

# EVALUATING INFORMATION QUALITY: HIDDEN BIASES ON THE CHILDREN'S WEB PAGES

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### **Abstract**

*As global digital communication continues to flourish, the Children's Web pages become more critical for children to realize not only the surface but also breadth and deeper meanings in presenting these milieus. These pages not only are very diverse and complex but also enable intense communication across social, cultural and political restrictions while educating and entertaining. Hidden biases associated with hate, stereotyping, prejudice and discrimination on these Children's Web pages, furthermore, can be delivered by several hate groups, who specifically target young children. They know that hateful messages placed at an early age can profoundly influence and affect young minds. Due to representing the personality of the providers/designers, the main purpose of this paper is to evaluate the social, cultural and political forces determining information quality and the rich array of Web sites being delivered for children. Especially, this paper, painted a more realistic and accurate portrait of biases in online world, is to learn how to better promote the most important of diverse backgrounds, ethnocentrism and antiracist equity in the children's Web pages by increasing emphasis on cultural multiculturalism. This is a quantitative study, which utilizes both quantitative and qualitative data. This study was conducted completely online in 2005-2006 school year and there were 219 participants (126 women and 93 men) from the world. The participants were open and distance communication workers (such as online administrators, communication designers, content providers, parents, tutors, mentors, stakeholders etc.). Data were collected from a five-point Likert scale including 60 items, five open-ended questions, and semi-constructed online interviews lasted nearly 30 minutes. After analyzing the collected data, the researcher provides teachers, educators, parents and online communication designers with a quality information checklist for evaluating and especially identifying hidden biases on the children's Web pages.*

**Key Words:** *information quality, hidden biases, the children's web pages, quality information checklist, hate groups*

## BİLGİ KALİTESİNİN DEĞERLENDİRİLMESİ: ÇOCUK WEB SAYFALARINDAKİ SAKLI ÖNYARGILAR

### **Özet**

*Küresel sayısal iletişimin hızla gelişmesi, sadece yüzeysel değil aynı zamanda daha geniş ve derinlemesine anlamların çocuklara kazandırıldığı ortamlar olarak, web sayfalarını çok daha önemli hale getirmektedir. Ayrımlı ve karmaşık olmalarının yanı sıra sosyal, kültürel ve politik kısıtlamaları da bünyelerinde barındırmalarına karşın, bu Web sayfaları hem eğitirken hem de iletişim kurdururken yoğun iletişimlerin oluşmasına olanak sağlayabilmektedirler. Ancak, çocuklar için desenlenmiş bu Web sayfalarında nefret grupları, kendi mesajlarını çocuklar için desenlenmiş bu Web sayfalarında gizlice yansıtarak yayımlayabilirler. Sunucu/tasarımcısının kişisel özelliklerini taşıması nedeniyle, bu makalenin ana amacı, çocuklar için desenlenmiş Web sayfalarında yer alan bilgi kalitesini tanımlayan sosyal, kültürel ve politik güçleri değerlendirmektir. Özellikle, çevrimiçi dünyada*

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*önyarguların daha gerçekçi ve doğru görüntülerinin sunulmaya çalışıldığı bu makalede, çok kültürlülük anlayışı vurgulanarak, çocuklar için desenlenmiş Web sayfalarında ayrımlı altyapılar, etnik merkezlik ve ırkçı olmayan eşitlik kavramlarının daha iyi nasıl sunulması gerektiği konusunun sorgulanması da amaçlanmaktadır. Bu niceliksel çalışmada hem niceliksel hem de niteliksel verilerden yararlanılmıştır. Araştırma, 2005-2006 öğrenim yılında tamamıyla çevrimiçi olarak 219 katılımcı (126 kadın ve 93 erkek) ile gerçekleştirilmiştir. Çalışmanın katılımcıları açık ve uzaktan iletişim işçileridir (örneğin; çevrimiçi yöneticiler, iletişim tasarımcıları, rehberlik uzmanları, paylaşımcılar, vb.). Araştırma verileri, 60 maddeyi kapsayan beşli Likert ölçeği, beş açık uçlu soru ve yarı yapılandırılmış yaklaşık 30 dakika süren çevrimiçi görüşmelerden elde edilmiştir. Verilerin analizinden sonra, çocuklar için desenlenmiş Web sayfalarını, saklı önyargular açısından değerlendirebilmeleri için araştırmacı, öğretmen, eğitimci, anne-baba ve çevrimiçi iletişim tasarımcıları için 120 maddeden oluşan bir nitelikli kontrol listesi oluşturulmuştur.*

## 1. INTRODUCTION

Not only do the children Web pages have the information, which is the familiarities and awareness of facts and truths gained through individual experiences, learning and self-contemplations, but also they cover the knowledge, which is the confident understandings of the subjects, potentially with the ability to utilize diverse sources for specific purposes. Hidden biases, therefore, can be easily built up from power elites, and strongly organized and deeply stored in each young individual's mind. The construction of democratic *knowledge*, however, requires more than collecting, acquiring and transmitting large amounts of information, data and experience by emerging from the interactions of bodies, minds and souls and understanding the social word. As critically pointed out by Bates (2000), Lund (2003) and Powazek (2002), the children Web pages that membership in the digital community accords to rights must suggest that important responsibilities tie the individual self to collective due to remarkable advances in interactive communication arenas. In this context, these Web pages with the cutting-edge technologies should build powerful multicultural networks to share and exchange knowledge for the prosperity and well-being of its members to send and receive information across any locations, devices and services.

