Soka University of America
Aliso Viejo, California

February 11 & 12, 2017

The 13th Annual Soka Education Conference

“Transforming Society Through Human Education”
Disclaimer
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The Soka Education Student Research Project is an autonomous organization at Soka University of America, Aliso Viejo, California.
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Dear Reader,

We would like to extend a warm thank you for participating in the 13th Annual Soka Education Conference taking place on February 11-12, 2017. We have been working on realizing this conference for over a year now, so it is with great pleasure that we present these two busy days to you. This booklet that you are reading will serve as a document and reminder of our 2017 conference, a final compilation of everyone’s efforts as well as a point of departure for future inquiries into Soka Education.

As you know, this year marks the 13th anniversary of Soka Education Conferences. This weekend is filled to the brim with the thorough research of students, alumni, faculty, and professionals across a multitude of interest focuses. This year, presentations range from combatting powerlessness through education, comparing urban education with Soka education, , the development of a multidimensional health program in Nepal, and study of musicking in the context of social and ecological peace, just to name a few. In addition to the academic brilliance of this conference, it is also a celebration of the progress Soka Education has made over the decades. With every conference, we become more and more curious as to how Soka Education or humanistic education in general is being implemented in communities around the world, in both traditional and non-traditional educational spheres. As this conference marks the 13th year of providing an academic venue for people to come together to discuss Soka Education and humanistic education at SUA, we hope that this discussion will increasingly incorporate experiences of the theoretical and tangible applications of humanistic education. We hope to partake in this historic conference with you and set the tone of humanistic education for decades to come.

This year’s keynote speaker is Dr. Awad Ibrahim, who currently serves as a Professor at the Faculty of Education at University of Ottowa. He is a Curriculum Theorist and an award-winning author. His fields of interest include cultural studies, hip-hop, youth and Black popular culture, social foundations, social justice and community service learning, and linguistics. We are excited to say the least to share this experience with Dr. Ibrahim and to hear his impressions and directions of Soka education.

From around the corner or across the world, thank you so much for coming to the 13th Annual Soka Education Conference. We sincerely appreciate the continued support of the students, faculty, alumni, family, and community members in understanding more deeply the significance of education in today’s world. Please enjoy this booklet and all its contents. We hope to see you next year!

Warmly,

Soka Education Student Research Project
What is Soka Education?

The starting point and essence of Soka education is the spirit to treasure each student individually so that they can become happy and enjoy a glorious future. Education does not exist for the sake of the nation, for business, or for religion. The aim of Soka education is the happiness of oneself and others, as well as society as a whole, and peace for all humanity. - Daisaku Ikeda, Founder of Soka University of America

Soka Education was founded by Tsunesaburo Makiguchi (1871-1944), a Japanese educator in the early 20th century. Emerging out of 40 years of classroom experience, Soka Education is one of the first full-fledged educational theories ever put forward by a Japanese elementary school principal.

Soka (創価) is derived from the Japanese characters “sozo” (creation) and “kachi” (value), and literally means value creation. Soka education seeks to empower students to perceive value in every aspect of life. A key element of Soka Education is the quality of the relationship between teacher and student. Rather than exercise authority over the students, teachers are expected to engage in the learning process and grow together with the students. Thus, Soka education is not a mere injection of knowledge, but a humanistic process that nurtures wisdom and enables the individual’s potential to bloom to the fullest. The teacher’s genuine care and concern for the student, and their efforts to nurture the unique character and potential of each learner, make up the heart of Soka education.

Makiguchi established this pedagogy based on his firm belief that the happiness of children should be the purpose of education. This was a radical idea in Japanese society, oppressed under fascist militarism before and during the war. Individuals were forced to place precedence upon national prestige rather than their own happiness, and children were taught at school to serve that purpose. It was against this backdrop that Makiguchi advocated that the happiness of children be the utmost priority of education.

Today Soka education is being practiced globally: in Japan the Soka education system encompasses kindergarten through university; in the United States, Soka University of America was founded in California; and there are Soka Kindergartens in Brazil, Hong Kong, Malaysia, Singapore and South Korea, as well as other parts of the world.

The Soka Education Student Research Project (SESRP) is a student-initiated and student-run project at Soka University of America. Project members engage in the study, research, and exhibition of Soka Education as a unique educational philosophy.

The purpose of SESRP is:
What is Soka Education?

- **To inspire individuals to embody and perpetuate the spirit of Soka Education**
- **To create a community united in protecting the values of Soka Education**
- **To encourage thorough and rigorous research into the meaning, possibilities, and development of Soka Education**

The **objectives** of the SESRP are:

- **To establish Soka Education as an acknowledged field of research**
- **To develop a centralized source and venue for information and discussion on Soka Education**

*To build and maintain relationships with other institutions to promote Soka Education*
## Soka Education Conference 2017 Program

### Day 1: Saturday, February 11th, 2017

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Keynote Speaker: Awad Ibrahim

Dr. Awad Ibrahim is an award winning author and a Professor at the Faculty of Education, University of Ottawa. He is a Curriculum Theorist with special interest in cultural studies, Hip-Hop, youth and Black popular culture, social foundations (i.e., philosophy, history and sociology of education), social justice and community service learning, diasporic and continental African identities, ethnography and applied linguistics. He has researched and published widely in these areas. He obtained his PhD from OISE, the University of Toronto, and has been with the Faculty of Education of the University of Ottawa since 2007. Before that, he was in the United States where he taught in Bowling Green State University in Ohio. Internationally, he has ongoing projects in Morocco, Sudan, Saudi Arabia and the United States. His current projects include an ethnography of an inner city high school in Ottawa (funded by Ottawa-Carleton District School Board) and a SSHRC-funded project on the daily struggle of ‘becoming citizen’ in Canada. He is the creator and the leader of the Urban Education Community at the Faculty of Education, University of Ottawa. This is a project that intends to immerse Bachelor of Education students into urban middle and high schools. He has more than 100 publications.
**Melanie Reiser** is the Executive Director, Membership for the Association of Waldorf Schools of North America (AWSNA). In this role she oversees membership processes for schools and institutes with special attention to ensuring that the foundational philosophy of Waldorf Education, anthroposophy, informs each institution’s whole environment. Melanie received her B.A. from the University of Virginia and her M.A. in Elementary Education from Antioch New England Graduate School and her Ph.D. from the University of Denver in Curriculum and Instruction. Prior to her current role with AWSNA Melanie worked in outreach and enrollment at several Waldorf schools and as a class teacher at the Detroit Waldorf School for 8 years, completing one cycle with a group of students from grades 1-8. During her time in Waldorf schools she held various leadership positions, including faculty chair, and served on a wide range of committees—from finances to personnel.

**Cassidy Bradford** is a fourth-year undergraduate student at Soka University of America (c/o 2017). A student of traditional, Montessori and Sudbury educational models, Cassidy has been interested in education from a very young age. Although her interests began primarily in non-traditional schooling, she became interested in Makiguchi and Ikeda’s educational philosophies through SUA’s Soka Education Student Research Project (SESRP) and an on-campus Learning Cluster, ”The Educational Philosophies of Tsunesaburo Makiguchi and Daisaku Ikeda” led by guest professor Dr. Jason Goulah. As a student concerned about social justice, Cassidy has been thinking through the connections between social justice and soka education since her second year at SUA. She is honored to have had the opportunity to co-author and present with her mother, Melissa Bradford, and represent an undergraduate voice at the conference.
Melissa Riley Bradford is a founder of Tallgrass Sudbury School in Riverside, IL and an adjunct science and math instructor at Joliet Junior College. Her research interests include soka (value-creating) pedagogy, Makiguchi and Ikeda Studies, democratic education, and alternative education models. She is currently working on her doctoral dissertation on the role of dialogue in value creating education at DePaul University and is a recipient of the 2014-16 Ikeda Center Education Fellowship.

Michael Golden received the DMA in Composition from the University of Washington, having studied with William Bergsma, Diane Thome, and William O. Smith, among others. His music has been performed on six of the seven continents (not sure about the penguins) and he has received regional, national and international commissions, prizes and recordings. Dr. Golden's research interests, along with music composition and theory, include applied ethnomusicology, music and ecology, music psychology, embodied cognition in the arts, and music in peacebuilding. He has published articles in Peace and Policy and the Journal of Peace Education. He currently serves as Professor of Music Composition and Director of the Creative Arts Program at SUA, and as Research Fellow with the Min-On Music Research Institute, and periodically pretends to be a jazz pianist.

Michio Okamura has an MEd in Bilingual-Bicultural Education from DePaul University and is currently pursuing an EdD in Curriculum Studies. He is a K-8 Japanese language educator at Andrew Jackson Academy, Chicago Public Schools, where he is implementing Tsunesaburo Makiguchi’s value-creating pedagogy through the framework of play and playfulness.
Nozomi Inukai is the doctoral assistant in the Institute for Daisaku Ikeda Studies in Education at DePaul University and an EdD candidate in Curriculum Studies at DePaul University. Before coming to DePaul, she graduated from Soka University of America and Claremont Graduate University and taught in a Japanese/English dual immersion program at an elementary school in California.

Prakash Bista is currently a 4th year student at Soka University of America, President of Impact Schools, a California non-profit organization, and Founder/Director of Modern Model Residential School, a non-profit elementary school in rural Nepal. Prakash was the winner of First Prize at Orange County Social Entrepreneurship Competition 2014. He was also named one of Orange County’s 100 Most Influential People in 2014 by Orange County Register. Prakash’s dream is to expand educational opportunities to the poorest and remote communities in Nepal.

Jacqueline M. Mills graduated from Soka University of America in 2008 and earned her Masters of Public Policy and Certificate in International Development from Duke University in 2010. Her global health work spans experiences at various organizations including the Sabin Vaccine Institute, Physicians for Human Rights, Physicians for Social Responsibility, and the Network for Engineering and Environmental Management. In 2015, she served as a Duke Global Health Fellow at the World Health Organization. She is currently a medical student at the Boston University School of Medicine and hopes to work in the intersection of international policy and clinical medicine in the future.
Nandini Choudhury currently works as a Delivery Science Analyst at Possible, a non-profit organization that provides healthcare in rural Nepal. Nandini completed her Masters in Public Health from Boston University, with a dual concentration in Global Health and Epidemiology. At SUA, she completed her BA in Liberal Arts with a concentration in Environmental Studies in 2012. Prior to this, Nandini has worked at the Public Health Foundation of India on research projects on the social determinants of health, and human resources for health, as well as at Pathfinder International, the Harvard FXB Center for Health and Human Rights, and Maitri India.

Mitsuaki Hirai is a public health professional with expertise in water, sanitation, and hygiene (WASH), global health, and program evaluation. Hirai graduated from Soka University of America in 2009 and pursued a Master of Public Health at UCLA School of Public Health. In May 2016, Hirai obtained his Doctor of Public Health (DrPH) from George Washington University. Currently, he works for Centers for Disease Control and Prevention (CDC) as an evaluation fellow.
Satoshi Inuzuka is a M.A. student in Japan Studies Program at Sophia University, Japan. Satoshi grew up in Hachioji, Tokyo, attended Tokyo Soka High School, and graduated from Soka University of America as a member of Class of 2014. At SUA, he had majored in Humanities, with foci on history and music. His research interests lie in histories of East Asian nations, urban studies, and media studies. Satoshi had joined twice in the past conferences. In the 2013 conference, Satoshi presented a paper collaboratively with Yu Hirano (c/o 2013) on the role of Liberal Arts College. In the 2014 conference, he joined as a presenter of Dr. Larry Hickman and Dr. Jim Garrison’s book talk on their dialogue with Dr. Daisaku Ikeda. This year’s conference paper is based on Satoshi’s undergraduate academic experience: a partial collaborative translation of Tsunesaburo Makiguchi’s Research into Community Studies as the Integrating Locus of Education and his capstone research on the suburbanization in Orange County, CA with Professor Jay Heffron.

Vicki Gefen Mokuria has devoted her life to education, having worked for many years in a broad range of positions: teaching English as a Second Language to newly-arrived immigrants to the U.S.; as a high school teacher in a magnet program in Dallas, Texas—teaching students interested in pursuing careers as social service professionals, along with government and economics; as a program director at a community center, running an after-school and summer program for neighborhood youth; and as a parent educator, working primarily with undocumented immigrant families. After graduating from Soka University of America’s Master of Arts in Educational Leadership and Societal Change in May 2016, Vicki entered Texas A&M University’s doctoral program in Urban Education. In addition to being an emerging scholar, Vicki is the proud mother of Sara, Aileen, and Cristina, and she is the president of her grandson, Amari’s, fan club. Vicki plans to devote the rest of her life to supporting education, with the goal of collaborating with other like-minded educators committed to imbuing public schools with humanistic principles. In addition to having a passion for education, Vicki also loves travelling, nature, long walks, the beach, and lively conversations with good friends.
**Diana Wandix-White** is a doctoral student at Texas A&M University, earning a PhD in Curriculum & Instruction with an emphasis in Urban Education. After a few years of military family travel, Diana grew up in northeast Kansas. She developed a love for reading and writing early in life, despite an unfavorable school experience after changing schools in second grade. It was this experience, along with her fondness for language arts, that led her to the field of education where she could positively affect the life and learning of students. Diana attended Washburn University of Topeka, Kansas and earned her B.A. in Communication Studies with an emphasis in Public Relations and a minor in English. After several years in corporate America, she began her teaching career in San Jacinto County, Texas and later earned her M.Ed in Reading Education. Diana has worked in education for twenty years--two years as a middle school language arts teacher, seventeen years as a high school English teacher (including three years as an administrator), and one year as a junior college remedial reading and English teacher. Diana is an incessant learner and is most often enrolled in some form of continued education. In particular, she has taken several courses in Spanish and instructional technology. Her research interests are connected to her personal early education experiences and her years of teaching language arts. Those interests include urban student success after conveyance from an urban to a suburban school; urban education and early literacy; significance of inclusion of culturally diverse texts in early childhood literacy; and areas of disparity across the globe and its varying effects on literacy.

**Daniel S. Wong** graduated from the Columbia University School of Engineering and Applied Science with a BS in Biomedical Engineering in 2008. He worked at the National Children’s Medical Center in Washington DC conducting research on human cytomegalovirus prior to joining the Tufts University Sackler School of Graduate Biomedical Sciences, where he is currently a Ph.D. candidate in the Cellular and Molecular Physiology program, researching the mechanisms of cancer metastasis. He has served as a board member of the Columbia Engineering Young Alumni Association, as well as a Representative and Treasurer for the both the Columbia Engineering Student Council and the Sackler Graduate Student Council, and co-founded the Tufts Mentoring Circles peer mentorship program.
Workshops

Workshop 1: Humanistic Education Through Mentor/Student Relationships

Hideki Ohashi, Miki Tanahashi, Yoshimi Nakazato, Brandon Cavorsi
SUA Class of 2020

Workshop Summary

Key words: Soka Pedagogy, John Dewey, mentor-student relationships
Our presentation will include a powerpoint, a guest speaker, interviews, and discussions. We regard human relationships as important aspects to achieve the goal of Soka education. Therefore, in our workshop, we would like to discuss the relationships between teachers, students, as well as staff. Through this research, we want to improve the quality of Soka education in SUA.

Brandon Cavorsi: I love my cat. I’m not passionate about anything right now, but I hope to be by the time I graduate.

Hideki Ohashi: I love shabu-shabu and animes. After I graduate SUA, I want to work for education. Thank you for coming!!!
Yoshimi Nakazato: I love a cosmos. I truly appreciate this unusual environment that we have here since we can develop ourselves through human interactions.

Miki Tanahashi: I love dogs. I’m not entirely sure what I want to do in the future but I think I’ll figure it out while I’m here.
Workshop 2: This is What “Superheroes” Look Like: Education to Empower

Arthur Carlisle, Sofia Dugas, Amrita Sood, Rosabelle Heins, Viviane Vallerand

Workshop Summary

We see superheroes in movies, cartoons, and comic books all the time, often to escape the seemingly mundane and hopeless realities of our world. However, we fail to realize that within all of us lies a dormant superhero waiting to be untapped. Every changemaker, from the figures we read about in history to the everyday heroes who go unnoticed, has realized that each one of us plays a part in actualizing our dreams for a better world. Through using our individual interests and skills we can combat world issues and injustices. We are a group of SUA students who realize that it is essential to instil these ideals to the future generation of the world. We created Y.E.S. G.I.V.E, Youth Education Supporting Global Involvement and Value of Empowerment. It is a workshop series run by SUA students for middle school students. The program aims to inspire values of global citizenship and to equip youth with skills in the arts that they can use to contribute to their communities. We are at a crucial time where hope for the future is desperately needed. We believe that education should empower youth to create positive change in their local and global community. We all must bring creative solutions to achieve our ideals. Soka University of America’s mission statement is to “Foster a steady stream of global citizens committed to living a contributive life.” And we, at Y.E.S. G.I.V.E, are ready to bring the mission to life.

Arthur Carlisle: I grew up watching superhero cartoons and fantasizing about being a superhero. But in 8th grade, my life changed when reading about youth like Anne Frank, Sadako Sasaki, John Lewis, and Malala Yousafzai who used their unique gifts to stand up against injustices and better the world. Because of their stories, I developed a calling to use my gifts to address global issues, and became a part of the Righteous Conversations Project, collaborating with Holocaust survivors to create Public Service Announcements (PSAs) about global issues. From then on, it’s become my mission address social injustices and inspire youth to do the same, speaking at TEDx Mission Viejo, as well as, to youth at the Maryvale Orphanage, Determine to Succeed Program, and Boys and Girls club of Flint, MI. With Peace Works Travel and the Righteous Conversations Project, I’ve created a
Workshops

A documentary in Cambodia about dehumanization and four PSAs about human trafficking, gun violence, bullying, and discrimination. I currently serve as a counselor at Peace Camp of the Foothills (which instills in youth the importance of peace, tolerance, and social justice) and as an ambassador for the Music in Common Program (which brings youth of different faiths together to foster understanding and create songs about peace and tolerance). Because of the impact “heroes” have had on my life, I work for the MY HERO Project, which celebrates and educates youth about the world’s heroes through stories, short films, music and art. I am eternally grateful for my journey and to be working with my peers, “my heroes,” to empower youth to be global citizens and use their unique gifts to better the world.

