Action Research.

Beyond *ConneKt|Vignettes*, this model may be applied to any scenario exhibiting complementary needs. The designer need only analyze the needs in order to create an effective contextual forum that provides individual, mutual, and societal benefit.

Potential Publications

The following three journals are potential destinations for this proposal:

- *Educational Technology Research and Development*, as a proposal for the development of an artifact of educational technology
- *Journal of Technology Education*, as a proposed application of technology education research
- *The Innovation Journal*, as an innovative solution for a public sector problem

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