The children Web pages, therefore, must generate new forms and tools of gathering data, manipulating and storing diverse knowledge, transforming egalitarian information, and working together over distance and time. The existing milieu for building virtual connections concentrates on the integration of knowledge from diverse sources and domains across space and time forced by not only ambiguity but also continuous radical changes whereas the children Web pages can provide the infrastructure to send bits anywhere, anytime in mass quantities-radical connectivity. Therefore, advancing the extensive productivity, social opportunities and intellectual potentials through more focused advance strategies of designing and delivering the children Web pages is very crucial. More specifically, representing more well-planned and selective ways of looking for flexibility, value and beneficial arrangements within the global cultural, political and economical issues associated with the emerging technologies must be the fundamentals of these pages that generate the collective commons committed to expanding the variety of creative works available for their all young members to legally build upon and share. Besides, these digital networks must be equipped with not only high-tech systems but also new visions of global online societies for supporting their citizens to discover new plans for political resistance and power elites (May, 1999; Spring, 1999). As noted by Hamilton, Ture and Carmichael (1992), the author question the viability of hidden-biases that seek radical changes in racial hierarchy, include patterns with disparate amounts of economic and political power, and rely on sentimentality and goodwill to build and maintain cohesiveness. Recognizing the self-interests of the groups involved in the relationship have the capacity for realizing the self-interests of each group and articulate their own independent base of power as well as have specific goals for democracy.

## 2. PURPOSE

*Hidden biases* associated with hate, stereotyping, prejudice and discrimination on these Children's Web pages, furthermore, can be delivered by several hate groups, who specifically target young children. They know that hateful messages placed at an early age can profoundly influence and affect young minds. Due to representing the personality of the providers/designers, the main purpose of this paper is to evaluate the social, cultural and political forces determining information quality and the rich array of Web sites being delivered for children. The main purpose of this study is to provide teachers, pre-service teachers, parents and online communication workers with a checklist to evaluate the children Web pages based on hidden bias-based values, norms and ethics. *The guidelines for identifying biases* provided by the School Coalition's (2003) were modified to design this checklist for identifying and categorizing these hidden bias issues discussed by the experts from online education, communication and early childhood. Based on the main purpose of this study and the concerns discussed above, these twelve research questions are developed to prioritize the goals and directions: What is the list of indicators of hidden biases in the children Web pages that highlight the patterns based on

1. *ethnicity* (a social, psychological, and political structure that indicates identification with a particular group which is often descended from common ancestors, and a sense of being different than other groups because of cultural tradition, ancestry, national origin, and/or history),
2. *gender* (a social, psychological, and political characteristic regarding culture-bound conventions, roles, behavioral norms, relationships among women-men and boys- girls and the characteristics of appearance, speech and movement not exclusively limited to biological sex)
3. *sexual orientation* (A private preference of an individual protected by Executive Order No. 28 for heterosexuality, homosexuality or bisexuality; or a history of such a preference; or an identification with having such a preference) (Glossary of Affirmative Action Terms, 2006),
4. *identity* (self knowledge about one's characteristics or personality, and the individual sense of importance in a social context),
5. *religion* (a strong belief concerning the supernatural, sacred, or divine, and the moral codes, practices and institutions associated with such belief that control human destiny),
6. *socio-economic status* (the honor or prestige attached to one's position in society),
7. *family structure* (a social unit living together who share common beliefs and activities),
8. *occupation* (the unique set of tasks, skills, and abilities associated with a individual's performing a particular job),
9. *age* (the number of years of life completed),
10. *body shape and size* (the results of various dynamics including people's genetics, the milieus they grew up in, their stages in life, their nutritional intakes, their cultural norms and their life styles) (Cooke, 1996),
11. *disability* (the temporary or long-term reduction and a physical or mental impairment of a person's ability to function which significantly restrictions one or more main life actions), and
12. *native language* (the first language learned in the home).

The children Web pages must cover the organizational features of digital knowledge networks that affect the process and outcomes of planned change diverse activities (Bennis, Spreitzer, and Cummings 2001; Jonassen, 2000; Moore and Brooks, 2000; Rosenberg, 2001; Zemsky and Massy, 2004). Enhancing the communication achievements of children should link powerfully the theory, policy and practice of actual democratic and multicultural environments that provide online workers with diverse apprenticeship models to make sense of their communicational and personal experiences. To serve the equitable and high-quality communication opportunities must encourage interactive communications among children to attain a wide perspective, take account of the knowledge,

experience, needs, interests and aspirations of each other regardless of their social, cultural, economical and political backgrounds. The relationships among academic, technological and multicultural knowledge to benefit from personal experiences, can be able to generate opportunities for these digital children to become critical thinkers and also productive members of a democratic knowledge society by encouraging their attempts to rethink and reconstruct their ideas, views, needs, expectations, beliefs and attitudes toward cultural pluralism and expose different perspectives through a variety of philosophical strategies. As mentioned by Benson and Harkavy. (2000), Bhargava, Kirova-Petrova, and McNair (1999), Grant and Lei (2001), Kurubacak (2006), McCarthy, Giardina, Park and Harewood (2005), and Rovai (2002), the results in a global perspective on the latest improvements in critical multiculturalism can able to involve children in communicational activities in democratic forms of digital learning. Due to the development of new communication technologies, children Web pages are becoming more important and more visible than ever before. On the other hand, the amount of knowledge they manage is increasing at a speeded up tempo. In the near future, these Web pages will go beyond the traditional standards and established norms of effectiveness. Online communication workers must generate diverse global design possibilities with near future paradigms in our minds. They, furthermore, must probe egalitarian conditions to meet children's communication needs and learning skills, and also help these end-users access unlimited democratic knowledge inherently.