Sofia Cecilia Dugas: I am so honored to be working alongside a brilliant and dedicated team of students from all backgrounds to create a program we feel so passionately about: accessible global citizenship education. I am a second year student at Soka pursuing a concentration in International Studies. My passions stem from my involvement with an international peace organization called CISV (previously named Children’s International Summer Village) where I have been able to attend and participate in camps and interchanges in Brazil, Norway, Tennessee, New York, and Colorado. The goal of these camps is to bring children from around the world together to build global friendship, creating a more peaceful society. Soka has enabled me to cultivate these interests by further exploring education policy and practice in other parts of the world. Now I am focused on the youth (aka the future) in my community. It is time to share values of humanistic global citizenship education by working with students to create a more valuable educational environment. A global citizen is not just someone who has traveled the world but rather someone who understands we are all interconnected and play an important role in the peacebuilding process.
Amrita Sood: I am a first year student from India who has a crazy dream to make this world a better place for everybody. Since childhood I was taught that it is “One planet the earth one family mankind”. I always felt empowered when I dreamed about a world without borders. I have been a part of various exchange programs from all over the world. These programs really helped me expand my vision and learn how to embrace differences. With so many changes in today's societies I truly feel the need for a radical change. I am so grateful and excited to be a part of this project. It is very important for the youth to take action now. Mandela has always inspired me to believe that education is a powerful tool. I have been involved in various community service projects including helping homeless children on the streets to be able to live a decent childhood, tutoring underprivileged children and empowering women from marginalised parts of the society. With YES GIVE I want to share humanistic values to foster young children to become great leaders in the future.

Rosabelle Heins: It is with great enthusiasm and gratitude that I join a group of students and role models to create an endeavor so close to each of our hearts. I am a first year student at SUA pursuing a concentration in Humanities. My interest in Y.E.S G.I.V.E stems from a passion of education, peacebuilding and the arts, but it is most fundamentally based on a simple desire to create a better world for the future. I attribute much of my interest in Y.E.S G.I.V.E to my
involvement as a counselor for “Fresh Start,” a camp in which upperclassmen and alumni assist 8th graders to help them make a smooth transition from middle school to high school. Through engaging in team-building exercises and dialogue, I was able to help campers build confidence and learn the values of respect and communication. Becoming a Fresh Start counselor was my first glimpse into what it meant to “create value” and positively contribute to society. I was thrilled to discover that since “Fresh Start” was implemented, the dropout rate at my high school decreased from 10% to 1%. I hope to help create a similar outcome through Y.E.S G.I.V.E.

Viviane Vallerand: I am a first year graduate student in Educational Leadership and Societal Change at Soka. My passion for education brought me to work for several years in summer camps and lately to become an elementary teacher in Quebec (Canada). I also did research with different professors in education at Laval University in the fields of educational technologies, early childhood development and behavioral management. Moreover, I animated psychomotor workshops for low-income families with the NGO Famille à Bord and I developed French literacy programs for migrant and refugee allophone children with the NGO Frontier College. My love for travelling also led me to do an internship in an elementary school in Senegal and a humanitarian trip in an ecological farm in Ecuador. Those experiences open my eyes about social inequities and how much well-designed education is necessary to strive for social and environmental justices.
Workshop 3: Everyone is busy; everyone is making sense. An ethnographical approach to education.

Marco Timm, Samrat Basyal, Mitsue Hosokawa, Arlen Vidal Castro, Bhavana Rani, Viviane Vallerand
SUA Graduate Class of 2018

Workshop Summary

The workshop will be designed based on our learning experiences from a three-week intersession course on ethnography and education facilitated by Dr. Frederick Erickson, a distinguished scholar and Professor Emeritus of Education and Anthropology at the University of California. The course was comprised of intensive field research, observations of educational practitioners and a theoretical understanding of the various nuances of everyday school life. Based on what we learned during this course, we would like to reveal to you the rich potential of ethnography to create human-centered, safe and inclusive learning environments. An ethnographical approach to education proposes to pay close attention and to acknowledge the subjective experience of students, teachers and administrators in a learning environment and thereby offers an avenue to humanize the educational processes of formal schooling. We invite you to come and unravel some of these intricacies through insightful dialogues and an interactive, engaging and activity-based workshop.
We are the 3rd class of the Graduate program in *Educational Leadership and Societal Change* at Soka University of America. 'Magnificent 7’ is how we are fondly referred to as, by our graduate professors. We constitute a very diverse cohort of seven students from seven different countries namely, Bhavana Rani from India, Samrat Basyal from Nepal, Cintia Kussuda from Brasil, Marco Timm from Germany, Mitsue Hosokawa from Japan, Viviane Vallerand from Quebec and Arlen Vidal Castro from Los Angeles. We bring with ourselves personal and professional experiences in the field of education from around the globe which adds a very eclectic flavor to the class, with interests ranging from socio economic inclusion of children and women empowerment in developing countries, higher education financing and studying alternate educational models, refugee crisis and educational integration of displaced people to a strong inclination towards understanding and implementing Global Citizenship.
Exploring Global Citizenship Education: How the Values of Soka Education Can Inform a U.S. Elementary School

Melanie Reiser

Abstract
The purpose of this paper is to utilize a process to develop a possible set of principles and a proposed school ecology for an elementary school in the U.S. that is inspired by the values of Soka education. The process includes identifying the foundational identity, the principles, the school ecology, and an artistic metaphor to describe what the whole school could look like. A small group of educators worked together to articulate one possible manifestation of an elementary school in the U.S. based on the educational principles of value creating humanism.

The 1933 publication of Tunesaburo Makiguchi’s *A Geography of Human Life* was the foundation of what is today a worldwide interest in and quest to understand Soka education (Understanding Soka Education: A Bibliography), an education that is growing and flourishing nationally and internationally (Soka Schools). At the same time as his publication, Makiguchi established an educational society focused on Soka, value creation, which gradually transitioned from to an organization for lay practitioners of Nichiren Buddhism (Tunesaburo Makiguchi). Over the next four decades Makiguchi, then his student, Josei Toda, then Toda’s student, Daisaku Ikeda, held firm to the vision of establishing schools based on Makiguchi’s value creating educational theory. In order for Ikeda to fulfill Toda’s dream, he went back to Makiguchi’s wish and worked to establish the first Soka schools in Japan. In the subsequent five decades, nearly one dozen Soka schools have been established under the guidance of Ikeda (Soka Schools). Thus, in the last 45 years, because of the tireless efforts of Makiguchi, Toda, and Ikeda, the world has witnessed the development of nearly one dozen Soka schools throughout Asia and in the Americas.

The many scholars, educators, and citizens who are interested in the further manifestation of value creating education have researched and implemented elements of Soka education in a variety of ways. Countless educators and academics have used the principles of humanism as articulated by Ikeda in their daily activities as teachers. The Renaissance Charter School in New York developed aspects of its school ecology from these same principles (Understanding Soka Education: A Bibliography). And scores of scholars have researched the ideas of Makiguchi, Toda, and Ikeda to actualize elements of Soka education, studied comparisons of Soka education to other educational models, and investigated how Soka education is being applied in the classroom and in pedagogical content (Understanding Soka Education: A Bibliography). In other words, scholars are exploring the meaning of Soka education and how the philosophy of humanism informs a school setting.

This exploration influenced Reiser (334) to research a possible framework for establishing a philosophically inspired school, such as a Soka school, founded on value creating humanism. Drawing upon many scholars, Reiser’s dissertation (1; ch. 1) considers the importance of a school’s foundational identity, its primary philosophy, and the extent to which the principles
developed from this foundation consciously inform the school’s ecology and the engagement of the school community. This researcher, one person who is part of the worldwide interest in and quest to understand Soka education, uses the framework described above to explore what an elementary school in the United States, inspired by the values of Soka education, could look like.

**RATIONALE**

But why is it that a school needs to be developed using a new framework? Why not use practices already in existence? We can look to both Soka scholars and mainstream academic scholars for support that something new is needed.

Makiguchi and Ikeda both emphasize that a new impulse for humanistic competition is needed in society (The Light of Humanity Illuminates Hope for the Future). Ikeda articulates support for Makiguchi’s ideas, including the history of how competition has driven humanity—first military, then political, and third economic competition—and that a new impulse of competition is needed—humanistic competition. Evidence that economic competition is still the current value in mainstream culture can be found on the U.S. Department of Education website, which states that in the U.S. the educational “mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access” (Goals). The ‘global competitiveness’ refers to economic competition as demonstrated in the language the department uses in referring to its goals, “these goals, which will help measure the success of the Department’s cradle-to-career education strategy, reflect the importance of teaching and learning at all levels of the education system” (Goals). In other words, the current educational model is intended to prepare students for a career that allows them to be economically competitive on a global scale.

And research highlights weaknesses with various educational practices based on this idea of economic competition. In *The Death and Life of the Great American School System: How Testing and Choice Are Undermining Education* Diane Ravitch, the architect behind No Child Left Behind, presents findings on the ineffectiveness of many current U.S. educational practices, including the problems associated with bringing a business model of standards and accountability into education (ch. 7). In the book *Doing School: How We Are Creating a Generation of Stressed-Out, Materialistic, and Miseducated Students*, Stanford education professor Denise Pope highlights a particular set of problems in high school education that further demonstrates some weaknesses with the economic competitive model (ch. 7). In short, Pope uncovers some of the shadow aspects of a focus on economic competition as a foundation for education.

Eminent educational scholars, such as Elliot Eisner (163), Nel Noddings (1), and Parker Palmer (3), are concerned by the emphasis on economic competition and the subsequent educational practices that are utilized in U.S. education today. These educators highlight the fragmented approaches taken in the U.S. in addressing educational concerns, from standardization and unrealistic accountability to educational practices that do not value substance. Their proposed solutions include finding a shared purpose for education and developing corresponding practices that effectively fulfill the aim (Eisner, 136; Noddings, ch. 12). This approach is consistent with Ikeda's ideas. Ikeda recently stated, “The mentor sets forth the principle. It is up to the disciples to take action to put it into practice” (The February Campaign of the New Era 12). The framework utilized in this paper will apply this concept, albeit for an educational setting, by identifying principles from the foundation philosophy and then articulating ways for these principles to be put into practice. Eisner (145) advocates for focusing on intentions when developing the school ecology—the intentional, curricular, pedagogical, evaluative, and structural aspects of the school. Nel Noddings’ emphasis is upon care in education (27, ch. 2). Noddings wrote, “I want to suggest that caring is the very bedrock of all successful education and that contemporary school can be revitalized in its light” (27). She further elaborates on the importance of nurturing and how caring must be the impetus for all aspects of a school. For Noddings, the purpose of a school must be infused in the whole educational program of a school. Parker Palmer describes this eloquently and succinctly when he says that "to live divided no more is ... the elemental need for one’s own
beliefs to govern and guide one’s life” (168). These leading educational thinkers highlight the importance of purpose in education, corroborating Ikeda’s declaration that the principles should be the foundation of any practices. Drawing upon these ideas this paper explores an approach that focuses on identifying principles and subsequent practices as a framework to explore ideas for a U.S. elementary school based on the principles of Soka education.

METHOD
Using a theoretical framework articulated by Reiser (334) and consistent with the ideas of eminent scholars, this study explores what an elementary school in the U.S., inspired by the values of Soka education, might look like. The framework provides a process to explore how the foundational philosophy informs what the school’s principles could be, and the art and science of how these principles could be translated into the reality of a school. From the foundational philosophy, key players in the school’s development work together to identify the principles, or values, that will become the basis for the workings of the school. From the principles, the group then develops policies and practices for the various components of the school ecology—intentions, structure, curriculum, pedagogy, and assessment. To breathe life into this structure, and help prevent it from becoming too rigid, the group identifies an artistic metaphor that can represent how the school community engages with the principles and the school ecology. For this research, a group will utilize this process to help consider what this elementary school could look like.

A group of four participants committed to work together on this research. The members of the group were chosen using purposeful criterion sampling as described by Creswell (154)—they all have experience with the foundational philosophy and a shared background in their educational training—they have all received training as Waldorf teachers. While some members of the group knew each other, the group as a whole was working together for the first time and shared ideas via video conferencing and email over a six-week period. The newness of the group working together, the limited time frame, and the distance communication method limited the depth of the discussions; however, the shared philosophical practice and common educational training created the opportunity for meaningful dialogue.

The group’s work developed in a thoughtful manner. The first video conference focused on introductions, background on the research, and information on the theoretical framework. The group intended to meet via video conferencing weekly, however due to scheduling conflicts, the whole group was not able to meet together again at one time. Rather, smaller groups via video conferencing and email communicated to discuss the various ideas. After the initial video meeting, the first topic of discussion focused on identifying the principles and ensuring they were grounded in value creating humanism. Next the group tackled the school ecology components, leaving identification of an artistic metaphor of how the school community engages with the principles and the school ecology to me. The final conclusion is also summarized by me. Although artificially constructed and limited by time, the focus group worked in a collaborative, open, and meaningful way.

It is helpful to provide some specific context around the principles, school ecology, and artistic metaphor that follow. The collective experience of the focus group is based in independent education and to leverage this expertise the group imagined that the school they were designing would be independent. Additionally, the group recognized that several of the ideas identified for the school ecology would be difficult to implement due to costs, among other reasons. Despite this the group resolved to include the ideas with the spirit of Toda, who stated “’too big’ is just about the right size for young people’s dreams. What we can achieve in a lifetime is always but a fraction of what we would set out to achieve” (Josei Toda: Reviving Buddhism in Today’s World). Based on this determination, the focus group identified the following principles, school ecology, and artistic metaphor in framing a U.S. elementary school inspired by the principles of Soka education.

PRINCIPLES OF VALUE CREATING HUMANISM
The focus group shared and discussed those principles they believed to be most relevant for an elementary school inspired by the values of Soka education. Like Soka University of America, these values are based on Buddhist humanism as described by Ikeda (About Soka Overview). The focus group consciously selected and articulated them in such a way as to create a space for anyone with similar values, regardless of their spiritual or cultural background, to feel welcome and to feel that these principles can be representative of their values also. As described by the Ikeda Center for Peace, Learning, and Dialogue, Soka education “is focused on values, promoting enduring hope in the inherent capacities of students and educators” (Understanding Soka Education: A Bibliography). With this in mind, the focus group developed the following educational principles founded on value creating humanism. As mentioned previously, these principles are identified by the focus group for the school they are imagining, and are not necessarily meant to be relevant or applied to any other school inspired by the values of Soka education. The use of an active verb to begin each principle was done with consciousness, in the spirit that taking action is critical.

**Educational Principles Founded on Value Creating Humanism:**

1. **Nurture every human being’s unlimited potential and inherent dignity.**
   The board, faculty, and administrative staff work with each other, parents, students, and the broader community with this understanding at the heart of their interactions.

   Ikeda consistently emphasizes the fundamental belief that all humans have unlimited potential and that life is infused with inherent dignity. He reinforces these ideas in *Unlocking the Mysteries of Birth and Death: ... And Everything in Between, A Buddhist View of Life* (18) and *Discussions on Youth* (212). A quote from other educational institutes founded by Ikeda states “Soka (value creating) education... approaches the work of education from the standpoint of absolute respect for the dignity of life” (Understanding Soka Education: A Bibliography). And Soka University of America clearly identifies one of its founding values as the sanctity of life (About Soka Overview). Again and again Ikeda emphasizes the unlimited potential and inherent dignity in life to individuals and as values in the educational institutes he has founded, thus the focus group identified this as the first principle.

2. **Honor the oneness of life and the environment.**
   The board, faculty, and administrative staff support a school ecology that recognizes the interdependence of individuals, organizations, and the environment.

   In *Life, an Enigma, a Precious Jewel*, Ikeda declares, “Careful examination invariably reveals a connection ... [between living things and their natural surroundings], for a delicate thread of life joins all objects and beings in the universe (29). This statement demonstrates that the legacy of value creating humanism is steeped in the concept of the oneness of life and the environment. This is also relevant as an educational principle because this idea is at the heart of Makiguchi’s education thesis *The Geography of Human Life* (ch. 1). Establishing this concept as a principle expands the scope of understanding the human and earth relationship beyond the educational program to also have an impact on the overall school infrastructure, including the use of sustainable material and other resources.

3. **Care for the student.**
   The board, faculty, and administrative staff demonstrate care for the students for the purpose of nurturing the student’s happiness.

   In *Soka Education* Ikeda emphasizes caring for students (139). This care is grounded in his belief in youth, “I trust all of you. I live for your happiness, for your future. You are the hope of humanity. Each of you is hope itself. Each of you possesses a precious treasure” (*Discussions on Youth*. Vol. 1, vii). He further emphasizes that youth “are the protagonists for change in any era” (The Courage of Application). For Ikeda caring for students is grounded in his care for them as
individuals and in his hope for their ability to transform society in the future. It is also based on the commitment to the happiness of children in Makiguchi’s educational ideas (As an Education Reformer) and Toda’s advocacy (Overview). Based on the consistent words and actions of Makiguchi, Toda, and Ikeda, the focus group felt it imperative that a principle be dedicated to this value.

4. **Inform the educational program based on Makiguchi’s, Toda’s and Ikeda’s pedagogical insights.**
The faculty, and administrative staff work with Makiguchi’s, Toda’s, and Ikeda’s pedagogical insights, including but not limited to the ideas in the *The Geography of Human Life* in developing the curriculum, pedagogy, and assessment practices.

Makiguchi, Toda, and Ikeda, collectively, have written many books and speeches on value creating humanistic education. Makiguchi penned *A Geography of Human Life* and *Education for Creative Living* and many of Ikeda’s speeches and proposals on education are compiled in *Soka Education*. Toda established a tutorial school, textbooks, and a children’s magazine inspired by the educational insights of his teacher, Makiguchi (Overview). This principle demonstrates a commitment to implementing an educational program with specific curricular practices, pedagogical practices, and assessment methods based on the works of Makiguchi, Toda, and Ikeda.

5. **Support human revolution as the basis of bringing forth one’s full potential.**
The board, faculty, and administrative staff are committed to self-development in the spirit that this will lead to bringing forth their own happiness, and the happiness of the students and members of the school community.

Toda coined the phrase human revolution “to describe a fundamental process of inner transformation whereby we break through the shackles of our ‘lesser self,’ ... growing in altruism toward a ‘greater self’ capable of caring and taking action for the sake of others” (Human Revolution). Ikeda boldly proclaims, “A great human revolution in just a single individual will help achieve a change in the destiny of a nation, and, further, will enable a change in the destiny of all humankind” (Human Revolution.). He also states that educators involved in Soka education are “themselves attempting an inner ‘human revolution’” (Understanding Soka Education: A Bibliography). Thus, establishing this principle for the adults who work for or on behalf of the school provides a framework for a shared commitment to transformation.

6. **Cultivate servant leadership.**
The board, faculty, and administrative staff are guided in their respective roles by being in service to the school community.

Ikeda conducts dialogues, delivers speeches, and writes about the importance of leaders working to help people become happy (Daisaku Ikeda). In one of these speeches, presented at Harvard University, Ikeda emphasizes the importance of transitioning from the practice of hard power to soft power (The Age of ‘Soft Power’ and Inner-Motivated Philosophy). This picture of anti-authoritarian leadership, which Ikeda describes as self-motivated action lends itself to a governance model based on servant leadership. In a recent article one of Ikeda’s students drew a direct relationship between Ikeda’s value of the human being and the concept of servant leadership (Aiken). This value, or principle, of servant leadership is meant to inform both the formal governance model and the informal leadership that is a part of any school community.

7. **Engage in continual study and research.**
The board, faculty, and administrative staff work to continually deepen their individual and collective understanding of value creating principles and value creating education through the study of relevant works by Makiguchi, Toda, Ikeda, and other like-minded individuals.
These educational principles of value creating humanism need to be living. Through study, the immediate school community can deepen their shared understanding of these principles so that they can be refined and updated and so that the school community can find new ways of allowing these principles to be living in the school ecology to best serve their intentions.

**SCHOOL ECOLOGY**

Eisner’s concept of school ecology embraces a whole systems approach which includes the components of intentions, curriculum, pedagogy, evaluation, and structure. The intention is to develop a school where all aspects of the organization and its practices are consciously developed from the principles. Several thoughts that describe how the principles of value creating humanism can be reflected in the various school ecology components are outlined below. It is worthwhile to note that the proposed school ecology identified here is an initial look at what could be and is not meant to be all-encompassing. For each area of the school ecology the focus group identified one or several ideas that would be the foundation for more specific activities. The hope is that this process and some of the ideas shared are thought-provoking for what could happen in the future.

**Intentions.** At the heart of any school are its intentions, hence this aspect is explored first. The intentions can be likened to a school’s mission and vision, and like the principles, help guide the school’s activities. Ikeda shares that the primary message of Makiguchi’s *The Geography of Human Life* is “for all human beings to live together as global citizens who share the awareness that the Earth is our common home and the world is our stage of action” (The Light of Humanism Illuminates Hope for the Future). Ikeda has embraced Makiguchi’s message as a source of inspiration at other educational institutes he founded. The mission at Soka University of America is to “foster a steady stream of global citizens committed to living a contributive life” (About Soka Overview) and the founding principles at Soka University are “Be the highest seat of learning for humanistic education. Be the cradle of a new culture. Be a fortress for the peace of humankind” (Mission). In each of these instances there are common elements of humanism, global citizenship, taking action, and respect for the earth. These examples, consistent with the principles of value creating education, are the heart of what can be the school’s intention, stated as a mission: ‘To cultivate global citizens committed to creating value for humanity on our precious earth’.

**Curriculum.** The curriculum, as one of several components of an education program, addresses what content is taught and the sequence of this content through the grades. Universities established by Ikeda are dedicated to liberal arts education (Marinoff). Thus, a liberal arts curriculum that includes the traditional core academic subjects of language arts, the humanities, mathematics, and science along with supplementary courses and interdisciplinary content that include the arts and world languages is a natural foundation for the curriculum. Each year the curriculum sequence could broaden and deepen, building upon prior years as the students move up in the grades. Above and beyond the impulse for a liberal arts curriculum, the foreign language content supports the global citizenship emphasis (Curriculum; Hovland 4; Oxfam 13). A pillar to be incorporated through the years, inspired by the proposed mission and the educational ideas of Makiguchi, is a focus on geography. This pillar can be used in an horizontal interdisciplinary manner and in the vertical deepening of content manner. The geography focus can be integrated into the curriculum through the study of the relationship between the local geography and how humans in a particular environment care for themselves and the earth. The content can be integrated into varying aspects of the curriculum that can deepen each year so that it is a thread that is at the heart of what cultivates global citizenship within the students. Reviewing this proposed curriculum content, the mission and principles 2—Honor the oneness of life and the environment—and 4—Inform the educational program based on Makiguchi’s, Toda’s and Ikeda’s pedagogical insights—play an important role in informing this component of the school ecology.

**Pedagogy.** The pedagogy, as a second component of an education program, focuses on describing the methods and practices teachers use to bring content, but may also have an impact on structural components of the ecology. With a strong background in Waldorf education, the focus group
members identified several pedagogical practices found in Waldorf schools that they felt would be apropos based on the identified principles. In consideration of principles 1—Nurture every human being’s unlimited potential and inherent dignity—and 3—Care for the student—the practice of a teacher looping for multiples year with a particular class is compelling because a deepened relationship, which happens over time, enhances the ability of the teacher to nurture the student's potential and care for the student. Another method to emphasize could be focusing on opportunities for learning through real-life experiences. This aligns with Makiguchi’s half-day schooling idea that advocates for student time and experience with family, community, and vocational pursuits (Gebert and Joffe 76). Teachers would strive to give students actual experience in the content. One approach for teachers would be to first identify an opportunity for students to engage in community work. The teacher could connect with a non-governmental organization (NGO), a local non-profit, or the department of a local government that provides services to marginalized communities to find activities that students can take up during school that gives them actual experiences with the local community. The focus group also discussed the establishment of a business in connection with the school as another means for real-life experience for the students. The business would be representative of the themes of local geography—so in a rural setting it could potentially be a small farm while in a more urban setting it could be a bakery or thrift store. While this business would need appropriate structure and staffing to be financially viable, the idea is that through the grades the students would work and interact with the business in a way that provided real world experience of being a global citizen. A final pedagogical wish from the focus group is the use of both group and mixed-age experiences in the school setting. In these ways the principles 1—Nurture every human being’s unlimited potential and inherent dignity—and 4—Inform the educational program based on Makiguchi’s, Toda’s, and Ikeda’s pedagogical insights—are the basis for the methods identified here. A third pedagogical practice the focus group identified is the intention of bringing content, both core and supplementary, in an interdisciplinary manner. Ikeda writes that culture and art “nurture the virtue of goodness, the desire to make earth a paradise” (Discussions on Youth, 88). Thus, infusing the arts into other subjects, for example, can serve as a catalyst for a student to engage with the school’s mission: to be committed to creating value for humanity. These pedagogical practices are just a handful of the many methods that the school could embrace in order to bring life to the principles and fulfill the mission.

Evaluation. This component of the school ecology encompasses assessment of faculty and staff and assessment of the students, which is the third and final aspect of the education program. This paper will focus on the ways student assessment can be implemented, based on the principles. The first aspect of assessment is collecting data. As described by Ravitch, a very common practice in the United States, and many places throughout the world, is a focus on high stakes standardized testing. The standardized testing happens frequently and is considered high stakes because the summary of student outcomes affects funding and autonomy for the school or district. In turn, this influences the curriculum, and indirectly the pedagogy, because schools and districts frequently get caught up in teaching to the test (ch. 6). Wary of this trap, the focus group became committed to 360° student assessment, an idea that places emphasis on taking into account multiple aspects of the individual in both a qualitative and quantitative manner. This assessment would include understandings ways to collect the data and communicate the information to parents. Beyond the scope of this section, but equally important, is how this assessment data informs the future work of the teacher. Qualitative multi-pronged data collection may include observations of the student with their peers, in classes, and during recess and lunch times, while quantitative multi-pronged data collection may include reviewing the results of teacher designed individual and group written assignments and activities, and very limited use of testing. To communicate this data with parents the teachers could meet one on one with parents at designated times during the year and then provide a written narrative summary at the end of the year. For future consideration is the idea of
assessing more than mastery of the content. As described with the high stakes testing, the emphasis on assessment results can heavily influence what and how content is taught. Recognizing this, it could be informative to assess the student on those qualities of a global citizen so that the mission of the school maintains an active influence on the educational program. This would have to be approached in a caring and nuanced manner for a variety of reasons. These approaches to the evaluative component of the school ecology are especially informed by principles 1—Nurture every human being’s unlimited potential and inherent dignity—and 3—Care for the student.

Structure. The structural component is presented last so that influences from other aspects of the school ecology that affect the structure have some context. This component includes elements of governance structure, the physical structure and other structural components, and the structure of the schedule.

The governance structure is primarily influenced by principles 6—Cultivate servant leadership—and principle 7—Engage in continual study and research. The idea of servant leadership is that those in positions of authority—either informal or formal—lead by serving. Aiken describes a Nichiren Buddhist concept of servant leadership that emphasizes the equality of leader and practitioner. Further, Ikeda (The Age of ‘Soft Power’ and Inner Motivated Philosophy) describes the need for a transition to a leadership style that unleashes the inner motivation of individuals and that is built on consensus and satisfaction among human beings. One way this lens of leadership can inform the governance structure is through the use of consensus based decision-making. Consensus can be implemented in a variety of ways but at its heart is the concept that everyone has a voice which can be very different than the experience of a majority vote or authority based decision. Additionally, in consensus, everyone is committed to working collaboratively once a decision is made. Consensus can be effectively implemented using mandates that allow for smaller group decisions when there is trust in the processes and the individuals who use the processes. The use of consensus in schools is not necessarily common, but can be a unique expression of servant based leadership. Additionally, the governance structure can incorporate regular study of the principles as the basis of dialogue, exploration, and innovation.

The physical structure and other structural components are heavily informed by principle 2—Honor the oneness of life and the environment. What is presented here is the ideal for the focus group, however all recognized that finances play a critical role in the viability of any of these structural components. The intention of the group in identifying this picture is to bring consciousness and attention to this aspect of the school ecology. The focus group voiced a hope for a school building that is built with locally and sustainably sourced materials and xeriscape landscaping. Depending on the location this would result in very different structures and property. Additionally, the group wondered whether the building could not only be off the grid, but if it could be a source of energy supply—through wind or sun, again depending on the location. Consideration of a rooftop garden, sustainably harvested foods for school lunches, composting, rain collection, and a zero waste campus were all discussed. In these ways the focus group identified how the principles can inform the physical structure.

The structure of the schedule is indirectly shaped by principles 2—Honor the oneness of life and the environment—and 3—Care for the student. Again borrowing ideas commonly found in Waldorf education, the focus group discussed the idea of bringing content in blocks, via a main lesson and with student created textbooks. They also discussed the role of seasonal festivals and the idea of a community life. A block schedule is one in which core content rotates throughout the year and is studied intensively for 3-5 weeks at a time. This content is generally brought during the first two hours of the day, called main lesson. These two scheduling features allow the student and teacher to go into greater depth for a concentrated period of time before letting the content go for another block. These formats are supportive of the concept of student created textbooks, which are guided by the teacher and are artistic and written accounts of what the student has learned. These practices nurture care for the student by creating a healthy rhythm for students that allows them to
express what they have learned in a unique manner. An emphasis on festivals and community activities nurtures a connection with the seasons and with the interconnectedness of the school and the wider community. This nurtures a feeling of oneness between life and the environment. While these specific ideas from the focus group are only indirectly connected to the principles, they demonstrate a nuanced application of these values.

The multiple layers of the structural element, along with the intentions, curriculum, pedagogy, and evaluation components of the school ecology provide the infrastructure, or bones, for a school with a particular set of principles. However, what the superstructure, or muscles and joints, of the school looks like when it comes to life requires something more dynamic.

**ARTISTIC METAPHOR**
The use of an artistic metaphor to describe how the people engage with the school ecology is one way to consider the art of education. While the school ecology represents the science of education—the formalized practices—the artistic metaphor represents an imagination of how people can engage with these practices. This metaphor can be helpful because it honors the dynamic nature of the human being and our unique role in bringing any organization and its forms and practices to life. Having an articulated school ecology is not only helpful, it is incredibly valuable, because it brings to light the shared agreements on how the school will function. But there can be a discrepancy between what is described on paper and what comes to be, or is needed, in real life situations. The activity of working with an artistic metaphor helps individuals navigate these real life situations in a manner that can honor the group’s identified principles and school ecology.

*Throwing pottery.* A potter who works to bring forth the unique attributes of a particular piece of clay is like an educator who teaches in the spirit of the Latin word educare, which means to draw forth. This is contrast to the Latin root educare, which means to train or mold (Bass and Good, 162). Pottery is an art form that has been used by cultures from around the world for thousands and thousands of years. Pottery continues to be created today and, as in the past, is both functional and an art form. There are different classifications of clay—the three main categories are porcelain, stoneware, and earthenware—and the artist selects the type of clay based on what they are creating. The artist’s decision on the type of clay to be used is just the first of many that influence the outcome of the pottery. The next major decision for an artist is to determine how to make the pot—by hand or wheel-thrown. When throwing, potters provide boundaries and form for the clay while allowing the unique attributes of a particular type and specific slab of clay to blossom. In this way there is both a give and take to the process. The artist must understand the clay and tools they are working with while at the same time allowing the clay to speak.

In working with clay potters identify many nuances. "There is no one way of doing things right on a potters (sic) wheel... Smart hands will always be the potter’s best tool" (Gillies). Potters speak of understanding a clays limitations and possibilities, although new potters often rely on conceptual understanding “before their intuitive awareness can compensate in what they need to do” (Gillies). One of the hardest skills is understanding how to create walls of the appropriate thickness. The artist must know when and where to pull on the walls, she must know how to hold the pressure without pushing, and she must be responsive to the clay in the moment. Learning these skills and developing the capacity to engage in nuanced activity is critical for successful potters. In particular, and of great significance when working with this metaphor in an educational setting, is the artist’s understanding that their role is to support the unique attributes of the clay come forth because there is no such thing as forcing the clay to mold to the artist’s will. The last two major activities in creating pottery are the firing, then glazing, of the object. With these steps—selecting clay, throwing it, firing it, and then glazing it—the artist has worked with clay to help transform it into something new that has a unique contribution to make.

While there is always further elaboration possible, the focus here is to express how the artistic activity of throwing pottery can be a metaphor within a school community for how the
individuals can work with the school's principles. For board members and administrative staff, the metaphor can apply to their primary working with other adult colleagues and parents, and their work in bringing policies to life. For the teaching staff, the metaphor can apply to their work with students, parents, and colleagues. The idea is that the clay—whether it represents a person, such as a student, or an inanimate object, such as a policy—is not someone or something to be manipulated. Nor are policies or agreements meant to be blindly implemented. Rather, the adults use their expertise to work with others and the agreed upon practices to bring them to life in light of the principles. In this way the potter's throwing of clay is a picture of the unique contribution each person makes in bringing the school principles to light.

CONCLUSION
The purpose of this paper is to consider a process for establishing an elementary school in the U.S. inspired by the values of Soka education. The particulars identified—the principles, the school ecology, the artistic metaphor—represent what a small group of educators discussed. These particulars are not meant to be representative of what an elementary school inspired by the values of Soka education should look like. Rather the process of working together and collaborating to be clear of the shared principles, intentions, and practices is the takeaway. The value of this process is that it supports transparency in all that the school values and implements, which can serve to support its mission of global citizenship.

Works Cited


Bringing Social Justice to the Human Scale: Combatting Powerlessness through Value-Creating Pedagogy

Cassidy Bradford and Melissa Bradford

Abstract

As Daisaku Ikeda writes, "Some people say the prevailing mood in the world today is one of powerlessness... Decisions about political, economic and environmental issues all seem to be made somewhere beyond our reach" ("WLS Vol. 1" 6). As society grows more complex and our scholarly understanding follows, the human agent can get lost in abstract thinking about hegemonic structures that perpetuate social injustices. When engaging with discourses of critical theories and pedagogy, the coauthors of this paper, along with their interlocutors in the field of education, wrestle with feeling overwhelmed, angry, and powerless as a result of their critical consciousness (Freire 35). In light of this year’s conference theme, this begs the question, "How, then, can we transform society through human education?" The coauthors look to Tsunesaburo Makiguchi’s value-creating pedagogy and Daisaku Ikeda’s advocacy of a life-sized paradigm that focuses on the human scale. The co-authors highlight themes from their dialogues with classmates and colleagues to explore how value-creating pedagogy brings a fresh approach to the praxis of critical pedagogy by empowering individuals on the human-scale.

1. Introduction

This fall, thousands of demonstrators protested the Dakota Pipeline Access, ringing the call for social justice louder each and every day. In November, the protesting grew with the victory of U.S. President-Elect Donald Trump. Today, many people around the United States are in fear for their own well-being, safety and basic human rights and for those of the people close to them. Universities and cities are becoming “sanctuaries,” taking a stance to not cooperate with the federal government should they attempt to detain and deport undocumented immigrants. Trans-youth are committing suicides at alarming rates. Public school students in Chicago are suffering from decades of racist housing policies and failed busing programs. Unarmed African American men are being killed by police, while #BlackLivesMatter protesters fight for justice throughout the country.

In response, critical theorists in the field of education point out and analyze systemic issues such as neoliberal policies and hidden curricula that perpetuate the social injustices we are grappling with today. This creates a dilemma for educators. An awareness of hegemonic structures that keep inequalities in place can weigh down both students and teachers until we lose the hope and energy to fight. In response to this year’s conference theme, we ask, “How, then, can we transform society through human education?” As Daisaku Ikeda writes, "Some people say the prevailing mood in the world today is one of powerlessness... Decisions about political, economic and environmental issues all seem to be made somewhere beyond our reach. What can the individual accomplish in the face of the huge institutions that run our world? This feeling of powerlessness fuels a vicious cycle that only worsens the situation and increases people’s sense of futility (“WLS Vol. 1" 6)."
The mood Ikeda describes is the motivation for this paper.

It is often the lens of critical pedagogy that students of education employ to understand social justice, and the sense of powerlessness is often palpable. After one of her first doctoral classes, Melissa Bradford overheard a classmate say, "I feel so hopeless now." She found that discussions on education from a social justice lens frequently led to students expressing a pessimistic perspective that the structures of oppression cannot be changed through education but can only be resisted. This experience led Melissa to record a series of dialogues with one of her colleagues, and together both educators contended with the realities of implementing social justice education.

Similarly, Cassidy Bradford often left critical theory oriented classes first enraged, then paralyzed, when she realized how small she was in comparison to the deeply-rooted and complex injustices of the world. Following Melissa's experiences, Cassidy engaged in dialogues with her classmates on the unintended impacts of education for social justice at Soka University of America in person and through written conversations. As critiques and challenges of critical pedagogy and social justice education emerged from both our dialogues, we explored how value-creating pedagogy helped us to move beyond the limitations we felt when faced with the enormity of social injustice. Taken altogether, the themes, critiques and solutions discussed in our respective dialogues provide a framework for this paper. We hope that by opening up our dialogues to others we may take a foundational step toward a larger conversation on soka education and social justice.

2. What Now? When Anger, Exhaustion and Cynicism Take Hold

In this section, we share edited versions of conversations between Melissa and a fellow teacher, and Cassidy and fellow students. We do not position ourselves as experts in critical theory or social justice, but instead we share our reactions to our studies as students and as teachers. Our voices are important because the majority of educators and students are not critical theorists. We hope our voices as practitioners provide insight into the lived experience of people impacted by critical theory for social justice education. What follows throughout the paper are edited dialogue excerpts which have been edited to flow in written format. Here, Melissa and her colleague discuss their frustrations with a social justice perspective:

Melissa: In many of our classes, we discuss the need to make more equitable outcomes in education, and we use critical theories to point out the systemically-caused injustices that are reinforced by schools. Our colleagues often express their frustrations and sense of hopelessness when we are faced with neoliberal policies such as standardization and privatization. How do you feel about these discussions?

Colleague: This kind of conversation can be had in academia because academics are not practicing in a K-12 setting. When you try to carry out these critiques in the school you end up causing conflict. And maybe some conflict is okay but some is unnecessary because it becomes the focus of your life and it will consume you. I see many people consumed by the drive for social justice.