### 3. THEORETICAL FRAMEWORK

*Hidden biases* are judgments and prejudices in specific senses for having dogmatic predilections to the exact viewpoints, the beliefs and values of power elites, and the political and ideological perspectives of oppressed groups that sneakily determine who or what was responsible for an event, action, activity, so on. *Hidden biases* are deceitfully manipulated by the groups who have the political and economical power that it is very hard for ordinary individuals to realize their thoughts are shaped and oppressed by these anti-egalitarian groups. A philosophical, theoretical and political orientation of the children Web pages emphasizes the relationships between power and privilege that, as noted by Fabos and Young (1999) and Kendall (2003), helps the young develop positive attitudes toward others' diverse backgrounds, and accept that all people have equal rights. In addition, to accept people from the world, they can be engaged online participants in collaborative e-activities with others. User-centered Web pages must give carefully attentions on the self-esteem progress of these digital citizens. Without strong bases of self-confidence (Sheets-Hernandez, 2004), they cannot be successful online participants to value themselves, respect individual freedoms and take risk in making errors. To support hidden biases free children Web pages, these pages must clearly define their goals and objectives, and their specific plans to deliver and maintain e-contents. Besides, these children Web pages must conduct formative and summative evaluations (Burge, 2000; O'Looney, 2003), to assess their multicultural performances that match the social needs of online participants who have the diverse race, gender, ethnicity, religious, language, size, cultural and social backgrounds with or without disabilities.

By respecting individual differences, virtual communities with the ideas of multicultural education increase the quality of the children web pages successfully. Since these Web sites are social and cultural experiences (Stephenson, 2001), racial differences are irrelevant, intelligence is multidimensional and distributed; and online participants must discover to be intelligent in multidimensional communication milieus. Therefore, these Web page must be designed how to discover new communication technologies and their relationships to conduct online communications to societal and educational change. On the other hand, these Web pages can able to help children working collaboratively with each other regularly to promote excellence through continuous process improvement and the creative pursuit of new ideas and systems. In this context, planning, managing

and leading effectively in professional developments and life-long learning endeavors can construct knowledge networks, and help children work in a project-based team to investigate their critical thinking developments. With integrated new media, children Web pages must be organized and performed multiculturalism and plurilingualism in the vast field of new communication technologies and their interrelationship with global society as a whole. On the foundation of open and flexible structures for children Web pages, online communication workers can be able to serve new concepts and approaches in collaborative interactions and mutual understandings for a caring world view. To gather people from across disciplines, from all levels of education and from the community to address, in the near future, children Web pages must build lifelong learning processes which regulate to ensure overall coherence, encourage good practices, and prevent misuse for the entire global society. Noting this explosive growth potential of cutting-edge technologies, children Web pages must generate their interactive models to adapt to and exploit the new world of opportunities.

## **4. METHODOLOGY**

This is a mixed study that aims to provide teachers, pre-service teachers, parents and online communication workers with a checklist to evaluate the children Web pages based on hidden bias-based values, norms and ethics. Furthermore, this study aims to modify *the guidelines for identifying biases* provided by the School Coalition's (2003) to design a checklist for identifying and categorizing the hidden biases. For these reasons, this research utilized both qualitative and quantitative data to provide the information in detail to the researcher for the data collection. Moreover, the combination of these methods helped the author generate new perspectives and stimulate new directions in the data analysis. The methodology combinations provided data triangulation from a variety of data sources, and also methodological triangulation from multiple methods (Patton, 1990). Therefore, the researcher overcame the natural prejudices that derived from a single research method.

### **4.1. Research Setting and Participants**

This research was conducted totally online during the 2005-2006 school year. The researcher sent an email messages to the different professional listservs to both introduce her study and ask the digital people whether they would like to participate this research voluntarily. Although there were volunteer 271 participants after the first call, 52 of them chose not to participate in this study. They were excluded from the research study with no penalty. The researcher assembled an informal email communications of each 219 online worker (126 women and 93 men) from across the world and including online administrators, online communication designers, online content providers, online early childhood education faculty, parents, online tutors, online mentors, and online support staff from the broad area of Open and Distance Education. A total of 219 participants were selected and all of them completed the study. These experts not only identified but also categorized top hidden bias issues and challenges. After the data were collected from the participants, strategic planning around the identified research main concerns resulted in a checklist to ensure ongoing hidden bias issues in the children Web pages.

### **4.2. Data Sources**

This is a mixed study that the qualitative and quantitative data were collected from the different sources. Therefore, utilizing the mixed data provided a more complementary and diverse aspects of the complex phenomenon. Besides, the researcher regularly recorded and systematically stored the qualitative and quantitative data, and also indexed all data carefully. To identify hidden biases in the children Web pages, the first group quantitative and qualitative data were collected from a Survey, entitled as *Identifying Hidden Biases in the Children Web Pages*, which had three main sections (Appendix 1.):

1. The first section was aimed to collect the participants' demographic characteristics, and had the 5 structured questions, and
2. The second section had a five-point Likert scale including totally 60 items. The scale had twelve sub-sections, which each of them had the five items to investigate hidden biases in the children Web pages.
3. The free speech area had the five open-ended and semi-structured questions.

Each question in the Survey was carefully developed and modified according to investigating the focus of the study. Besides, this study focused on producing the meticulous description of hidden biases in the children Web pages, and also developing possible explanations of this phenomenon in its natural context. On the other hand, the interview protocols were one of one of the main instruments of qualitative data, which were collected from semi-constructed online interviews and lasted nearly 30 minutes. The researcher interviewed with six volunteer participants (3 women and 3 men) individually via MSN Messenger after conducting the Survey.

### **4.3. Data Analysis**

It took nearly one year to complete the data analysis and triangulation perfectly; because the collected data from the different sources were very rich and dense. The researcher identified hidden biases in the children Web pages through the data and outcomes from the study participants. The process of the data analysis in this study was to systematically search and arrange the survey and interview transcripts. Besides, the researcher conducted the descriptive statistics and the content analysis to identify code and categorize the primary patterns and themes in the data collected from the different sources. Furthermore, to provide the credibility in this mixed study, the researcher adopted a stance of neutrality with regard to the research phenomenon under study (Patton, 1990). In other words, she did not try to prove a specific perspective and manipulate the data from the different sources. Utilizing both qualitative and quantitative methods in this study was to examine more complementary and different aspects of the complex phenomenon. After analyzing the collected data, the researcher provides teachers, educators, parents and online communication designers with a *quality information checklist* for evaluating and especially identifying hidden biases on the children's Web pages.

### **4.4. The Limitations and Strengths of the Study**

This is a mixed study that contained similar characteristics in most qualitative and quantitative research. First and foremost, this study allowed the researcher to focus on the research phenomena that existed and happened in its natural environment. The researcher did not control or manipulate any patterns and themes in this study. As a result, generalization might not be possible whereas transferability could be doable. This study was to aim how to discuss the guidelines of discerning *hidden-biases* in children Web pages through a critical pedagogy approach and determine how to better apply the principal of equity in these Web pages by increasing emphasis on cultural multiculturalism. The participants, therefore, were asked their ideas, opinions and beliefs toward these practices based on their experiences. The information provided necessary knowledge to online workers, as online communication designers, who made the critical decisions regarding the use of pedagogical and communicational techniques and methods. The researcher was aware of the limitations of this study that she utilized the confident mixed research methods and the data collected from the different sources. Furthermore, the researcher regularly communicated with the experts from the related fields, *Educational Technology, Communication and Research Methods*. Finally, the researcher in this study regularly and systemically recorded all data collected from different sources in each step. Additionally, she carefully and securely stored all collected data by indexing, labeling, coding and categorizing into the private digital folders on the Internet, and CD-ROMs, and also by printing the hard-copies of the necessary documents. To sum up, the gathered information from the participants was valid, useful and enlightening.

## 5. FINDINGS

Building hidden bias-free Web pages can increase cultural contacts. Therefore, there is a need for investigating clearly how to generate collaborations among online professionals, community and global resources effectively. As mentioned by Bhargava (2002), Broadbent and Cotter (2002), Brook and Oliver (2003), Burniske and Monke (2001), Ciceri, Biassoni and Colombo (2005), Huerta, Ryan and Igbaria (2003), McChesney (1999), Moore and Kearsley (2005), Mowshowitz and Kawaguchi (2002), Newman (2001), Picciano (2002), Preece, Rogers and Sharp, 2002; Scardamalia, 2003, furthermore, how to negotiate the meaning and usability of flexible e-contents is very important for online communication workers in assessing their understandings toward cultural norms, values and ethics from the globe must be the main concern of designing the children Web pages. In this study, the children Web pages are defined as the informal educational Web sites including interactive texts and graphics are built and delivered for the children between three and five years old based on social development in specific age groups (Sheets, 2005). This section reports the findings and embraces various insights that answer the research inquires emerged during the data analysis. These data collected from 219 online workers (126 women and 93 men) reflect exactly the participants' ideas, opinions and beliefs as well as their experiences toward identifying hidden biases in the children Web pages. These helped the researcher present the authentic findings of this study in-depth. The findings of the study provide exhaustively descriptive analysis and discussions of twelve main areas of a checklist for identifying hidden biases in the children Web pages:

1. Ethnicity (a social, psychological, and political structure)
2. Gender (a social, psychological, and political characteristic)
3. Sexual Orientation (a private preference of an individual)
4. Identity (self knowledge about one's characteristics)
5. Religion (a strong belief concerning the divine)
6. Socio-Economic Status (the honor or prestige attached to one's position in society)
7. Family Structure (a social unit living together who share common beliefs)
8. Occupation (the unique set of tasks, skills, and abilities)
9. Age (the number of years of life completed)
10. Body Shape and Size (the results of various dynamics including people's genetics)
11. Disability (a physical or mental impairment of a person's ability)

Online knowledge sharing to construct new diverse schemas and also revised the existing ones in their minds encourage virtual participants to interact a wide range of viewpoints by reverencing individual cultural differences and giving more attention to diversity issues. These can help children understand how to manage their role tasks, to give attention to diverse knowledge community, and to play an important role to integrate new digital technologies in their activities via Web pages, which must be powerfully designed, and dramatically altered their roles and communication strategies based on the oppressed-free ideology. In this context, the children Web pages can make their points of agreement and disagreement explicit that order their digital citizens' perspective of the future by being aware of diverse cultural backgrounds. This must be determined by social movements and stated the existence of new and potential interesting subjects of interest for collective actions. To underestimate changes in the short run confounded by the vast apparently endless obviousness of new unpredictable issues can promote diversity in online societies including various interest groups. Using multicultural resources for egalitarian transmissions can make fundamental changes in online citizens' main concerns according to the struggles between capitalist hegemony and its democratic challengers. Furthermore, the existence of new, potentially interesting subjects of interest for collective actions has a power to be shared among diverse populations to shape the online public policy by involving efforts from a wide range of challenging social groups. As discussed by Bonk (2001), Chua and Ngee (2001) and Neo (2005), distinguish novel and emerging communicational relationships formulated by the large shared interests must structure according the power of whole communities.

As strongly highlighted by Dolby (2000), and Torres (1998), the exploration of hidden biases begins with a series of diverse concerns: First, a communication philosophy must introduce to underlies the concept of hidden biases, which provide children with successful activities and agreements for online communities by working together without space and time obstacles. Second, provide a general orientation and overview for hidden biases free Web pages to recognize the ethical, legal, and social implications of new developments, which analyze the children Web pages by utilizing appropriate data processes and integration of knowledge from diverse sources from the world. Finally, providing multicultural insights into cultural differences can accomplish innovative levels of interactivity by increasing in-depth concerns among children and communities, and demonstrate the relationships and functional interactive communications across disciplines, languages and cultures. In this case, as mentioned Vrasidas (2006), providing a global forum for the exchange of diverse information and ideas on new improvements in children Web pages can help academics, educators and media professionals whose cultural, political, social, economical and educational experiences come from several countries and contexts. These Web pages, therefore, can reflect the diversity of the online communication workers' professions to encourage researches in emerging educational media areas, such as those generated by globalization, technology developments, public policy shifts, future trends, and innovation.