Melissa: Critical pedagogy emphasizes critique and resistance. The focus is to point out what is wrong within our schools and also to create an awareness in our students. I am not sure how this makes me a better teacher.

Colleague: The focus often becomes pointing out bad people and making them change - fire them from their job or bring justice to them. But the other side will resist. So there will be a fight and it will consume your life. You're constantly angry and bitter. So I make a conscious decision not to get involved in that type of activism. There are sometimes I have to fight for certain things, but social justice activism would put me into a whole different kind of role as a teacher.
Melissa: What do you mean? What kind of role?

Colleague: The role of an activist teacher means my focus is on fighting the system. The focus is not on the development of the child. That’s why I say the social justice agenda is out of touch with the reality of the classroom. It’s not practical.

Melissa: I think it’s easy to succumb to your lesser ego when you are focused on injustice. Your ego gets puffed up because you are “right” and the others are “wrong.”

Colleague: With critical theory, all I do is point my finger at others. I feel good about it! The ones in power are bad, not me.

Melissa: But to be a better teacher, we have to work on ourselves.

Colleague: Ego cannot be broken by being told you have ego. It’s when I realize myself, “Oh, shit, I have egotistic stuff in myself.” I have to realize that. And how do I realize it? Critical pedagogy doesn’t help me with that.

This conversation articulates limitations of classroom practicality as well as the generation of ego-driven anger and bitterness. The first response of a classmate of Cassidy’s hit home for her and reflected her own experiences in class:

Cassidy: I know your concentration is in environmental studies. When I first took an environmental course at SUA it was really hard not to feel like the world is doomed. “My recycling isn’t doing anything except making me feel good about myself.” What was it like for you when you first started out in the ES concentration?

Classmate 1: Well, at first I was really angry and at a loss, thinking, "What can we do?" I would cry and be really passionate all the time about figuring out solutions and actions to resist big oil, institutions, etc. and was simultaneously becoming cynical and depressed. It’s so overwhelming when comparing the current state to the ideal.

Cassidy: I think I can get this flare up of passion, too, but then when I don’t see changes or I think about the laundry list of things that need to be done, I just feel like giving up.

Interestingly, rather than anger and frustration, another classmate shared their exhaustion:

Classmate 2: I’d say I felt a mix of disconnect, disbelief, and exhaustion. These courses were two of the most memorable courses I’ve taken at SUA. The classes really mess with your identity, you know? I was constantly leaving class grappling with my internalized, normalized assumptions and feeling shock about the reality of this country’s history of genocide and violence. It’s honestly kinda exhausting, which I understand is a very privileged thing to say and feel. But I understood why challenging institutions and people can feel impossible sometimes, because challenging these norms means challenging people’s entire understanding of their reality!
Cassidy: Sometimes I feel like there’s no way for me to actually change anything, you know? But I wonder if that’s a common occurrence or it’s something else that exhausts us as students about these topics.

Classmate 2: What exhausted me was unpacking my privilege and my assumptions. Being Asian American, there’s a lot of anti-blackness, anti-brownness and while I’m not actively engaged in the anti, it’s still normalized in my life. And so it was hard to confront that fact.

Cassidy: Oh yeah, I definitely had trouble confronting my own privilege and understanding it. As I started to grasp it, though, I thought, “Shit, I’m privileged but I just don’t even know what my place is in social justice and issues of race in the US. Where am I supposed to situate myself?” I hope I’m not simplifying too much, but I think people often resist giving recognition to their privilege because they feel like it paints them as "evil" or "bad." Looking at it on a surface level, they might easily feel like they only lose in recognizing their privilege, that there’s no personal gain.

When students do the work that social justice education asks them to, there are a wide array of emotions experienced but hope is not a common one. Although grappling with the very real obstacles of social injustices is not harmful or bad, if there is no source of hope it can be a challenge for students to maintain their motivation. The anger, exhaustion and cynicism is what has led us to search for a theoretical perspective that would be practical and ignite hope, motivating and encouraging educators and students alike.

3. The Human Scale of Value Creation

Simply seeing and understanding social injustice is not enough to truly transform society. What is needed is an educational philosophy and practice to give hope and combat the pervasive mood of powerlessness. Tsunesaburo Makiguchi and Daisaku Ikeda expound one such philosophy through the concept of soka, or value creation. Makiguchi was passionate about social justice and the happiness of every person. In fact, was Makiguchi forced out of his position as principal in a school because he refused to grant special favors to students from wealthy families. Indeed, he was ultimately imprisoned as a thought criminal and died in prison for strongly and openly opposing the Japanese militaristic government during World War II. When it came to his role as an educator, rather than simply critiquing the oppressive structures, his work focused on how to create value and bring happiness to all people regardless of systemic inequality, developing a pedagogy that empowered students and teachers toward living contributive lives. Ikeda, sharing these values, founded a school system based on the principles of value creation. Makiguchi and Ikeda did not ignore the very real impacts of injustice but instead of getting bogged down by the scale of the problems, they prioritized the happiness of the person right in front of them. Ikeda refers to this in his 2003 peace proposal as human scale or life-sized paradigm. (5)

An early mention of human scale can be found in Ikeda’s dialogue with French author and museum curator René Huyghe. In his 1980 dialogue with Ikeda, Dawn After Dark, Huyghe proposed that modern civilization, while excelling at scientific mastery of the exterior world, is driven by material concerns and is atrophied in the areas of “morality, sensitivity and the spirit” (82). Although it is understandable that new civilizations will come into being based on changing human needs, “Our tragedy lies in our inability to create such a new civilization on a human scale. Responding to the situation by developing the most efficacious faculties is insufficient if, in the process, the rest of the total human being suffers fatally” (Huyghe and Ikeda 83). Huyghe later goes on to point out that in past societies, there existed “graduated series of groups” that foster human solidarity at a human scale, moving outward from the nuclear family to immediate friends, to extended relations, to neighbors, and to the city (147). Modern nation-states lack the same emotional and spiritual development, and are at risk of lapsing “into abstraction imprisoned within
the autonomy of concepts” through categories of absolute concepts like social class or political party, offering clashes rather than complementing local ways of life (147). Huyghe calls for a restoration of the inner fullness of human nature through art, literature and poetry, love and religion (in the sense of spirituality) to combat this modern trend.

Two decades later, Ikeda takes up this theme of thinking on the human scale in his 2003 peace proposal. He explains that the process of globalization, while it has made us more conscious of global community, also exacerbates a feeling of disempowerment, or a sense that our individual lives have little meaning, in the face of vast global forces. In contrast, a life-sized paradigm “is simultaneously a humane sensitivity to life as a whole and also to the details of everyday human existence.” (18). While systemic problems exist and it is important to recognize them, at the same time, it is local efforts for equality, justice and sustainability that have real value in impacting lives for the better. For example, in a 2012 proposal to the UN Conference on Sustainable Development, Ikeda wrote:

[S]hifting the orientation of human civilization toward sustainability requires that the issues involved be considered on an authentically human scale, within the context and experiences of daily life. This is where we must sense the full weight of life’s inalienable dignity, and reflect on what is truly important to us and what we must come together to protect. (2)

We assert that in a similar fashion, value-creating pedagogy can empower teachers and students to contribute to social justice on the human scale by shifting our emphasis to the person, whether student, teacher or otherwise, right in front of us.

In light of mass standardization, neoliberalism and privatization, the notion of human scale has deep resonance in today’s education climate. Thus, in terms of social justice through value-creating pedagogy, we argue that to change society, teachers must make their first priority the happiness and empowerment of students in their classroom rather than systemic change. As Ikeda proposes, rather than education serving the needs of society, society should serve the needs of education (“Soka Education” 87). In his dialogue with Moscow State University rector Victor Sadovnichy, Ikeda says, “Education creates the structure of 'humanity'; then from that there is society, industry and government. Viewing things in a way where ‘first there is politics and economics, then somewhere supporting that is education’ is putting the cart before the horse” (Goulah “Ikeda and Dialogue” 93). Makiguchi’s theory of value-creating pedagogy is a tool for educators to achieve this goal of social change through value creation.

U.S. teachers may want to work toward a more equitable world for their students but they are stuck in a school system that allows very little room to do so. As Goulah writes, “a common complaint among preservice teachers I teach is the disconnect between their training in implementing a socially just, critical pedagogy and the mandated yoke of adequate yearly progress and standardized tests (“Fractured future” 211). As mentioned earlier, Makiguchi also found himself in an oppressive and rigid education system, especially as Japan militarized during the buildup to World War II. As his actions show, he was an advocate of social justice, but as a teacher he was still responsible for the day-to-day education within the repressive system. Therefore, he argued that “rather than devise complex theoretical interpretations, it is better to start by looking to the lovely child who sits on your knee and ask yourself: What can I do to assure that this child will be able to lead the happiest life possible?” (Vol. 5, 8). In this way he emphasized the human scale. Ikeda further explains, “Makiguchi’s focus of interest was never the state but always people, individual human beings.” (“Soka Education” 10). This is the spirit with which Makiguchi developed his pedagogy.

4. From Critical Pedagogy to Value-Creating Pedagogy

In this paper we contend that value-creating pedagogy enables educators to reorient critical pedagogy on a human scale. In this section we provide a brief summary of critical pedagogy and explain concepts of value-creating pedagogy in comparison to critical pedagogy.
4.1 Critical Pedagogy

Paulo Freire is a foundational critical theorist educators and students turn to when we think of overcoming oppression through education. Freire, inspired by Marx, argued for problem-posing education to help students understand the world and their relationship to it as a means for recognizing and breaking free from their oppression (81). He believed that words had the power to perpetuate social conditions, and that the oppressed must be able to name their world on their own terms, rather than the terms of those in power. Freire’s contribution in his seminal work *The Pedagogy of the Oppressed* lies in helping people awaken to systemic injustices, an awareness he refers to as critical consciousness. Concerned with the education of colonized and oppressed adults in the unequal society of 1960s Brazil, Freire argued against a “banking” model of knowledge transmission in education, and instead proposed a pedagogy for critical theory, which he believed would liberate students by helping them think critically about the oppressive structures in society. This process of conscientization, or the development of a critical consciousness, as opposed to a passive acceptance of unequal power and status, is achieved according to Freire by a “critical pedagogy” of dialogue and personal transformation.

Educators today are seeking to apply critical pedagogy in a way that is practical and relevant to a K-12 education. For instance, Stitson, Bidwell and Powell summarize and articulate the tenets of critical pedagogy in their article on teaching math for social justice (77 - 79). We categorize their principles of critical pedagogy into two sections: the learning outcomes and the educator’s process of student engagement. Regarding learning outcomes, they explain that the process of conscientization means students can perceive the contradictions of capitalism and class and take action against oppressive elements; the relationship between ideology, power and culture are understood and critique and resistance are used to examine and transform the social and pedagogical practices that maintain the status quo. Regarding the process of student engagement, the authors emphasize that the students’ background and culture should be valued. Additionally, teachers should use a dialogical approach that provides a space for curiosity while at the same time develops in students a critical ontology so they can see how they have been shaped by the dominant ideology. Finally, the classroom should be linked to the community, engaging with community members to revive democracy.

4.2 Value-Creating Pedagogy

We read critical theory as a mode of inquiry for acquiring knowledge. What Makiguchi’s pedagogy adds is a concrete theoretical foundation to apply that knowledge in a value-creative way. In contrast to the Kantian view, which held truth as a value in and of itself, Makiguchi distinguished between truth and value. Makiguchi argued that truth is neither positive nor negative in itself, but for knowledge to be valuable, it must be used to create beauty, gain and good. Beauty is the value of sensory response within a person, gain is anything that benefits the total vital experience of a person, and good is the societal equivalent of individual gain (Goulah and Gebert 124).

For Makiguchi, then, value creation goes hand in hand with the cognition of truth; otherwise, learning lacks a meaningful context. In this sense, Freire and Makiguchi are aligned in their critique of a banking approach to education, or what Makiguchi called knowledge transmission; however, because Freire’s critical pedagogy is a method of cognition of truth, there is no guarantee that the learner will be able to create positive value with the knowledge. In other words, it has the potential to be anti-value, value consumption or value creation.

Makiguchi’s theory does not reject the importance of the cognition of truth, but recognizes that truth is meaningless without the subjective evaluation by the learner, which is an emotional judgment. The process of incorporating both cognition and evaluation toward value creation, in terms of practical classroom application, can be understood through Makiguchi’s knowledge cultivation model. He broke the process down into stages:

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<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
<th>Stage 5</th>
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they find it necessary to seek a way to teach students that keeps them focused on their own growth.

the knowledge in a way that did not point fingers, render them powerless, or leave them exhausted.

Makiguchi’s Knowledge Cultivation Model (Vol 9, 310)

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Direct Observation</th>
<th>Thinking (Apperception)</th>
<th>Evaluation</th>
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Step 1, evaluation, begins with the learner’s initial evaluation of life. Learners know, for example, what things have subjective meaning to them, their likes and dislikes, but their values are not ordered in any particular way. Steps 2 through 4 cover the learning, or meaning making, process which is guided by the teacher. Direct observation happens through the learner’s first hand examination of a phenomenon. The learner then apperceives the cause and effect process, adding it to their already existing body of knowledge and values. Next, the learner evaluates their subjective relationship to what they observed and how it interacts with what they already know. Finally, the learner creates value of beauty, gain and good through real life application of their newly formed knowledge. The knowledge cultivation model and three components of beauty, gain, and good are crucial to understanding and applying Makiguchi’s theory.

Framed within the context of value-creating pedagogy, critical theory works as a mode of inquiry to facilitate cognition of truth. Critical pedagogy then is an attempt at application, which includes evaluative qualities that will differ depending on the teacher. Although it does not appear to be the intention of Freire or other critical pedagogues, critical pedagogy runs the risk of turning into value-consumption. Shoji Saito argues that value creation must come from creating something new where it does not already exist, further arguing, “merely memorizing our predecessor's words or what is written in a book is nothing more than 'value consumption' (kachi shohi)” (Goulah 35). Elizabeth Ellsworth asks of critical pedagogy, "Why doesn't this feel empowering?" She points out that the goal of critical pedagogy is couched in political ideology and social justice but “offers no sustained attempt to problematize this stance and confront the likelihood that the professor brings to social movements (including critical pedagogy) interests of her or his own race, class, ethnicity, gender, and other positions” (Ellsworth 309). In other words, there is a lack of recognition that the teacher is bringing his or her evaluation to the classroom and not necessarily connecting the knowledge to the student’s evaluation. On the other hand, the values of the student are embedded in Makiguchi’s value-creating pedagogy. Without it, teachers are not required to facilitate the student’s meaning-making process through knowledge cultivation and might instead do the value assessment for the students.

5. Dialogues: Bringing Justice to the Human Scale by Creating Value

Here we return to the dialogues with our interlocutors to reflect on our engagements with critical pedagogy, our moves toward human scale value creation and secure value creative social outcomes. We highlight two themes: first, the connection between cognitive aspect of knowledge and emotional evaluation that results; and second, acquiring the character of a value creator.

5.1 Creating value with critical pedagogy

In our first excerpts, our interlocutors express both the positive value they find in the knowledge gained from critical pedagogy and the recognition that they had to find ways to apply the knowledge in a way that did not point fingers, render them powerless, or leave them exhausted. Here, Melissa and her colleague discuss their agreement with the values of social justice but that they find it necessary to seek a way to teach students that keeps them focused on their own growth.

Melissa: You’ve critiqued critical pedagogy from a practical perspective as a teacher, and have argued that social justice can trigger anger and unnecessary conflict. But don’t you think there is value in learning about social injustices?
Colleague: Yes, we should be conscious of what is going on.

Melissa: What is the value of developing a critical consciousness?

Colleague: Awareness is a good thing, of course. Because I'm aware of the problem, I can choose that my actions do not go in that direction. And I know my students are oppressed. I know my students are having a very difficult time. Racism is real. Discrimination is horrible. But knowing that, having that knowledge, it does not necessarily follow that I must become an activist teacher and create activist students. I have other choices about how to be.

Melissa: It sounds like what you are saying is that a social justice agenda doesn't necessarily create value. It's not like we disagree with the aims of social justice educators, right? We want a just society.

Colleague: Yes, but pointing out and trying to change others is usually not successful. I'd rather do what I can do with my students so that we ourselves become the alternative.

Cassidy’s classmates were more explicit in sharing the value of what they had learned about social justice.

Cassidy: You mentioned earlier that learning about social justice made you cynical. When you got to that point, what happened to your desire to learn or try to address those injustices?

Classmate 1: My desire to learn about those issues stayed. I just pretty much decided that learning is the front lines of any revolution and that kind of tamed the drama because I had work to do, to learn as much as possible as deeply as possible.

Cassidy: It can be overwhelming to look at things from a systemic, abstract ideological perspective. What do you find valuable about taking a critical theoretical approach?

Classmate 1: For me the systemic abstract ideological perspective is a compass that helps me discern what needs to be done and how I want to go about it.

Likewise, Cassidy and her other classmate shared how, despite some negative feelings and the abstract nature of social justice issues, their education also empowered them.

Classmate 2: It's hard to be "an activist." I'm so over facebook activism. And I feel like I'm not doing enough, all the time. But I know to a certain degree this is just excuses.

Cassidy: You talked earlier about how exhausted you have felt at times. Did you feel you had the ability or power to take action after learning about social justice?

Classmate 2: I think as college graduates, especially SUA graduates, we're a triple threat. What I mean is that we have the skills to think critically, we feel an urgency to change the way things are, and we have a liberal arts degree that really lets us go anywhere after graduation. For example, I decided to completely go "off course" from my plan to pursue a graduate degree in public policy and instead pursue a graduate program in a field I have very little experience in: statistics. And this decision was informed by my courses at SUA where I learned about injustice at a systems level, as well as through an internship I had.
These two things taught me about injustices, and I personally found huge empowerment in using statistics to bring about change.

Cassidy: I agree. Even though I have felt powerless at times as a result of social justice education, being at SUA has given me the confidence that I have the skills to enact change and create value. So in terms of statistics, what about them makes you feel empowered? When I think of stats, I think of something almost abstract and far removed from the human - the real person.

Classmate 2: I’m throwing myself into this statistics path as the way I see myself having the most influence doing what I like doing. Statistics appeals to me because of how important it is for delivering social services. It lets us see what’s working and what’s not, how effective certain programs are.

Our conversations illustrate our search for a way to create value in response to the knowledge we have gained. From these examples we can see that we and our interlocutors value our critical consciousness but wrestle with how to use that awareness toward social good while still honoring our own personal well-being and needs.