## 6. CONCLUSIONS

Hidden biases-free Web pages help children facilitate multicultural ideals of inclusive, interactive, and collaborative activities globally, but also encourage them perceive the world better, think critically and perform decisively. Building knowledge networks through these Web pages, therefore, as mentioned by Freire (1972), Giroux (1997) and Kumashiro (2004), presents an inquiry into nature, causes, and cures of opposing progress for social interactions that promote a communication theory of unplanned consequences designed to contribute to the prediction and appreciate of the most undesirable outcomes of public goods and interests. In this context, the children Web pages can impact on delivering multicultural knowledge networks with interactive communication models and approaches that have the enormous potential to advance the issues of justice, equity and human rights. To better understand and construct the digital societies for children is to focus on the management strategies of global knowledge networks among societies. These strategies help online workers interact wisely with all knowledge sources from around the world by dealing with the challenge to accomplish access and equity issues by integrating digital technologies with increasing knowledge qualities and quantities. Moreover, they have to appreciate the various learning needs and expectations of diverse groups around the globe. These workers must progress generative enlightenments to produce multicultural e-contents delivered by the children web pages based on the philosophy of democratic education.

The radical changes are fostered by democratic rules and principles, as mentioned by Brosio (1994) and Gadotti (1996), can build an egalitarian online society, which does not allow elite powers and dominant groups to dictate the flow of information to generate hidden biases that brightly illustrates the essential ideas of oppressed political results. These knowledge networks, therefore, require that the children Web pages can be only as successful as their empowerment of their young digital citizen. In the complex times ahead, furthermore, online communication workers must help children share power and culture in various democratic ways. Questioning the assuming roles, the pros and cons of the effective children Web pages, and the policy choices what norms and values are reaffirmed or threatened to the digital citizens can reduce the collection of hidden biases. As mentioned by Vincent (2003), although technology cannot drive change, it is our collective response to the options and opportunities presented by these Web pages that drive change. Finally, to make the philosophy of *hidden bias-free* worthwhile, the children Web pages must radically cover the organizational features of knowledge networks that affect the process and outcomes of planned change activities.

## REFERENCES

- Bates, A.W. (2000). *Managing Technological Change*. San Francisco, CA: Jossey-Bass.
- Bennis, W., Spreitzer, G.M., & Cummings, T.G. (Eds.) (2001). *The Future of Leadership Today's Top Leadership Thinkers Speak to Tomorrow's Leaders*. San Francisco, CA: Jossey-Bass. Retrieved August 29, 2006, from <http://www.questia.com>
- Benson, L., & Harkavy, I. (2000). Higher education's third revolution: the emergence of the democratic cosmopolitan civic university. *Cityscape: A Journal of Policy Development and Research*, 5(1), 47–57.
- Bhargava, A., Kirova-Petrova, A., & McNair, S. (1999). Computers, gender bias, and young children. *Information Technology in Childhood Education Annual 1999*, (1), 263-274.
- Bhargava, A. (2002). Gender bias in computer software programs: a checklist for teachers. *Information Technology in Childhood Education Annual 2002*, (1), 205-218.
- Bonk, C.J. (2001). *Online Teaching in an Online World*. Bloomington, IN: CourseShare.com. Retrieved June 23, 2004, from [http://www.publicationshare.com/docs/faculty\\_survey\\_report.pdf](http://www.publicationshare.com/docs/faculty_survey_report.pdf)
- Broadbent, B., & Cotter, C. (2002). Evaluating e-Learning. *e-Learning Hub*. Retrieved December 24, 2003, from [http://www.e-learninghub.com/articles/evaluating\\_e-learning.html](http://www.e-learninghub.com/articles/evaluating_e-learning.html)
- Brook, C., & Oliver, R. (2003). Online learning communities: Investigating a design framework. *Australian Journal of Educational Technology*, 19(2), 139-160.
- Brosio, R. A. (1994). *A Radical Democratic Critique of Capitalist Education*. New York, NY: Peter Lang.
- Burge, L. (2000). *The Strategic Use of Learning Technologies*. San Francisco, CA: Jossey-Bass.
- Burniske, R.W., & Monke, L. (2001). *Breaking down the Digital Walls: Learning to Teach in a Post-Modem World*. Albany, NY: State University of New York.
- Chua, A., & Ngee A.P. (2001). Relationship between the types of knowledge shared and types of communication channels used. *Journal of Knowledge Management Practice*, Retrieved August 29, 2006, from <http://www.tlinc.com/articl26.htm>
- Ciceri, R., Biassoni, F., & Colombo, P. (2005). Multimedia interactive software for infancy: analysis of the communicative effectiveness, the usability and the function of the iconic code. In P. Kommers and G. Richards (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2005* (pp. 1687-1693). Chesapeake, VA: AACE.
- Cooke, K. (1996). *Real Gorgeous: The Truth about Body and Beauty*. New York, NY: Norton.
- Dolby, N. (2000). The shifting ground of race: the role of taste in youth's production of identities race. *Ethnicity and Education*, 3(1), 7-23.
- Fabos, B., & Young, M.D. (1999). Telecommunication in the classroom: rhetoric versus reality. *Review of Educational Research*, 69(3), 217-259.
- Freire, P. (1972). *Pedagogy of the Oppressed*. Harmondsworth: Penguin.