5.2 Character development through human scale efforts

Developing the character of a value creator means to contribute to the community while also experiencing personal gain and creating beauty. As part of this effort, our interlocutors talked about how they shifted their focus to changing themselves. Whether explicit or not, this demonstrates a move toward value creation. First, Cassidy discusses how efforts outside the classroom shifted her classmate’s perspective:

Cassidy: Critical pedagogy can make us want to just get angry and point the finger outward - at the government, the structures in place, etc. It’s interesting that you have shared how you look inward at your own privilege instead. Why do you think that is? Is there something about Soka or value-creation that helps you look within?

Classmate 2: I definitely do the finger pointing too...but I also learned from my experience in the SUA Student Leaders Assembly (SLA) that I need to be a mature and respectful conversation partner and be okay with the idea that I don’t have all the right answers. That was helpful for me in learning how to check myself because much of our SLA work last year was damage control as a result of people not having respectful conversations.

With her other classmate, Cassidy addresses how they recognized what they can and cannot change:

Classmate 1: When I heard my friends going into melodrama about these issues [of social justice] I felt like it was important but distracting from what we can do. Instead, I got focused on efficiently investing my energy. I was exploring new sides of environmental issues which got me into economics, cultural studies, policy and eco-critical theory. Seeing ideology driving most science, policies and approaches to environmentalism kind of brought me to a place of ”It’s all ideology, so it can’t be escaped, just try to minimize the worst.”

Cassidy: Yeah, totally! In my Peace Studies class every issue came down to, ”Well, what we really need is a mind shift in the public.” Working on social justice from the human-scale,
practically speaking, means we can only make real progress if we connect to the people immediately surrounding us. It’s the human connection that changes people’s hearts. We can definitely help others to lead happier lives. It’s much more of a gradual approach than immediate revolution but I think it’s something that is more likely to be deeply transformational and create sustainable change.

From this dialogue, Cassidy and her classmates agreed that changing the scope to a human scale, looking inward and considering what steps they can take from today, does not mean losing sight of the bigger picture and goals. Instead, they applied that knowledge to become value-creators regardless of their current situation. From a classroom perspective, Melissa and her colleague consider a similar change of scope:

**Colleague:** Social justice education is agenda driven. When you buy into that discourse, you become one of those fighters. I refuse. This is not me. I’d rather look at myself and see what I can do, what I can change in myself and in my classroom.

**Melissa:** Are we saying that by pointing out what is wrong, it can sometimes hinder our ability to create value?

**Colleague:** Experience matters, so what kind of practice our students engage in class will construct their identity for their place in the real world. Do they see themselves as creators of value? Or do they see themselves as an oppressed victims who are struggling to fight for justice?

**Melissa:** To my knowledge, critical pedagogy doesn’t say anything about cultivating one’s character. Value-creating pedagogy focuses on the development of people of character, by which Makiguchi meant the having the ability to create something that contributes beauty, individual gain and social good.

**Colleague:** The character I want my students to develop is the character of creation. I want them to self-identify that they can create something, that they are creators of positive value. Based on what I know about Makiguchi’s writing, students have to go through the experience of creating value. They have to practice applying knowledge and skill to create value. They have to practice a lot so that they see they can actually create something positive, a positive effect. And that’s the character, that they will identify themselves as value creators. I think that’s the identity I want them to construct rather than that of an activist.

Powerlessness and empowerment lie in how a student or educator sees themselves in relation to their situation. Makiguchi’s pedagogy places students in the role of an active creator of value, which is empowering. As discussed throughout the dialogues thus far, a person situating themselves in the role of oppressed victim or small citizen in comparison to societal structures is disempowering. The role of value creator can be a challenging position to fill when considering lofty and sometimes selfless goals of social justice. No matter how kind-hearted a person may be, it is not in human nature to always act selflessly. This is not to say that people do not want to act for the societal good, but that what also needs to be considered are the values of individual benefit and beauty. Cassidy’s classmate who is pursuing a graduate program in statistics is doing so out of a desire to contribute to the well-being of society. It is important to realize that her classmate likes statistics, which one might say constitutes beauty for them, and will financially benefit from a job in the field. They are striking a balance of both individual gain, beauty and social good.

Although the primary intent of our research is to reconceptualize critical pedagogy on a human scale, we believe there is also work to be done on the topic of practical application of value-creating pedagogy for social justice. This application will serve as a way to understand how Freire’s concept of critical consciousness, Makiguchi’s knowledge cultivation model, value-creation pedagogy, and ideas set forth in his work on Community Studies can work together to empower students to create value from their critical awareness. This application is taken from Ikeda and Makiguchi scholar Jason Goulah (“Makiguchi and Composition Instruction”). Although it is just one application, it serves as an example of how one might use these pedagogies together for value-creation and empowerment on a human scale.

In the context of social justice education in the incredibly segregated city of Chicago, Makiguchi’s Community Studies writings on borders are especially interesting to consider. Makiguchi writes,

Boundaries of the school. What do you call the outline of the school grounds on a map or plan? What does this boundary express? What is its shape? If there were no other forces, wouldn’t it be best to expand the area of the school grounds as far as we like and into the most convenient shape? Is it not a shame that this strange and confining boundary exists and so many children have to squeeze into this narrow floor space, that we can’t expand it? From discussing the reasons for this, help children grasp the concept that a boundary is the place where different [unseen] forces collide, just like when the bodies of A and B come into contact and push against each other. Nor is this limited to schools: it is an important location in the home also. If there were nothing that protects and ensures boundaries, those who are weak would find themselves in progressively more confined spaces while the strong would continue to extend themselves and expand (Gebert 156).

Makiguchi sought what Goulah and Gebert call the epistemological empowerment of learners, thus regarding the subject of borders, Makiguchi might start by asking students about what the borders of their school, neighborhood and city are (120). Makiguchi draws students attention to the causes and effects students can directly observe in their local environment, the goal being that students start to consider the foundational concept of borders, asking what borders really mean: are they rigid? Who decided these borders? How are they enforced? Depending on the neighborhood and community, this discussion would differ. Applying this to a Chicago Public School classroom, the discussion might turn to the topic of gang territory. This is a connection to the students’ real lived knowledge. Makiguchi believed that understanding of these concepts “opens the way to a nuanced and multilayered ‘reading’ of the world” (Gebert 156). Looking at borders in this way also aligns with critical pedagogy goals of uncovering structural inequalities. Learners might begin to question why Chicago has the segregation it does. The process of value creation, however, does not simply stop at this cognition of knowledge or direct observation. To continue this process, the teacher might then introduce the history of Chicago housing policies, or other forms of development to aid the students in cultivating a more nuanced understanding, or evaluation, of borders.

Goulah expound on the potential applications of Makiguchi’s educational philosophies and practices in Chicago in his article addressing two competing trends of critical approaches within second language education. Goulah thinks through how Makiguchi would use the local geography and community of Chicago as a teaching method. He writes,

For instance, the Red Line [of the city’s public train] runs along Lake Michigan from the affluent White suburbs north of Chicago to the city’s economically depressed mainly Black neighborhoods on the south side. Disembarking at stations in between, students could directly observe Vietnamese and Thai enclaves in the north and the Chinese community in the south, each with different businesses, signage, architecture, smells, and human-nature
relationships, not to mention the differences these spaces offer historically, racially, linguistically, and socioeconomically ("Makiguchi and Composition Instruction” 36). Goulah goes on to say that this trip would also allow students to directly observe socioeconomic differences of the city ("Makiguchi and Composition Instruction” 36). Although Chicago is an incredibly segregated city, in terms of race and socioeconomic standing, there is also much diversity. Looking to critical pedagogy and value-creation pedagogy, this type of field trip allows students to directly observe the inequalities of where they live. Following Makiguchi’s knowledge cultivation model, the teacher could then facilitate classroom dialogue or exercises that allow the students to evaluate how they feel about what they have seen with the educator refraining from trying to persuade the student of their own subjective reading. This student evaluation then leads to the need for apperception of cause and effect. Why is the city the way it is? Where are areas being gentrified? Who are the people losing and gaining? This apperception will add information into their existing body of knowledge. In the final step of the learning stage, the student then evaluates again their subjective relationship to this new information and how it interacts with that they already know. Next, the teacher must then facilitate some sort of activity that would allow the students to create something contributive and new from the knowledge they have gained based on their own evaluation, not based on the teacher’s values. One possibility could look like mapping out the city as they experienced it, such as Humara Bachan’s campaign, which works with Indian students to explore the slums in which they live and then create a map of it with new ideas for how to improve the living standards of their community (Sturgis). Mapping is not the only option; educators might consider working with their students on a video or art project. What is most important is that the final step of value creation be present. Where value-creation is present for the student, empowerment accompanies it because whatever the activity or project at this point is something the student values. There is agency in that. As a student experiences the process of creating something from their knowledge, the importance of what they know and how its application can create something of individual and societal value, their desire to learn grows as well as their confidence in their ability to apply it. This application is not the only way but offers us a window into the potential for value-creation that is present when we consider the goals of critical pedagogy from the lens of the human scale and value-creating pedagogy.

7. Conclusion: Applying Critical Pedagogy on the Human Scale to Transform Society

Our hope is that this paper serves as a way to open up dialogue on how value-creating pedagogy can transform society through human-scale education. There is much more work to be done and ideas to be discussed. As educators and students we can begin today, however, to shift our thinking to the human scale and reconceptualize what it means to work toward sustainable change. Both authors have had experiences in classrooms that may not have an explicit pedagogical application but have an ethos of Soka. They have also experienced explicit application of value-creating pedagogy. In our conclusion, we share how we’ve seen both approaches impact classroom curriculum to empower students and teachers.

Melissa’s colleague directly applies the knowledge cultivation model to his curriculum. Because he teaches Japanese language to K-8 students, his human scale approach focuses on the character development of value creators. For example, he might teach his students Japanese through learning how to prepare sushi. Students already come to the classroom with their evaluation of what foods they like and do not like (Step 1). Then he takes them to a sushi restaurant where the sushi chef demonstrates how to make sushi, and the students taste what is valued in the community of sushi experts (Step 2). Next, the students repeatedly practice making sushi for themselves and others, apperceiving the cause and effect processes and evaluating the results (Step 3 and 4). During that repeated practice, the students gradually get better and better at their use of Japanese. Finally, they use the knowledge they have acquired to create a new type of sushi of their own invention (Step 5) along with a menu that explains in Japanese what they have made. The students are empowered because they they are free to create something that is their own value, not
the value of the teacher. This resonates with what Ikeda writes of his efforts to focus education on helping people manifest their abilities and make contributions to a global community. As Ikeda states in his dialogue with Mikhail Gorbachev, “Pedagogic modes constitute a major difficulty. Teachers must never condescend. All kinds of education – scholastic or social – must be built not on compulsion but on voluntary principles. In other words, education must arise from internal needs” (Gorbachev & Ikeda 104).

During her first year at Soka University of America, Cassidy took a class titled “Nature and Humanity” which, although not explicitly framed around value-creating pedagogy, embodied the ethos of Soka, or value creation. The weeks were broken down into themes in which we listened to lectures on the details and systems. The class topics started with the things that feel very far removed from our everyday life and then slowly connected the dots until we arrived at our lived experiences. These lecture classes were followed by in-class small group activities where we applied the newly gained knowledge in ways there were relevant to many of us. Often the class would take a field trip into the local community to experience first-hand what we were discussing in class. Toward the end of the semester, the class covered sustainable development as a response to societies built around a car culture and unsustainable habits. The class traveled a short distance to the local town center. As we walked through the center we experienced, on a human-scale, what it means to have an unwalkable, unsustainable development. Finally, we worked on a small group project to redesign the town center sustainably but within realistic confines like budget and building regulations.

Our final project first addressed the content, which could be seen as raising our critical consciousnesses, but then went beyond that by bringing it to the human scale as we experienced the implications of that information. Although we were not in the position to implement them, we were able to come up with realistic solutions to sustainability issues. This process brought structural issues to the human-scale and empowered us by applying our knowledge toward value-creation. We contend that the ethos of Soka at SUA impacted this class and process, thus for educators who may not be able to implement value-creating pedagogy explicitly it is important to recognize that the value-creation process can still be present as long as the value creative philosophy and attitude is there.

This paper serves to bring into question the application of critical theory within the classroom. One of the intentions of this essay is to recognize the risk of value-consumption in the application of critical pedagogy in terms of cultivating a sense of powerlessness while not fostering students’ value creation. Ikeda writes, “We have to educate children and adults alike so that no one is made to feel powerless. We have to provide nourishment for the heart. And we have to create true human solidarity. This will be the key to the present age” (Ikeda WLS Vol. 3 61). As research moves forward, we argue that it should be concerned with the application of critical theory toward student empowerment through Makiguchi’s educational philosophies and value-creating pedagogy.

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Education for Social and Environmental Peace: Musicking Emergent

Michael Golden

Abstract

My focus in this paper will be to integrate ideas about music and education, not as reified objects or commodities, but as active human processes and ecological behaviors. Specifically, I will consider them in the context of the emergent potential of musicking as education which might be directed towards fostering social and environmental peace.

In his 1996 address at Columbia University, Daisaku Ikeda outlined three points essential for education for global citizenship, including awareness of the interconnectedness of life, appreciation for difference, and wide-ranging imaginative empathy. Peace studies scholars such as Johan Galtung have developed the idea that the deep-level divisions in our ways of thinking form the root causes of violence of all kinds in both social and environmental realms, while analysis of ethnomusicological studies from around the world suggests that people experience and value musicking as something that connects them with their environments. Bringing these ideas together, I will explore musicking in the context of the Santiago theory of cognition, showing the biological and ecological bases for music’s potential to connect us across divisions, and thus to further education for peace.

1. Introduction and Overview

In his 1996 lecture at Columbia University, Daisaku Ikeda suggested three “essential elements of global citizenship” which should be the goals of education: the wisdom to perceive the interconnectedness of all life, the courage to grow from, rather than fear or deny difference, and the compassion to maintain an imaginative empathy (55).

Over 80 years ago, John Dewey wrote, “Mountain peaks do not float unsupported; they do not even just rest upon the earth. They are the earth in one of its manifest operations” (2). Dewey’s point was that art too is a manifestation of the operations of life on earth, not “floating unsupported” in some abstract mental realm.

My purpose in this paper will be to explore connections between the seemingly disparate notions suggested by these two authors, and to develop from those connections a fresh perspective on musicking, one which suggests the possibility that it may be a useful practice in the pursuit of education for social and environmental peace and promoting global citizenship. The foundation of this endeavor is the conviction, underlying both Dewey’s and Ikeda’s ideas above, that a holistic, integrative view of phenomena such as social and environmental violence but also of musicking and of education can lead to a deeper understanding and more valuable and effective actions in response to the problems of the world.

Much of my work in this arena has been published elsewhere, so I will present here just an overview and refer the reader to my article in the Journal of Peace Education (Golden).
After defining some terms, the first step will be to delineate the multi-level linkage between the ecological and social realms in terms of violence and peace. I will next present a conception of human musicking as essentially ecological behavior, supported by evidence from ethnomusicology. This in turn suggests bringing insights from ecology and neuroscience to bear on our understanding of musicking, and then back to education. While much of this paper is necessarily theoretical in nature, I will refer to some practical ideas about application in the end.

2. **Terminology**

“Musicking” is a term brought back into use in recent decades, following the work of Christopher Small, who wrote, “Music is not a thing at all but an activity, something people do” (2). The advantage of this approach for this paper is twofold: it is behavioral or operational, and it is culturally inclusive, transcending the limitations of centuries of Eurocentric musicology.

“Ecology” is used in many ways today, sometimes meaning study of any complex system or social institution, sometimes as a substitute for “nature” or “environment.” Although I will use it primarily in its original sense (the study of the relationships among living things and their environments), in the context of musicking, I will extend the sense of “study” beyond the scientific.

“Education,” I will not be focused on what occurs in schools (although I hope these ideas might be useful there), but something more like what Gregory Bateson described as “learning about the ‘self’ in a way that may result in some ‘change’ in the ‘self’” (124). I will return to this topic in the context of ecology and neuroscience later.

3. **Social and Physical Environments: Links and Structural Relationships**

The linkage between war and ecosystem destruction is well-understood (Mische 38; Amster); their effects form a vicious circle. Problems in the ecosystem caused by human degradation of the environment lead to stresses and insecurities that often result in war, and war causes massive, lasting degradation of the environment and damage to the ecosystem. Further, peace educators have for some time recognized the importance to their work of both the methods and results of ecological ways of thinking (Reardon and Nordland).

What I want to suggest here is that at a deeper level, there is a homologous relationship underlying the violence we see in these two realms, having to do with our thinking, or the way we understand ourselves in the world. Johan Galtung uses the term “cultural violence” to describe patterns of thinking underlying manifest violence, and describes the source of this violence as “fault-lines,” “conceptual dichotomies in people’s minds” that divide us from each other (Urbain 6-7). Similarly, Sauvé and Orellana discuss “three main ruptures that underlie the current socioenvironmental crisis:”

…the rupture between individuals within a society, in the form of social disparity, inequity, abuse of power, and so forth; the rupture between societies, which both reflects and reinforces the first rupture; and the rupture between human beings and Nature, based on the denial of their own belonging to the web of natural life. The third rupture stems from the same set of attitudes and values as the first two, and all three feed back into each other, affecting each other synergistically (99).

These authors propose as the solution, “the extension of our sense of belonging and responsibility to the great network of living beings and the development of an ecocentric ethic” (102-3).
If divisive ways of thinking engender violent behaviors in both realms, it follows that peace education needs to include not only knowledge of environmental issues (e.g., sustainability, environmental security and justice), but a fundamentally ecological approach; it should aim at fostering awareness of our interconnectedness and extending our sense of identity, and it is with this in mind that I turn next to consideration of musicking.

4. Musicking as Ecological Behavior

Here is a statement of the conception of music I’m proposing:

Musicking is an activity of human beings involving sound and time, the function of which is to facilitate and enhance our connection with our environment. Environment here includes three mutually-related realms or domains: the social realm, the natural/physical world, and, as understood in many cultures, the metaphysical or spiritual realm.

This definition is not as arbitrary as it might appear. A meta-analysis of ethnomusicological studies from cultures around the world reveals this as a common element in the descriptions of the numerous and diverse functions that music serves (Golden 4-5). In different cultures and contexts, the precise significance of “connection with the environment” varies, including a range of meanings with some subtle distinctions: “identify with,” “harmonize with,” “appreciate,” “manipulate or influence,” “communicate with,” “become part of, or one with,” “understand,” and so on. In each case, however, there is some sense of learning, exploring or establishing the relationship of the people to their environment; hence my use of “ecological” to describe this behavior. Furthermore, in each case the sense of identity of the musicking humans is expanded into or integrated with the world around them, in a way that calls to mind the above quotation from Sauvé and Orellana.