- Gadotti, M. (1996). *Pedagogy of Praxis. A Dialectical Philosophy of Education*. New York, NY: SUNY.
- Glossary of Affirmative Action Terms* (2006). Retrieved September 23, 2006, from [http://www.uri.edu/affirmative\\_action/definitions.html#S](http://www.uri.edu/affirmative_action/definitions.html#S)
- Giroux, H. (1997). Rewriting the discourse of racial identity: towards a pedagogy and politics of whiteness. *Harvard Educational Review*, 67(2), 285-320.
- Grant, C. A., & Lei, J.L. (2001). *Global Constructions of Multicultural Education: Theories and Realities*. Mahwah, N.J.: L. Erlbaum Associates.
- Hamilton, C.V., Ture, K., & Carmichael, S. (1992). The myths of coalition. *Black Power: The Politics of Liberation* (pp. 58-85). Vintage; Reissue edition
- Huerta, E., Ryan, T., & Igbaria, M. (2003). A comprehensive web-based learning framework: toward theoretical diversity. In A. Aggarwarl (Ed.), *Web-Based Education: Learning from Experiences* (24-35). Hershey, PA: Information System.
- Jonassen, D.H. (2000). *Computers as Mindtools for Schools: Engaging Critical Thinking*. Columbus, OH: Prentice-Hall.
- Kendall, L. (2003). Cyberculture. In S. Jones (Ed), *Encyclopedia of New Media* (pp. 102-104). New York, NY: Sage Publications.
- Kumashiro, K. (2004). *Against Common Sense: Teaching and Learning toward Social Justice*. New York, NY: RoutledgeFalmer. Retrieved September 4, 2006, from <http://www.questia.com>
- Kurubacak, G. (2006). Evaluation of educational management systems. *Journal of Educational Technology*, 2(4), 19-27.
- Lund, D.E. (2003). Educating for social justice: making sense of multicultural and antiracist theory and practice with Canadian teacher activists. *Intercultural Education*, 14(1), 3-16.
- May, S. (Ed.) (1999). *Critical Multicultural and Antiracist Education*. Philadelphia, PA: Falmer.
- McCarthy, C., Giardina, M.D., Park, J.K., & Harewood, S. (2005). Introduction: Cultural inter/connections. *Critical Methodologies*. 5, 135-144.
- McChesney, R.W. (1999). *Rich Media, Poor Democracy: Communication Politics in Dubious Times*. Urbana-Champaign, IL: University of Illinois.
- Moore, A.B., & Brooks, R. (2000). Learning communities and community development: Describing the process. *Learning Communities: International Journal of Adult and Vocational Learning*, 1(1), 1-15.
- Moore, M., & Kearsley, G. (2005). *Distance Education: System View*. Belmont, VA: Thomson.
- Mowshowitz, A., & Kawaguchi, A. (2002). Bias on the Web. *Communications of the ACM*, 45(9), 56-60.
- Neo, M. (2005). Web-enhanced learning: engaging students in constructivist learning. *Campus Wide Information Systems*, 22(1), 4-14.
- Newman, O. (2001). *The Promise of the Third Way: Globalization and Social Justice*. New York, NY: Palgrave. Retrieved October 21, 2005, from <http://www.questia.com>

- O'Looney, J. (2003). Applying learning principles to development of multimedia for addressing bias in street-level public decision-making. *Journal of Educational Multimedia and Hypermedia*, 12(2), 163-183.
- Patton, M. Q. (1990). *Qualitative Evaluation and Research Methods*. Newbury Park, London: Sage.
- Picciano, A. G. (2002). *Educational Leadership and Planning for Technology*. Third Edition. Columbus, OH: Upper Saddle River.
- Powazek, D. (2002). Design for community: The art of connecting real people in virtual places. *Philosophical Perspectives on Constructivist Views of Learning*, 29(1), 37-48.
- Preece, J., Rogers, Y., & Sharp, H. (2002). *Interaction Design*. New York, NY: John Wiley and Sons.
- Rosenberg, M.J. (2001). *E-Learning: Strategies for Delivering Knowledge in the Digital Age*. Washington, DC: McGraw-Hill.
- Safe Schooling Coalition (2003). *Guidelines for Identifying Bias in Curriculum Materials*. Retrieved January 25, 2006, from <http://www.safeschoolscoalition.org/identifyingbias.html>
- Scardamalia, M. (2003). Crossing the digital divide: Literacy as by-product of knowledge building. *Journal of Distance Education*, 17, 78-81.
- Sheets, R.H. (2005). *Diversity Pedagogy: Examining Role of Culture in Teaching-Learning Process*. New York, NY: Pearson.
- Spring, J. (2001). *Wheels in the Head: Educational Philosophies of Authority, Freedom, and Culture from Socrates to Human Rights*. Second Edition. New York, NY: The McGraw-Hill.
- Stephenson, J. (Ed) (2001). *Teaching and Learning Online: Pedagogies for New Technologies*. London: Kogan Page.
- Rovai, P.A. (2002). Building sense of community at a distance. *International Review of Research in Open and Distance Learning*, 3(1), ISSN: 1492-3831. Retrieved March 26, 2006, from <http://www.irrodl.org/index.php/irrodl/article/view/79/152>
- Torres, C.A. (1998). *Democracy, Education and Multiculturalism: Dilemmas of Citizenship in a Global World*. Lanham, MD: Rowman and Littlefield.
- Vrasidas, C. (2006). "Educational Media International" Call for Reviewers. Retrieved October 29, 2006, from [AERA-C@asu.edu](mailto:AERA-C@asu.edu) (AERA Division C: Learning and Instruction Forum)
- Vincent, C. (2003). *Social Justice, Education and Identity*. New York, NY: RoutledgeFalmer. Retrieved March 26, 2006, from <http://www.questia.com>
- Zemsky, R., & Massy, W.F. (2004). Thwarted innovation: What happened to e-learning and why. *Report for the Weatherstation Project of the Learning Alliance at the University of Pennsylvania*. West Chester, PA. Retrieved January 28, 2006, from <http://www.irhe.upenn.edu/Docs/Jun2004/ThwartedInnovation.pdf>