5. Embodied Cognition: The Santiago Theory

The work of Chilean neuroscientists Maturana and Varela (which is commonly referred to as the Santiago theory of cognition) is particularly useful in exploring ecological issues because it locates the human processes inherent in both musicking and learning in the context of the development of all life on earth, enabling us to look at complex issues through the lens of coherent organic principles. I have elsewhere provided an overview of the relevant components of this theory, to which I shall have to refer the reader (Golden 6). For purposes of this paper, the four most crucial of these are 1) the observation that all living things require a semi-permeable membrane, which is continually maintained and reproduced by the same processes (autopoiesis) that it enables, 2) the claim that cognition is essential and common to all life (i.e., “mind” is a universal and embodied process among living things, with or without a brain), 3) the observation that each organism “brings forth” the world of its environment (i.e., that the organisms determines the features of its environment according to its needs and capabilities), and 4) the concept of “structural coupling,” which describes the phenomenon that occurs when there are recurring interactions between organisms and their environments, including other organisms.

The Santiago authors argue that the cognition by which bacteria detect the sugar gradient in their environment and are able to move so as to sustain life is part of a continuum in common with our own mental processes. Each bacterium brings forth a world, as does, for example, each neuron in our own complex nervous system. When there are recurring interactions between organisms, each can trigger changes in the other, but the internal structure of each organism
determines the nature of its own changes. As long as the interacting organisms don’t disintegrate, they form a structural congruence, or coupling.

In the course of the “natural drift” of living things towards increasing complexity and meta-cellular organisms with nervous systems, the range and flexibility of responses to the environment available to organisms greatly increase. The neurons in our bodies interact with three different sorts of environments: the world outside our bodies (as senses), the motor system, and most of all, especially in our brains, with other neurons. Maturana and Varela note that this results in tremendously increased structural plasticity, the ability of the human organism to modify itself under structural coupling. The intense interconnectedness of a complex nervous system opens “new dimensions of structural coupling for the organism, by making possible in the organism the association of many different internal states with the different interactions in which the organism is involved” (175). In other words, organisms with sufficiently complex nervous systems bring forth a complex internal world, consciousness, perhaps, along with the external world, and most significantly for our study, link them together.

6. Linking the Santiago Theory with Musicking

Although the Santiago authors make no mention of music, we can recognize without much trouble the relevance of their theory to the themes of Ikeda and Dewey cited earlier, and the potential applications to musicking and education follow from that (Golden 7-10). For example, the understanding that our cognitive and physical abilities and behaviors, including those engaged in musicking, are part of a continuum encompassing all living things precisely supports Ikeda’s call to recognize the interconnectedness of all life, and Dewey’s argument that the “mountain peaks of art” are manifest operations of the earth.

Structural coupling is a particularly important concept here, as it explains how recurring interactive behavior can modify and develop the internal structures of the organisms involved, especially those with nervous systems with a high level of plasticity. While the initial anatomy of the brain may be determined by inherited genes, the network of synapses is formed and strengthened by the neurons’ own activity, which in turn is “selected” by behavioral experience. Recent research in neuroscience supports the notion that musical behaviors influence brain development, especially in connectivity between different brain areas (Golden 8). Musicking engages multiple systems – auditory, temporal, motor, emotional and so on – and in particular, inter-hemispheric connections across the corpus callosum. In other words, musicking modifies our neural networks in the direction of what Gerald Edelman calls reentrant connectivity (Edelman and Tononi 82-86). This suggests that musicking may be understood as an activity that takes advantage of structural coupling to foster, enhance and conserve various human potentials, both neurobiological and social.

Another aspect of structural coupling involves the importance of early “proto-musical” interactions between infants and caregivers, especially mothers. The altriciality of our species makes the development of the attributes we consider most human all the more dependent on behaviors such as musicking. The attractiveness of musical behaviors that enhance development of brain functions again suggests that musicking emerges from characteristics of our ecosystem.

We can now also return to my point that musicking connects “us,” (here our brought-forth inner worlds) to our environments, the brought-forth outer worlds. For our species, of our five sensory channels, the auditory seems particularly well-suited to active connectivity and coupling (Golden “On Music, Interconnection and Consciousness” 35-37). As living things, we are of course always connected to our environments. Musicking serves an intentional process in
which we actively seek to explore, to know, to connect with the three domains of the environment, by linking them with our inner states. Note that it’s not necessary to claim that musicking is the only such behavioral channel, but it is an effective one. The Santiago theory provides an explanation of the diverse but related cultural concepts identified by ethnomusicologists; these ways of thinking are not just metaphorical cultural ideals in the poetic or artistic sense, but also expressions of neurobiological phenomena. Penelope Gouk writes:

There is, it seems, an inescapable relationship between the way we configure our inner and outer worlds, not only as individuals but as larger communities and even nations. “Music” (and all the activities this term may encompass) is itself a powerful expression of that configuration, as well as a means of altering it (23).

Human musicking is not “floating unsupported” but manifests the operations of our ecosystem, from which it has emerged.

7. Linking the Santiago Theory and Musicking with Peace Education

If fault-lines or ruptures in our thinking are the root causes of violence against fellow humans and the environment, then logically the role of peace education should be to encourage and enable people to adjust their own thought patterns such that “self” and “other” are interconnected rather than dissociated. Ecological thinking is thus both a goal and a guide to practice. In structural coupling, we have an ecological non-coercive model for promoting the awareness of our interconnectedness with our natural and social environments (Golden 12). Further, the Santiago authors consider communication to be the coordination of behavior among organisms, not the transmission of information; this approach seems entirely consonant with the ideas of Ikeda and Dewey about education (Garrison et al.).

This idea about communication in general suggests a fresh explanation of what it is that music communicates, and the possibility that musicking’s well-documented ability to foster coordinated behavior among humans can go beyond language in its potential to bridge fault-lines or ruptures.

Another potentially useful link becomes apparent if we consider the role of the “membrane function” not just in the chemical or biological sense, but in the context of individual and social identities. It’s virtually universal that people feel that musicking connects them to something larger than themselves. In other words, musicking can foster the awareness that, although bounded and, to a necessary extent, separated from the environment, an individual and/or group can also change perspective and grow beyond the fault-line (Golden 9-10).

8. Concluding Thoughts About Practice: Bringing Musicking to Peace Education

I have elsewhere suggested some principles and practical possibilities for implementing musicking as education for peace (Golden “Musicking as Education” 11-12). The main point I want to emphasize in concluding here is that, while the study of or about music can be valuable in expanding our horizons, the doing of music has the greater potential to foster learning in the sense that Bateson referred to. Musicking has emerged as a manifestation of the deep operating principles of life itself, and if implemented wisely in the cause of education for social and environmental peace, can be a great source of value.

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Reimagining the Aim of Education: Transcending the Dominance of Standardization and Accountability to Reshape Teaching Practice and Assessment

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Michio Okamura

Abstract

In the last two decades, the purpose of education in the U.S. is increasingly defined as preparing students to become competitive workers in the global economy, and their value is measured by standardized tests. Two Japanese educators, Tunesaburo Makiguchi (1871-1944) and Josei Toda (1900-1958) also lived during a time when educational goals were increasingly tied to cramming knowledge needed to pass the secondary school entrance exams. As a principal and teacher in a highly restrictive Japanese schooling system and even during the heightened political oppression during WWII, they sought to reimagine the aim of education as students' happiness, and thereby changing the teaching method while still helping students achieve within the system. In this paper, we explore the ideas and practices of Makiguchi and Toda as a way to challenge the hegemonic discourse and inform our own teaching practices. Makiguchi's value-creating pedagogy and Toda's practice at his private school in particular provide us with an alternative framework to think and act in today's standardization and accountability era. By drawing from their pedagogy and practices, we hope to inspire an attitudinal revolution to reimagine the aim of education and use those reimagined aims to guide our instruction and assessments.
Soka Education and Global Health in Action: Developing a Multidimensional Health Program for the Modern Model Residential School in Lalu Village, Kalikot District, Nepal

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Abstract

Research in previous Soka Education conferences has begun to focus increasingly on the role of Soka Education in medicine and public health (Choudhury, Tsuchiya, and Hirai). A group of SUA alumni volunteers with professional training in medicine, public policy, epidemiology, and public health has decided to turn this research into action. In collaboration with current SUA student, Prakash Bista, we have set out to develop and implement a sustainable health program at Modern Model Residential School (MMRS), which Bista established in his home district of Kalikot in rural Nepal.

MMRS is located in an extremely remote, rural and impoverished area in Nepal. While the school has many innovative attributes, including a solar energy system, full internet access, and composting toilets, its students usually grow up experiencing many deficiencies related to poverty, gender equity and equality, health education, malnourishment, and malnutrition. Our project design process includes a health needs assessment of the school and developing projects ideas based on well-recognized best-practices (United Nations Education, Scientific, and Cultural Organization). We also intend for this project to provide undergraduate students from Soka University of America (SUA) and possibly other universities with an opportunity to learn about global health research, ethics, and project implementation guided by Soka philosophy, in an immersive setting.

Through research of the available literature on school-based health interventions and the information we gained from interviews and questionnaires with key individuals at MMRS, we identified five possible projects: 1. Hand-washing education and resource provision, 2. Provision of nutritious meals and snacks, 3. Garden for sourcing legumes and vegetables, 4. School buffaloes for sourcing yogurt and whey, and 5. Vitamin supplementation. We analyzed these projects based on six criteria: address an urgent health need of the school, provide evidence-based solution to an identified health problem, be logistically and financially feasible, be culturally acceptable, provide positive
externalities for the community, and provide opportunities for teaching global health to undergraduate students. We weighted each of these criteria based on importance and scored each project on a scale of 1 to 5, where 1 represents “does not meet criterion” and 5 indicates that the project “fully meets criterion.”

Given the analysis of the projects, we recommend that MMRS prioritize addressing their health needs first with the hand-washing and school meal and snack project. These can later be supplemented with the garden and buffalo projects that can contribute to the provision of nutritious meals, and even less of a priority would be vitamin supplementation. Moving forward, we plan to work with the leadership of the Modern Model Residential school to begin to identify specific budgets, funding sources, key stakeholders and resources for each project with the goal of beginning implementation of these projects this year.

I. INTRODUCTION

Research in previous Soka Education conferences has begun to focus increasingly on the role of Soka Education in medicine and public health (Choudhury, Tsuchiya, and Hirai; Mills, “The Future of Global Physician-Citizens: Why and How Soka Should Improve Medical Education”; Mills, “Soka Education and the Doctor-Patient Relationship: Engagement, Education, and Empowerment”). A group of SUA alumni volunteers with professional training in medicine, public policy, epidemiology, and public health has decided to turn this research into action. In collaboration with current SUA student, Prakash Bista, we have set out to develop and implement a sustainable health program at Modern Model Residential School (MMRS), which Bista established in his home district of Kalikot in rural Nepal.

MMRS is located in an extremely remote, rural and impoverished area in Nepal. While the school has many innovative attributes, including a solar energy system, full internet access, and composting toilets, its students usually grow up experiencing many deficiencies related to poverty, gender equity and equality, health education, malnourishment, and malnutrition. Soka education founder, Tsunesaburo Makiguchi writes, “Health is the physiological foundation of happiness” (Makiguchi and Bethel). Makiguchi understood that the physical wellness of students is necessary for successful educational experiences and he made personal efforts to address these needs. Daisaku Ikeda described, “For students who were too poor to bring packed lunches from home, Mr. Makiguchi raised funds to provide meals and snacks” (Ikeda) (Ikeda, “The Dawn of a Century of Humanistic Education”). With this legacy in mind, our group has aimed to create a project that will address aspects of the health and health education needs of the children at MMRS. Our project design process includes a health needs assessment of the school and developing projects ideas based on well-recognized best-practices, with a special emphasis on guidance set forth by the United Nations Education, Scientific, and Cultural Organization (UNESCO) Program on “Focusing Resources on Effective School Health” (United Nations Education, Scientific, and Cultural Organization).

The second major purpose of our project is to provide undergraduate students from Soka and possibly other universities with an opportunity to learn about global health research, ethics, and project implementation guided by Soka philosophy, in an immersive setting. We have designed health interventions for MMRS such that undergraduate students, under the guidance of our team and in partnership with the school leadership, can participate in the implementation of projects and help to monitor and evaluate the success of our endeavors. This attribute of our program accords with Makiguchi’s emphasis on education “in real-life settings.” (Ikeda, Soka Education for the Happiness of the Individual). Through this experience, we aim to help students get exposure to well-constructed global health projects, teach the importance of thoughtful collaboration with local communities, and acknowledge and avoid the pitfalls of “voluntourism” that can often result from such projects.

Overall, our program will allow for us to explore the practical application of Soka Education philosophy at the elementary school level and the university level within the scope of public health
and medicine. We have formulated our research paper into a proposal document, which includes background information on MMRs and Kalikot district, a literature review on school-based health intervention programs, information collected from key informants at MMRs, project proposals including goals for monitoring and evaluation of our program, criteria for analysis of these proposals, recommendations for what projects to implement, and a plan for next steps of our project. We believe that this application of Soka Education research aligns perfectly with the call to action we find in this year’s Soka Education Conference theme of “Transforming Society Through Human Education.”

II. OVERVIEW OF KALIKOT DISTRICT AND THE MODERN MODEL RESIDENTIAL SCHOOL

**Background on Kalikot District**

Situated in the erstwhile Mid-Western Development Region of Nepal, Kalikot district has consistently been counted among poorest districts in Nepal with the lowest Human Development Index (HDI=0.374) of any district in Nepal between 2001 and 2011 (P. Sharma, Guha-Khasnobis, and Raj Khanal). Kalikot was also one of the most severely affected during Nepal’s civil war (1996-2006), facing high rates of casualties among its population. The region continues to face severe accessibility issues and is connected to the rest of the country via a highway that until recently had been seasonally impassable (United Nations Field Coordination Office; Basnyat; Bista). Additionally, different regions within Kalikot have also been identified as being at high risk of landslides, earthquakes, floods, epidemics, and fires (United Nations Field Coordination Office).

In general, health and education indicators in Kalikot are worse than the rest of the nation. The average per capita income in Kalikot district is PPP$578. Residents have formal schooling for two and a half years on average. In 2011, the overall literacy rate in Kalikot was 58%; disaggregated, the female literacy rate was 46.5% (Central Bureau of Statistics). In Nepal, gender, caste and ethnicity continue to be key factors contributing to socioeconomic status (Sharma, Guha-Khasnobis, and Raj Khanal). Even within the Kalikot district these factors persist in stratifying the populace.

**Kalikot District Health Information**

Professional health care provision is severely limited in Kalikot. The largest hospital, which offers basic health care with three emergency room beds and fifteen inpatient beds, is located in Mannma, the district headquarter. The hospital is chronically understaffed and limited in resources and supplies (Basnyat). In addition to this hospital, Kalikot also has one primary health center, thirteen health posts, fifteen sub-health posts, sixty-eight outreach clinics, and two ambulances (United Nations Field Coordination Office). These posts, however, are unreliably staffed and may often lack personnel entirely (Bista).

According to anecdotal evidence from a doctor who served at the district hospital, the most common health complaints observed at the facility included acute gastroenteritis, fever of unknown origin, trauma and fractures, chronic obstructive pulmonary disease, upper and lower respiratory tract infections, abdominal pain, and obstetric emergencies. He also noted that gastroenteritis was commonly seen in both children and adults during summer and monsoon, and highlighted the importance of oral rehydration solution in managing this condition (Basnyat). According to another source, the most common health complaints in the district are headaches, intestinal worms, scabies, and amoebic dysentery. In addition, food security and malnutrition are important concerns in the district – stunting and anemia were prevalent in the majority of children under the age of 5 years (United Nations Field Coordination Office). It is also worth noting that most households lack on-site access to drinking water, and girls and women are usually responsible for fetching water for the family (United Nations Field Coordination Office).

**Modern Model Residential School Overview**
Kalikot is located northwest of Nepal's capital city, Kathmandu. Transport from Kathmandu to the MMRS in Kalikot takes approximately 17 hours. This requires a 1-hour plane trip to Nepalgunj, an 11-hour drive, crossing over a river on a cable crossing, followed by a 5-hour hike on foot to Lalu village, where MMRS is located. Recent infrastructure development has allowed for the main road leading toward the cable crossing to be operable for most of the year (Bista).

MMRS serves slightly more than two hundred students and currently provides education up to the third grade due to government policies restricting grades levels on new schools. Upper grade levels will continue to be added in subsequent years in accordance with these national policies. MMRS students currently range from three to eleven years old; the upper age of the student population will continue to increase with the addition of grade levels. Girls make up approximately 30% of the school's enrollment. The vast majority of the students live at home with their families. Currently only five girls live at the school; these girls are either orphaned or come from extremely low-income single-parent homes (Bista).

The academic calendar follows the Nepalese calendar. Students attend school approximately 11 months out of the year. School is in session all day Sunday – Thursday and a half day on Friday. Annual school fees are approximately 100 USD for those who can pay. This covers books, uniforms, and one snack per day. Families who cannot afford the fee provide in-kind goods or services, such as carrying supplies from the river, assisting in construction or repair of the school facilities, or gathering wood. The school also makes profit from its goat farm and print and copy center. The school does not receive any government funding (Bista).

The school leadership consists of two committees: 1. The Executive committee, staffed by Prakash and four other people from the village and 2. The School management committee, which consists of parents of students, one teacher representative, a principal, and a local education activist. The teachers at the school are mainly from Kathmandu and other larger cities in Nepal and have been assigned to MMRS through one-year teaching fellowships. These teachers are paid and receive room and board. The school also employs a cook, administrative assistant, and a security guard. At times, international students will serve at MMRS as teachers. Currently a graduate of Dartmouth University is teaching at MMRS via the Lombard Public Service Fellowship (Bista).

The school has established energy and sanitation infrastructure. The school's energy is supplied by solar panels that produce a surplus of energy to power the school's facilities, which include 20 laptop computers having access to internet. The school is located near the village's natural potable water tap. Tanks at the school store water for cooking, drinking, toilets and for handwashing. The school is equipped with flushing toilets connected to composting tanks. The biogas from the toilets is used for cooking fuel (Bista).

The main food sources for individuals in Kalikot are from buffalo yogurt and whey, maize bread, lentils, and occasionally rice. While Lalu village has farms where legumes are grown, rice has to be imported and can therefore be costly. Meat is costly and is usually eaten only once or twice a year. At school, children typically eat one snack per day which often consists of instant noodles. The children are expected to receive full meals at home. The five students who live at the school receive meals at school (Bista).

The village's primary health post is located next to the school and is staffed with health assistants. A medical doctor is supposed to be located 3-4 hours walk away, but the post is usually vacant. The Kalikot district hospital is about an eight-hour walk away. When students become ill, they usually go to the health post in the village. Anecdotally, the most common cause of illness among the students is viral respiratory infections, similar to students in most high-income countries. Students receive standard vaccine regimens via government sponsored Female Community Health Volunteers (FCHV), whom are commonplace throughout Nepal.