## Appendix A

### Copyright Statement

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### Checklist for Identifying Hidden-Biases on Children Web Pages\*

<b>I - Ethnicity (a social, psychological, and political structure that indicates identification with a particular group which is often descended from common ancestors, and a sense of being different than other groups because of cultural tradition, ancestry, national origin, and/or history)</b>	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
1. helping children shape their individuality	NA	1	2	3	4	5
2. promoting different social experiences in children's communities	NA	1	2	3	4	5
3. interacting with other children from different groups	NA	1	2	3	4	5
4. becoming aware of their cultural features	NA	1	2	3	4	5
5. articulating how children feel about their ethnic group	NA	1	2	3	4	5
6. providing reflective contexts for children's internal ethnicity	NA	1	2	3	4	5
7. promoting new insights about children having different backgrounds	NA	1	2	3	4	5
8. being accurate in terms of worldviews of ethnicity	NA	1	2	3	4	5
9. promoting national unity in the global context	NA	1	2	3	4	5
10. providing summaries of the beliefs and customs for ethnic groups	NA	1	2	3	4	5
<b>II - Gender (a social, psychological, and political characteristic regarding culture-bound conventions, roles, behavioral norms, relationships among women-men and boys-girls and the characteristics of appearance, speech and movement not exclusively limited to biological sex)</b>	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
1. representing the personal sense of being girl and boys	NA	1	2	3	4	5
2. responding to social needs of genders	NA	1	2	3	4	5
3. getting equal gender attentions	NA	1	2	3	4	5
4. devaluing girls and boys cultural restrictions	NA	1	2	3	4	5
5. decreasing girls and boys violence	NA	1	2	3	4	5
6. representing non-traditional gender roles	NA	1	2	3	4	5
7. recognizing different roles of genders in their societies	NA	1	2	3	4	5
8. advocating human beings who suffer from gender-based oppression	NA	1	2	3	4	5
9. stating the culturally prescribed roles that girl and boys are to follow	NA	1	2	3	4	5
10. promoting gender equality throughout global human rights	NA	1	2	3	4	5
<b>III - Sexual Orientation (A private preference of an individual protected by Executive Order No. 28 for heterosexuality, homosexuality or bisexuality; or a history of such a preference; or an identification with having such a preference)</b>	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
1. expressing their personal sexual interest	NA	1	2	3	4	5
2. respecting the presence of diverse sexual orientations	NA	1	2	3	4	5
3. using inclusive language such as <i>partner</i> and <i>civil union</i>	NA	1	2	3	4	5
4. addressing misperceptions that may exists	NA	1	2	3	4	5
5. developing the policy regarding discriminatory sexual words	NA	1	2	3	4	5
6. taking sexual responsibility	NA	1	2	3	4	5
7. supporting the nature of sexual orientation development	NA	1	2	3	4	5
8. being supportive of healthy development for all children	NA	1	2	3	4	5
9. helping children discover their sexual orientation	NA	1	2	3	4	5
10. sharing intimacy with someone children can care about	NA	1	2	3	4	5

	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
<b>IV - Identity (self knowledge about one's characteristics or personality, and the individual sense of importance in a social context)</b>	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
1. discussing critically own cultural heritages	NA	1	2	3	4	5
2. protecting diverse identity integrity	NA	1	2	3	4	5
3. appreciating other children's cultural practices	NA	1	2	3	4	5
4. facilitating relationships necessary for identity development	NA	1	2	3	4	5
5. presenting comfortably her/s personality in global society	NA	1	2	3	4	5
6. supporting self knowledge about one's personality	NA	1	2	3	4	5
7. realizing diverse cultural values and perspectives	NA	1	2	3	4	5
8. providing children with the dialogs of presentation and interpretation	NA	1	2	3	4	5
9. bringing together self and identity across different groups	NA	1	2	3	4	5
10. pointing out self-awareness, self-representation, and self-regulation activities	NA	1	2	3	4	5
<b>V - Religion (a strong belief concerning the supernatural, sacred, or divine, and the moral codes, practices and institutions associated with such belief that control human destiny)</b>	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
1. understanding diverse religious backgrounds	NA	1	2	3	4	5
2. respecting other children's religious practices	NA	1	2	3	4	5
3. developing diverse religious interventions	NA	1	2	3	4	5
4. balancing religious segregations	NA	1	2	3	4	5
5. exploring moral codes associated with different religions	NA	1	2	3	4	5
6. expressing different beliefs in a divine power	NA	1	2	3	4	5
7. promoting religious understanding, tolerance and freedom	NA	1	2	3	4	5
8. leading to peace among religions	NA	1	2	3	4	5
9. extending religious freedom to children of all religious traditions	NA	1	2	3	4	5
10. describing religious faiths in all their diversity	NA	1	2	3	4	5
<b>VI - Socio-Economic Status (the honor or prestige attached to one's position in society)</b>	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
1. practicing the skills necessary for making friends from different groups	NA	1	2	3	4	5
2. appreciating qualities in different social classes	NA	1	2	3	4	5
3. including opportunity for cross-socio-economic friendships	NA	1	2	3	4	5
4. collaborating with peers from different social classes	NA	1	2	3	4	5
5. integrating children with various socio-economic status activities	NA	1	2	3	4	5
6. representing the ideology of multicultural education	NA	1	2	3	4	5
7. underlying perspectives of different socio-economic groups	NA	1	2	3	4	5
8. engaging children s in diverse collective actions	NA	1	2	3	4	5
9. discovering children's own involvement in politics	NA	1	2	3	4	5
10. building bridges among children from diverse socioeconomic backgrounds	NA	1	2	3	4	5
<b>VII - Family Structure (a social unit living together who share common beliefs and activities)</b>	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
1. appreciating differences in different family structures	NA	1	2	3	4	5
2. learning about blended families	NA	1	2	3	4	5
3. including opportunity for cohabiting families	NA	1	2	3	4	5
4. acquiring knowledge about same sex parenting	NA	1	2	3	4	5
5. understanding their roles in their own families	NA	1	2	3	4	5
6. realizing the role of families in society	NA	1	2	3	4	5
7. appreciating diverse perspectives of different family structures	NA	1	2	3	4	5
8. underlying family sensitive activities with children	NA	1	2	3	4	5
9. alternating children to grow up in nontraditional family structures	NA	1	2	3	4	5
10. providing information for any combination of the family structures	NA	1	2	3	4	5