*Key Informant Insights on Priorities for Health Interventions*
We administered a questionnaire (Appendix I) to several key informants at MMRS to elicit their insights on the perceived health situation, needs and priorities for the school's students. We received two complete responses. These individuals identified nutrition, sanitation and hygiene, and poor access to health care as primary issues of concern for students. According to one of the respondents, colds, fever and stomach ache were the most commonly cited reason for health-related absences from school. Underprivileged students in particular were seen as being nutritionally deficient since they often go hungry due to inadequate food at home. One key informant also noted that although the school emphasized personal hygiene, most students have poor access to hygiene in their home environments. Among the potential types of health interventions based on “FRESH” priorities that could be implemented at MMRS, both key respondents’ priorities converged on “skills based health education” and “school based health and nutrition services.” (United Nations Education, Scientific, and Cultural Organization). In addition, one respondent identified menstrual hygiene as a key future concern for female students.

Some potential barriers to implementing a health intervention identified included a lack of skilled health professionals at the school, poor awareness among parents, low resources, and inconsistent implementation. On the other hand, some opportunities for the implementation of a health program included supportive parents and community members, as well as the potential for the intervention to enhance the students’ and their parents’ quality of life. Both respondents emphasized the need for any health intervention to also involve the students’ families, which they see as essential to the success of any such program. Although time constraints prevented us from being able to elicit input from more key informants, we believe it is important to take these suggestions and concerns into account while designing an intervention that is collaborative and responsive to local needs.

III. REVIEW OF SCHOOL-BASED INTERVENTIONS AND GUIDING FRAMEWORK

Historically, schools have been recognized as a key location to improve the health and nutritional status of school-aged children. In low-resource settings, however, health interventions often focused on children under five years and post-pubescent adults, leaving students as one of the most underserved populations (Strickland). Developing and implementing an effective school-based health program is therefore of vital importance to ensure that students stay healthy and develop their full potential. This section provides an overview of a guiding framework and empirical evidence from school-based health interventions to inform the development of a rSoka Health pProject at MMRS.

*Focusing Resources for Effective School Health (FRESH) Framework*

In 2000, several international health organizations, including the United Nations Children’s Fund (UNICEF) and the World Health Organization, proposed a guiding framework—the Focusing Resources for Effective School Health (FRESH)—to promote school health widely and systematically. The FRESH framework highlights four core components for action: 1) health-related school policies; 2) safe water and sanitation; 3) skill-based health education; and 4) health and nutrition services (UNICEF). This framework also emphasizes the importance of collaborations within and between ministries, schools, and communities, suggesting that multiple partners and activities are essential to improve students’ health status (UNICEF, 2012). Since the launch of the FRESH approach, many school-based health and nutrition interventions have been implemented (see Table 1).

Based on the global momentum and national needs for school-based health programs, the Government of Nepal also adopted the National School Health and Nutrition (SHN) Strategy in 2006 (Government of Nepal, 2006). The development of this strategy developed political support for SHN interventions in Nepal.
<table>
<thead>
<tr>
<th>FRESH Categories</th>
<th>Intervention Activities</th>
<th>Expected Outcomes</th>
</tr>
</thead>
</table>
| **Policy**       | 1. Child rights, avoidance of discrimination and stigmatization, gender, sensitive, child centered  
                  2. Inclusion of pregnant girls and mothers in education  
                  3. Enforcement of code of practice for teacher behavior zero tolerance policy  
                  4. Collaboration between health and education sectors | 1. Inclusion of all children  
                  2. Specific inclusion of girls  
                  3. Avoidance of harassment and abuse  
                  4. Effective implementation |
| **Environment**  | 1. Access to safe water  
                  2. Hand washing  
                  3. Provision of sanitation  
                  4. Gender-separate sanitation  
                  5. Garbage disposal | 1. Reduced infection  
                  2. Reduced drop out of adolescent girls |
| **Education**    | 1. Curriculum addressing health, hygiene, and nutrition  
                  2. Life-skills program  
                  3. Peer education program  
                  4. Health-promoting clubs | 1. Improved knowledge and skills to promote good health, hygiene and nutrition  
                  2. Lifelong positive behaviors such as avoidance of HIV/AIDS and substance abuse  
                  3. Reinforcement of positive behaviors |
| **Services**     | 1. Deworming for intestinal worms and schistosomiasis  
                  2. Prompt recognition and treatment of malaria  
                  3. Insecticide-treated nets  
                  4. Micronutrient supplements  
                  5. Breakfast, snacks, and meals  
                  6. First-aid kits  
                  7. Referral to youth-friendly clinics  
                  8. Counseling and psychosocial support | 1. Reduction in worm infection  
                  2. Reduction in impact of malaria  
                  3. Reduction in incidence of malaria  
                  4. Reduction in anemia and malnutrition  
                  5. Avoidance of hunger  
                  6. Management of injuries  
                  7. Access to specific treatment  
                  8. Mental health |

Table 1. Common school-based intervention activities. Source: (Bundy et al.)

**Empirical Evidence: School Health and Nutrition (SHN)**

Although the empirical evidence of SHN interventions in Nepal remains limited, a recent study suggested that school-based programs are associated with improved health knowledge and outcomes (Shrestha et al.). Shrestha et al. reported that a SHN project was conducted in two districts of Nepal from 2008 to 2012, and intervention activities included but were not limited to health checkups, vitamin supplementation, deworming, school feeding, and provision of safe drinking water and sanitation. One year after the completion of intervention activities, the authors assessed students’ health knowledge, hygiene practices, and health outcomes. The analysis revealed that students from
interventions schools were associated with 50% and 33% lower odds of worm infections and diarrhea respectively than that of students from comparison schools (Shrestha et al.).

**Empirical Evidence: Hygiene Promotion**

Hygiene promotion is also a key intervention activity that has been incorporated into many school-based programs. A great deal of literature confirmed that hand washing with soap can reduce the risk of diarrheal diseases (Curtis et al.; Cairncross et al.; Curtis and Cairncross) and respiratory infections (Rabie and Curtis). Curtis and Cairncross, for instance, revealed that diarrheal risks can be reduced by 42% to 47% through proper hand washing with soap. By comparing the effectiveness of hand washing, water quality, and sanitation interventions in reducing diarrhea risks, Cairncross et al. (2010) also indicated hand washing with soap as the single most effective activity.

School-based WASH interventions have included hygiene promotion activities such as provision of soap, establishment of hand washing stations, and education on proper hand washing led by trained teachers (O’Reilly et al.; Blanton et al.; Freeman et al.). Blanton et al. reported that these hygiene promotion activities significantly increased the proportion of students who can demonstrate correct hand washing—“lathering the hands thoroughly, cleaning between fingers, and air drying the hands” (p. 666)—from 22% to 53% (p < 0.0001). Freeman et al. also indicated knowledge improvements among students about appropriate times to wash hands with soap, i.e. before eating food and after defecation. These results suggested that hygiene promotion has been successfully conducted in school-based WASH interventions.

**IV. PROJECT PROPOSALS**

Based on the demonstrated health needs of students at MMRS and literature review, five project ideas have been proposed and analyzed with key criteria. The proposed project ideas include: 1) hand-washing promotion, 2) provision of school meal and snacks, 3) nutrient supplementation, 4) vegetable garden, and 5) buffalo keeping. The overall goal of these projects is to improve the health condition and school attendance of students by reducing exposures to preventable diseases or improving their nutritional status. Detailed description of projects, specific objectives and activities for each project are described below.

**Project #1 – Hand-washing**

**Objectives:**
- By Month 12, increase the proportion of students who wash their hands with soap after using the bathroom to over 75%
- By Month 18, reduce the two-week prevalence of diarrhea among students by 25%
- By Month 18, reduce the rate of school absenteeism by 10%

**Activities:** Hand-washing with soap will be promoted at MMRS through teacher training, student club activities, and hand-washing demonstrations. Two teachers from MMRS will receive training on WASH with an emphasis on hand-washing promotion. Trained teachers will establish a student health club, recruit students as peer educators, and explain how to wash hands with soap properly. Teachers and peer educators will organize educational sessions on handwashing demonstrations at MMRS.

**Objectives:**
- By Month 12, increase the proportion of students who wash their hands with soap after using the bathroom to over 75%
- By Month 18, reduce the two-week prevalence of diarrhea among students by 25%
- By Month 18, reduce the rate of school absenteeism by 10%
Project #2 – School meal and snack
Objectives:
- By Month 12, increase the proportion of students who receive a healthy meal and snack each day to 90% or higher.
- By Month 18, reduce the rate of school absenteeism by 10%.
- By Month 18, demonstrate growth percentile increase in at least 50% of children.

Activities: Nutritious and calorie-rich school meal and snack will be provided for MMRS students, teachers, and administrators. Locally available food, such as maize and lentils will be purchased for this activity. Height and weight of the school children will be measured every 3 months to assess growth percentiles.

Objectives:
- By Month 12, increase the proportion of students who receive a healthy meal and snack each day to 90% or higher.
- By Month 18, reduce the rate of school absenteeism by 10%.
- By Month 18, demonstrate growth percentile increase in at least 50% of children.

Project #3 – Legume and Vegetable Garden
Objectives:
- By Month 12, increase the proportion of students who eat school-grown vegetables as part of their lunch to 90% or higher.
- By Month 18, reduce the rate of school absenteeism by 10%.
- By Month 18, demonstrate growth percentile increase in at least 50% of children.

Activities: A group of students and teachers will be identified to create a school vegetable garden. MMRS will be provided with seeds of selected vegetables, and students and teachers will maintain the garden throughout the school year. Harvested vegetables will be cooked and provided to students. Vegetables will ideally be rich in calcium, iron, and protein.

Objectives:
- By Month 12, increase the proportion of students who eat school-grown vegetables as part of their lunch to 90% or higher.
- By Month 18, reduce the rate of school absenteeism by 10%.
- By Month 18, demonstrate growth percentile increase in at least 50% of children.

Project #4 – Buffaloes for whey and yogurt
Objectives:
- By Month 12, increase the proportion of students who take buffalo milk to 90% or higher.
- By Month 18, reduce the rate of school absenteeism by 10%.
- By Month 18, demonstrate growth percentile increase in at least 50% of children.

Activities: The school will acquire two buffaloes to provide yogurt and whey to students. Infrastructure for keeping the buffaloes will be created by local farmers. In the early phase of the project, any deficit in yogurt or whey supply for students should be purchased from the village. Any surplus in later times can be sold for income for the school.

Objectives:
- By Month 12, increase the proportion of students who take cow buffalo milk to 90% or higher.
- By Month 18, reduce the rate of school absenteeism by 10%.
- By Month 18, demonstrate growth percentile increase in at least 50% of children.
Project #5 – Vitamin Supplementation

Objectives:
- By Month 12, increase the proportion of students who receive vitamin supplements to 90% or higher
- By Month 18, reduce the rate of school absenteeism by 10%

Activities: All students at MMRS will be provided with vitamin supplementation. Vitamin supplements will be purchased locally as best as possible. Supplements will be vetted to ensure they contain no heavy metals.

V. CRITERIA FOR SELECTION

Each of our projects will be assessed based on the following criteria:
1. Address an urgent need of the school
2. Provide evidence-based solution to an identified health problem
3. Be logistically and financially feasible
4. Be culturally acceptable
5. Provide positive externalities for the community
6. Provide opportunities for teaching global health to undergraduate students.

Each project received a score of 1 to 5 (from 1- minimally reaches goal to 5- maximally reaches goal) for each criterion. We weighted the criteria in regard to importance as follows: 1-3 at 20%, 4-5 at 15%, and 6 at 10%. The highest total score indicates the projects that best fit the criteria.

VI. ANALYSIS OF PROJECTS

Project #1 – Hand-washing

The hand-washing campaign addresses the infectious disease concerns regarding upper respiratory infections and gastroenteritis as this work should help to curb the transmission of disease. Additionally, it starts to address hygiene concerns put forth by the key informants. This however, was not emphasized as a primary concern of the informants and therefore in regard to criterion 1, this project scored 4 out of 5. Health projects focusing on hand-washing, including those cited in our literature review have shown repeatedly the success of hand-washing projects both at schools and in the larger community; for criterion 2, this project scored 5. The implementation of this project is very minimal cost. No extra infrastructure costs or seed costs are necessary. In regard to logistical and financial feasibility, this project scored 5.

The cultural acceptability was scored 3 because students do not currently embrace adequate hand-washing practices, and behavior change often requires careful culturally-sensitive engagement. If students teach their families about the hygiene practices they learn at school, there could be significant positive externalities for the village in regard to decreased morbidity from infectious disease. For criterion 5, this project scored 5. For the last criterion, this hand-washing scored 5, because undergraduate students could use this project as an opportunity to learn about infectious disease, proper hygiene practices, how to teach WASH principles, and engage closely with school children in teaching proper hand-washing techniques. The total weighted score of this project is 9.1

Project #2 – School meal and snack

This project addresses the most pressing health need emphasized by the key informants and by those highlighted in the literature. The average socioeconomic status in Kalikot is very low and many students are unable to acquire proper nutrition for growth. Thus, this project scores a 5 in regard to criterion 1. Our literature review also regards school nutrition programs as very fundamental in improving health of school children. For criterion 2, this also scores a 5. For this
project to come to fruition, the school needs to be able to finance the meals, obtain proper food for the meals from the village, and adjust school schedules to accommodate meal times. Ensuring reliable food sources can commit to providing food to the school will require agricultural supply capacity and proper contracting. While still feasible, this project requires more complex navigation of logistics and finances and therefore scored 3 out of 5 for criterion 3.

This project intends to provide locally-available, culturally-appropriate foods. The children and their families however are unaccustomed to their children getting adequate meals at school. Because some community members may have concerns regarding this project, this project scored 4 for cultural feasibility. Given that local farmers may benefit financially from becoming food suppliers for the school, the positive externality for the community may be quite high and thus this project scored 5 for criterion 5. This project could provide some opportunities for undergraduate student involvement, for example if they partake in the growth percentile measurements and analysis. A vast majority of this project will require work by school officials and local community members, not students. For criterion 6, this project scored 4. The total weighted score of this project is 8.1

Project #3 – Legume and Vegetable Garden

The legume and vegetable garden does address the urgent nutrition needs of the school, but it does not do so quickly. Constructing and maintaining the garden will take time and the benefits will not be immediate. Thus for criterion 1, this project scored 3. While addition of more nutritious foods would benefit the students, the literature did not necessarily indicate that this needed to happen via a school garden; thus for criterion 2, this scored 3. Developing this garden to the level where it can produce food for the school will be logistically and financially challenging. For instance, MMRS will need to designate land for this purpose and will acquire material resources to start and maintain the garden. For criterion 3, this also scored 3.

Many villagers have grown their own vegetables and can support the development of the garden, but since school gardens in that area are unprecedented and we cannot at this time anticipate what villagers will think of this, the project scored 4 for cultural feasibility. The garden scored 3 for positive externalities for the community because, this may take away from the economic benefit local farmers could derive from being produce suppliers for the school, but if the garden produced a surplus, this could also serve as an additional food source for villagers. . This garden could be a great opportunity for undergraduate students to participate in learning about global health, agriculture, nutrition, and biology; this project scored 5 for criterion 6. The total weighted score of this project is 6.8.

Project #4 – Buffalo for whey and yogurt

Acquiring buffaloes for the purpose of providing students with whey and yogurt could addresses the urgent nutritional needs of the schoolchildren, and thus this scores 5 for criterion 1. While this would help with nutritional needs, extensive evidence does not exist demonstrating that having those sources at the school are the best methods for acquiring these foods. Therefore, this project scores 3 for criterion 2. Acquiring two buffaloes will require initial purchase cost as well as maintenance costs for feed. MMRS will need to consider where to keep the buffalo and who will assist in their care. Many villagers however are well acquainted with care of buffalo and this may not pose a large challenge. For feasibility, this scores 4.

Buffalo are a locally acceptable source of whey and yogurt and are often used in meals. Similar to the school garden however, having buffalo at school is unprecedented and therefore scores 4 for cultural acceptability. The positive externalities for the community in this case are also similar to the garden, scoring 3, because the whey and yogurt could be purchased from local farmers and increase the financial benefit to the local community. Having a buffalo at school could take away that benefit. Nevertheless, any surplus from the buffalo could also serve as an additional supply source for the community if needed. Having a buffalo at the school would provide opportunity for undergraduate
students to learn about nutrition and biology; this project scored 4 for criterion 6. The total weighted score of this project is 7.6.

Project #5 – Vitamin Supplementation

Lastly, vitamin supplementation would address the problem of malnutrition at the school, but it does not address the problem of malnourishment among the schoolchildren. While vitamins would be helpful, they are not as essential as improved meals and therefore this project scores 3 for criterion 1. Vitamin supplementation has been shown to be useful in improving health outcomes for children, but because supplements can vary widely in their composition, this scored 3 for criterion 2. Although no additional infrastructure at the school would be necessary for this project, this would require a reliable source of appropriate vitamins, this project scored 4 for feasibility. Supplements are not commonplace in Kalikot and may not be accepted as appropriate source of nutrition for the students and thus scored 2 for criterion 4. The supplements would likely be sourced from urban areas and would not provide economic support to the village economy; therefore this scores 2 for criterion 5. Nevertheless, this project could provide many learning opportunities for the undergraduate students and also provide them a chance to teach the schoolchildren about nutrition and health. This scores 3 for criterion, for a total score of 5.7. Please see table 2 for the summary of this information.

<table>
<thead>
<tr>
<th>Project Proposals</th>
<th>Urgent-Perceived Need</th>
<th>Evidence-based solution</th>
<th>Logistical and Financial Feasibility</th>
<th>Cultural Acceptability</th>
<th>Positive Externalities to the Community</th>
<th>Opportunities for Teaching</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand-washing campaign</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>9.1</td>
</tr>
<tr>
<td>School meal and snack</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>8.1</td>
</tr>
<tr>
<td>Legume/Vegetable Garden</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>7.0</td>
</tr>
<tr>
<td>Buffalo</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>7.6</td>
</tr>
<tr>
<td>Vitamin Supplementation</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Table 2. Analysis of each project proposal against the six criteria. Scores were given for each project ranging from 1 as “does not meet criterion” to 5 “meets criterion.” The weighted score of each project equals the score multiplied by the weighted percentage.

VII. PROJECT RECOMMENDATIONS

Given the analysis of the projects, we recommend that MMRS prioritize addressing their health needs first with the hand-washing and school meal and snack project. These can later be supplemented with the garden and buffalo projects that can contribute to the provision of nutritious meals. If MMRS is able to identify reliable and suitable sources of vitamin supplements, this could also be useful to consider, but we do not consider this project a priority.
VIII. NEXT STEPS

Moving forward, we plan to work with the leadership of the Modern Model Residential school to begin to identify specific budgets, funding sources, key stakeholders and resources for each project. We have already begun planning how to bring these projects to fruition (please see Appendix II. School-based Water, Sanitation, and Hygiene (WASH) and Nutrition Project Draft Logic Model) and plan to continue developing our partnership to make these projects a reality. We also intend to begin looking into how to create opportunities within these projects to involve undergraduate students and are in the process of developing a mini-curriculum on global health ethics to serve as a primer for all students who will work with this project.