	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
<b>VIII - Occupation (the unique set of tasks, skills, and abilities associated with a individual's performing a particular job)</b>						
1. presenting ideas about different jobs	NA	1	2	3	4	5
2. practicing the skills necessary for individual job performs	NA	1	2	3	4	5
3. talking about diverse occupational health and safety issues	NA	1	2	3	4	5
4. underlying different activities related to workplaces	NA	1	2	3	4	5
5. integrating knowledge about diverse occupations	NA	1	2	3	4	5
6. providing authentic facts on differentials in occupational discriminations	NA	1	2	3	4	5
7. discussing a collective description of a number of occupation performed	NA	1	2	3	4	5
8. developing the basic skills for the job of living necessary for independent lives	NA	1	2	3	4	5
9. providing children with equal actions in diverse occupations	NA	1	2	3	4	5
10. supporting democratic perceptions of different occupations	NA	1	2	3	4	5
<b>IX - Age (the number of years of life completed)</b>						
1. respecting the people from different ages	NA	1	2	3	4	5
2. learning discriminate against a person because of his/her age	NA	1	2	3	4	5
3. learning the expectations associated with different ages	NA	1	2	3	4	5
4. underlining the age differences in the society	NA	1	2	3	4	5
5. fostering age-role flexibility through activities	NA	1	2	3	4	5
6. providing role-play activities related to different ages	NA	1	2	3	4	5
7. prohibiting unjustified direct and indirect age discrimination	NA	1	2	3	4	5
8. providing an overview of the considerations on age discrimination	NA	1	2	3	4	5
9. constructing positive sense of different ages	NA	1	2	3	4	5
10. protecting children from discrimination on the basis of their ages	NA	1	2	3	4	5
<b>X - Body Shape and Size (the results of various dynamics including people's genetics, the milieus they grew up in, their stages in life, their nutritional intakes, their cultural norms and their life styles)</b>						
1. appreciating different body shape and size	NA	1	2	3	4	5
2. making the children with different body size feel comfortable	NA	1	2	3	4	5
3. balancing curiosity about different body shape with respect	NA	1	2	3	4	5
4. playing a valuable role in shaping ideas about different body size	NA	1	2	3	4	5
5. reducing discriminatory behaviors against different body shape	NA	1	2	3	4	5
6. focusing on changing body shape and size without blaming	NA	1	2	3	4	5
7. appreciating the personal sense of being different body shape and size	NA	1	2	3	4	5
8. becoming aware of the body size diversity around children	NA	1	2	3	4	5
9. enhancing children's overall sense of energy, vigor and enjoyment of life	NA	1	2	3	4	5
10. promoting children's perceptions of different body shape and size	NA	1	2	3	4	5
<b>XI - Disability (the temporary or long-term reduction and a physical or mental impairment of a person's ability to function which significantly restrictions one or more main life actions)</b>						
1. providing children with knowledge about disabilities	NA	1	2	3	4	5
2. emerging from friendships in diverse disability groups	NA	1	2	3	4	5
3. exploring feelings associated with disabilities	NA	1	2	3	4	5
4. providing supplementary materials for children with disability	NA	1	2	3	4	5
5. appreciating differences in self and other children	NA	1	2	3	4	5
6. promoting positive responses to disability groups	NA	1	2	3	4	5
7. including activities on disability rights	NA	1	2	3	4	5
8. offering educational opportunities suited to their particular needs	NA	1	2	3	4	5
9. making reasonable adjustments for disabled children	NA	1	2	3	4	5
10. connecting children with disabilities to the information and resources they need	NA	1	2	3	4	5

	No Idea	Not Covered	Somewhat Covered	Quite Covered	Very Covered	Strongly Covered
<b>XII - Native Language (the first language learned in the home)</b>						
1. understanding the relationship between home and second languages	NA	1	2	3	4	5
2. forming language learning throughout activities	NA	1	2	3	4	5
3. providing multilingual activities for diverse children	NA	1	2	3	4	5
4. transferring the language acquisition skills one language to another	NA	1	2	3	4	5
5. maintaining children's linguistic strengths	NA	1	2	3	4	5
6. expressing formal language experiences in different activities	NA	1	2	3	4	5
7. underlying the value of bilingualism	NA	1	2	3	4	5
8. encouraging respects for linguistic diversity	NA	1	2	3	4	5
9. gaining a deeper understanding of different languages	NA	1	2	3	4	5
10. bringing diverse linguistic resources for children	NA	1	2	3	4	5

\* The Checklist for identifying hidden-biases on children Web pages uses a five-point scale:

No Idea = 0

Not Covered = 1

Somewhat Covered = 2

Quite Covered = 3

Very Covered = 4

Strongly Covered = 5