IX. APPENDIX I. Key Informant Questionnaire Assessing Priorities for a Health Intervention at Modern Model Residential School, Kalikot

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>What do you consider to be key health concerns for the students at MMRS?</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Why do you think students have these health issues/concerns?</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>In your opinion, what can be done at MMRS to reduce students' health issues/concerns?</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>What do you think are the most common causes for children falling ill?</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>What health issue(s) are the most commonly cited reason for health-related absences from school?</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>How often do the most underprivileged students go hungry because they do not have enough food at home?</td>
<td>Never, Rarely, Sometimes, Most of the time, Always</td>
</tr>
<tr>
<td>7.</td>
<td>How would you describe the overall health status of students?</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>How would you describe the overall hygiene status of students?</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>How would you describe the overall nutritional status of students?</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Among the following health-related domains, which would you think should be a priority for a health intervention at MMRS?</td>
<td>Health-related school policies, Safe water and sanitation, Skills based health education, School based health and nutrition services, Other (please specify)</td>
</tr>
</tbody>
</table>
11. According to you, what are some barriers to conducting a health intervention at MMRS?

12. According to you, what are some facilitators and opportunities in conducting a health intervention at MMRS?

13. Please describe any other considerations we should keep in mind while designing a health intervention at MMRS.

Thank you for your time and participation

X. APPENDIX II: School-based Water, Sanitation, and Hygiene (WASH) and Nutrition Project Draft Logic Model

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**XI. APPENDIX II: School-based Water, Sanitation, and Hygiene (WASH) and Nutrition Project Draft Logic Model**

| Program Goal: Improve the health conditions and school attendance of students by reducing exposures to preventable diseases |
|---|---|
| **Program Objectives:**  
- By Month 18, reduce the two-week prevalence of diarrhea among students by 25%  
- By Month 18, reduce the number of school absence by 20%  
- By Month 12, increase the proportion of students who wash their hands with soap after using the bathroom to at least 75%  

| **Program Assumptions:**  
- Improved knowledge contributes to behavioral change  
- Adequate WASH supplies will be continuously provided to schools  
- Water supply will not be cut down  

---

**Monitoring and Evaluation**

<table>
<thead>
<tr>
<th><strong>Inputs</strong></th>
<th><strong>Activities</strong></th>
<th><strong>Outputs</strong></th>
<th><strong>Short-term Outcome</strong></th>
<th><strong>Intermediate Outcome</strong></th>
<th><strong>Long-term Outcome</strong></th>
</tr>
</thead>
</table>
| **Human Resource**  
- Executive Committee, School administration, SUA students and alumni  
- Project Resource  
- Funding, Donations, In-kind Contributions  
- Stakeholders  
- Students, Parents, Teachers, Community, Donors, SUA community  
- WASH supplies and Food  
- Soap, handwashing, snacks  

| Teacher training on WASH  
- Establishment of school health club for WASH promotion  
- Hygiene/nutrition education and hand washing promotion  
- Provision of WASH supplies, nutritious meals and snacks  

| The number of teachers trained  
- Number of WASH promotional activities conducted  
- Number of students who received hygiene education  
- Number of students receiving nutritious meal and snack  
- Number of meals provided.  

| Increased knowledge about the importance of handwashing  
- Increased intentions to wash hands at critical moments  
- Increased consumption of nutritious food  

| Increased proportion of students washing their hands with soap  
- Improved nutritional status among students  

| Reduce incidence of infectious disease among students  
- Reduce school absenteeism due to illness or malnutrition/malnutrition  
- Impact: Improved quality of life  

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I. BIBLIOGRAPHY


Reconsidering Values in Local Community as the Locus of Learning- Application of Makiguchi’s Ideas in Today’s Context

Satoshi Inuzuka
SUA Class of 2014

Abstract
This study applies one of Tsunesaburo Makiguchi’s pivotal educational concepts to contemporary America’s context: local community as the integrating locus of learning. The paper begins with an assumption that the mobile lifestyles of American suburban dwellers, which is directly consequential of the automobile-oriented suburbanization, has uprooted them from their local neighborhoods. Orange County, CA is presented as an archetype of the suburbia where neighborhood life is debilitating. It is then pointed out that in such suburban settings, children’s capability for first-hand local experience is markedly constricted. Here Makiguchi’s proposal of local-based education is reintroduced as a viable educational idea. It is argued that when local community is set as the foothold from which to recognize the world, children shall be able to have rich first-hand experiences to appreciate the society and meanwhile establish organic ties to their local environment. A case study, the Foxfire Oral History Project, is offered to demonstrate how such local-based education can practically be valuable to the children.

Introduction

Tsunesaburo Makiguchi (1871-1944)—over one hundred years ago—pronounced an idea that local community should be the integrating locus of elementary education. This study aims to apply the concept in the contemporary America’s context.

Automobile-centered suburbanization in the twentieth century America has momentously increased people’s mobility; in the meantime, it has uprooted them from local neighborhoods. With the case study of Orange County, CA, this study in the first sections demonstrates how such suburbanization created a mode of life that is mobile but not really rooted. Then it is claimed that contemporary American suburban children’s capability for first-hand experience is, as a result, significantly constricted.

Makiguchi’s idea that local community should be the locus of learning is offered as a viable concept applicable to ameliorate today’s situation. It is suggested that education based on local community may be able to offer the students with rich first-hand experience to appreciate the society and at the same time help them establish organic connections to the land and people in the local neighborhood.
The final section offers the Foxfire Oral History Project as an instance to demonstrate how such local-based education is beneficial to students in practical sense.

**South Orange County as an Archetype of Automobile-Centered Suburbia**

Orange County, California, is often cited as an archetype of the new type of centerless suburbia, in which people move around the whole region freely by automobiles. The origin of such regional structure dates back to the 1920s Los Angeles where public transportsations were defeated in its competition versus automobiles. In the early-1920s, both railways and car industry in the city were thriving and were mutually complementing. Yet the worsening traffic congestion pressed for either one of the two solutions to be undertaken: to build elevated lines along the major train lines, or to invest in construction of north-south and east-west boulevards capable of managing the automobile traffic. In 1926, the Los Angeles population voted overwhelmingly in favor of the latter, the automobile, plan, which resulted in a quick deterioration of the railway system. The approved roadway system had a decisive effect on the structure of the city: Every spot in the vast Los Angeles basin would be close either to the north-south or to east-west boulevard, opening up the whole region for new housing development.

The 1920s’ heritage of the automobile-centered city structure preconditioned the suburban growth in the areas surrounding the Los Angeles City, including Orange County. Once San Fernando Valley, north-west of Los Angeles, had been filled with housing tracts, focus of development shifted toward east, to San Bernardino, and toward south, to Orange County; new freeways, especially the Interstate Five, made the site more accessible.

Orange County is the land of the vanishing orange groves. Agriculture had long been the backbone of Orange County’s economy. In the north, dairy farms flourished. Toward its southern end, cattle was grazing on the vast ranches. As the original home of American oranges, by 1936, Orange County was producing one-sixth of the nation’s Valencia crop, which generated two-thirds of the county’s agricultural income. In 1948, there were more than five million orange trees in the county. However, in the latter half of the twentieth century, Orange County had been transmogrified. In 2014, there were no more than 100 acres of citrus remaining. Instead of orange groves, what we now witness in Orange County is seemingly endless suburban residential areas, many of which are master-planned communities constructed after the 1960s, one such city is Aliso Viejo.

By the mid-1950s, Orange County’s farms were being replaced by tract housing faster than any other community in the United States. Existing cities began expanding their territories in every direction, and new cities were incorporated almost every year. In the two decades from 1940 to 1960, the population of Orange County had grown by five times from 130,760 to 703,925. Most of the city planning followed the planned sprawl model of development, increasing a perception of “discontinuity and chaos” (McGirr 40). In response to the infamous sprawl, many subsequent developments were undertaken by large property owners who built fully-planned communities which would maintain order and green space. In the 1960s and the 1970s, master-planned communities such as Irvine, Mission Viejo, and Laguna Niguel had undergone their construction. In the 1980s and 1990s, in a manner that would later be called “post-suburban,” Aliso Viejo, Rancho Santa Margarita, Ladera Ranch, and some others followed (Starr 355). Aliso Viejo, in this context, was one of the last frontiers of the suburbanization in the Los Angeles region.

**Suburbia and Community**
In its planning, the City of Aliso Viejo was intended to be a neighborhood town, where the majority of its residents can live and work in the same community. An official planning document found at the Aliso Viejo City Hall reads:

Aliso Viejo was the first planned community in California with a master plan that provided for a balance between projected jobs and the projected residential workforce. The plan called for 22,000 onsite jobs and 20,000 residential dwelling units, making it possible for residents to live, work, and play in the same locale. (The City of Aliso Viejo, Fact Sheet)

In an interview with Van Stevens, the planning father of Aliso Viejo, I asked questions about this live-and-work community concept. The answer I received was quite an unexpected one: “The concept of live-and-community is such a mystical idea, so I try not to use the phrase,” because “many of the communities in Orange County are bedroom communities, and they are heavily interdependent on each other” (Stevens 3). He even mentioned that the concept of live-and-work community is a “super-planning cliché” (Stevens 3).

Stevens is right. In Orange County as of 2002, the largest group of commuters is the people who live in the county but drive across city lines to work (60.6%), and as much as 17 percent of the Orange County residents work outside of the county. Only about twenty percent (22.3%) of the commuters in Orange County work in their communities of residence. In Aliso Viejo as of 2000, just about twenty-five percent (26.4%) of the jobs in the city were held by its residents, even though the city was originally designed as a live-and-work community. As Stevens commented, the live-and-work community concept seems not to be a realistic expectation in Orange County.

Actually, the whole Orange County region is functioning like a single great decentralized city, what Pierce Lewis calls “the galactic city comprised of loose, separated urban clusters” (Conzen 413). Accordingly, a typical experience of Orange County citizens is something like this: “I live in Garden Grove, work in Irvine, shop in Santa Ana…” (Jackson 265). It may be the case that Orange County dweller “works in one place, sleeps in another, shops somewhere else, finds pleasures or companionship where he can, and cares about none of the places” (Oldenburg 4).

It has to be reminded here that such automobile-centered suburbanization and the resultant centerless town structure is not unique to Orange County: It had taken place at national level. In 1956, the Interstate Highway Act provided for a 41,000 miles (eventually expanded to 42,500 miles) of highway system, making the Americans’ lives dependent on automobiles, and by 1984, there were more cars than households or workers. From 1950 to 1970, the population in American suburban areas doubled from thirty-six million to seventy-four million. In 1970, for the first time in world history, the nation’s population counted more in suburban areas than in cities and farms. As of 2010, over a half of Americans lived in suburbs.

Kenneth T. Jackson, the author of Crabgrass Frontier (1985), argues that “[a] major casualty of America’s drive-in culture” is “the weakened ‘sense of community’” (Jackson 272). Because of the spatially decentralized mode of life, many suburban residents lost their attachments to their local residential communities, as a great urban historian Lewis Mumford observes:

The town housewife, who half a century ago knew her butcher, her grocer, her dairyman, her various other local tradesmen, as individual persons, with histories and biographies that impinged on her own, in a daily exchange, now has the benefit of a single weekly expedition to an impersonal supermarket, where only by accident is she likely to encounter a neighbor. (Mumford 512)
Most suburban residents are no longer compelled to socialize with people who live in the same local community. Whether good or bad, they are now able to maintain and construct a personalized social network which is not reliant on geographical proximity. Indeed, home and work settings are becoming two dominant spheres for the lives of many American suburbanites, while the societal role of local communities is diminishing. Thus in a way, the mobile lifestyles of contemporary American suburbanites, which is directly consequential of the automobile-oriented suburbanization, has uprooted them from their local neighborhoods.

**Suburbia and Children`s Experience**

Then what connotations does this fact, that American suburbanites` daily lives are increasingly detached from local neighborhoods, have on the educational experiences of children living in the suburbs? It is claimed that their capability for first-hand experience at local level is significantly constricted and that they can have few opportunities to establish organic connections to the local environment.

John Dewey, the most renowned American educational philosopher, over a century ago already pointed out that American children in the beginning of the twentieth century were less fortunate for first-hand experience than those in the beginning of the nineteenth century:

> He [kids in the beginning of the twentieth century] never sees cloth till he sees it in the form of clothes, nor foodstuffs till they appear on the table. The house in which he lives is illuminated by gas that lights on the application of a match, or by electricity that only needs a switch to be pressed. The country child a century ago was more fortunate in his daily experiences. He saw in immediate neighborhood of his own home all the processes of cloth-making from the shearing of the sheep to the working of the loom... His ordinary life was consequently of much greater educational worth, both on the intellectual and on the moral side, than that of the child today. (Boyd and King 399)

The modern children, Dewey thinks, have much less opportunities for first-hand experiences at home and in neighborhoods in exchange of immediate convenience.

The American children in the beginning of the twenty-first century, then it can be put forward, are further much less fortunate for first-hand experience than ones in the beginning of the twentieth century. A prerequisite to fully utilize the benefits of the spatial mobility granted to contemporary American suburbanites is the driver`s license; and an important fact is that children cannot drive a car. In such “an uncoordinated agglomeration of standardized single-use zones with little pedestrian life,” it is not very hopeful to expect children to have life-experiences (Duany, Plater-Zyberk, and Speck 13).

Then, what are the children in the beginning of the twenty-first century doing instead? They resort to mass and social media as vicarious substitutes for first-hand experience. A report on children`s media use in the United States shows that in 2010 children between 8 to 18 year old spent over seven-and a half hours daily on average using entertainment media. Recent study by Sherry Turkle (2015) shows that preoccupation with technologies, in turn, weakens people`s link to local communities. Turkle cites a fifteen-year-old school kid`s insight that cell phone indeed is an incomplete substitute for a contented neighborhood life:

> In the olden days, people were friends with their neighbors. They weren`t friends with people who lived ten miles away. So nowadays, people aren`t so close with their neighbors. Their friends don`t live close by. And there`s more travelling, and you`re associated with people everywhere, but in the olden days, you basically knew what you were familiar with. Your town, your people. Now, if you don`t have your
“Alone,” or the ’loneliness’ in this context, can be rephrased into 'lack of connections to the local environment.' Here I would like to bring in Tsunesaburo Makiguchi’s a century old contention of local-based elementary education as the educational idea needed to be seriously reconsidered today. Local-based education as proposed by Makiguchi enables children to have rich first-hand experience to appreciate the society all the while helping them to establish organic connections to their local environment.

**Application of Makiguchi’s Local-Based Education Concept in Today’s Context**

This section examines Tsunesaburo Makiguchi’s idea that local community should be the locus of learning, and then consider how it can be applicable to contemporary America’s context. First, the concept currently in discussion is clarified.

Makiguchi during his lifetime published three major works: *Jinsei Chiri Gaku [A Geography of Human Life]* (1903), *Kyouju no Tougou Chōshin toshiteno Kyoudo ka [Research into Community Studies as the Integrating Locus of Education]* (1913) and *Soka Kyouiku Gaku Taikei [The System of Value-Creating Pedagogy]* (1938). Though the first book is on geography and the third on educational philosophy, all the three works share some leitmotifs, as Makiguchi in his later work states, “study of local communities, *A Geography of Human Life, and Soka Kyouiku Gaku Taikei are the philosophical system with the single root*” (Makiguchi, *Makiguchi Tsunesaburo Zensyu Vol. 5*, 425). One primary commonality among the three works is Makiguchi’s emphasis on local community as the locus of learning. The following part chronologically presents the development of the local-based education concept in his works.

*A Geography of Human Life*, Makiguchi’s first book, was published in 1902 when Makiguchi was still an obscure geographer. The work, as the title itself claims, examines various geographical phenomena in relation to people’s daily lives. Makiguchi, like John Dewey in the same period did, set first-hand experiences and daily lives as the point of departure of his study. Makiguchi later recollects that his subjects of research have never been away from lives of people, and it is his belief that knowledge and actual practices have to be synchronized [*知行合一*]. In associating all sorts of natural and social events taking place in the world to people’s daily lives, Makiguchi has found that most phenomena of the world, both natural and social, can be learned through observation of events occurring within single local community.

Makiguchi’s middle work, *Kyouju no Tougou Chōshin toshiteno Kyoudo ka [Research into Community Studies as the Integrating Locus of Education]* is the theories and curriculum of the local-based elementary education, which he calls the Local Community Study [*郷土科*]. In the book, Makiguchi asserts that the Local Community Study should be the integrating locus of all the school subjects, including math and science as well as geography and history. Makiguchi compares a child’s learning experience to a tree: “The trunk of the tree is the Local Community Study, and all the other subjects are branches and leaves.” (Makiguchi, *Makiguchi Tsunesaburo Zensyu Vol. 2*, 401). Makiguchi contends that direct observations exercised at local community, in which most of the social and natural phenomena of the world are epitomized, is the most “natural and efficient” way for children to attain basic concepts of the society (Makiguchi, *Makiguchi Tsunesaburo Zensyu Vol. 5*, 64). Makiguchi sketches out throughout the work how those observation can be directed. By observing how (1) beneficial or harmful [*利害*]; (2) beautiful or ugly [*美醜*]; (3) good or evil [*善悪*] each of the phenomena is in relation to their own lives, Makiguchi expects, pupils can most effectively recognize the world.
The last and the most important work of Makiguchi is *Soka Kyouiku Gaku Taikei [The System of Value-Creating Pedagogy]* (1938), which became the foundation of the Soka Education Pedagogy. Makiguchi applies the concept of local-based education in this masterwork as well. Here, Makiguchi classifies the historical development of education in connection with teaching materials into four phases:

First phase: Most of the teaching materials are texts  
Second phase: Pictures and paintings are introduced along with texts  
Third Phase: Actual materials are used for education  
Fourth Phase: The local environment itself to be teaching materials.  

(Makiguchi, *Makiguchi Tsunesaburo Zensyu Vol. 2*, 383)

Makiguchi thinks that in the most developed phase of education, children learn directly from the environment in which they lead lives, and there teachers’ role is to help, encourage, and direct the learning of the pupils rather than to lecture from the podium. Entering the twenty-first century, we might find ourselves still stuck in the second stage.

Before moving on to application of the local-education concept to today’s context, the answer to the question you may naturally have by this point shall better be provided. You might wonder that “Makiguchi’s local community concept is obsolete, because the material condition of a century ago is entirely different than that of today. The role of nation is more important now, and we are living in the age of globalization.” I claim that Makiguchi’s local-based education concept is still relevant to us today. Makiguchi—a century ago—was keenly aware of the current of growing national sphere and of globalization, and also the perils they would pose when they turned into national’ism’ or global’ism’; it was with this recognition Makiguchi maintained that local community should be the locus of learning for elementary education.

In *Jinsei Chiri Gaku [A Geography of Human Life]* (1902), Makiguchi elucidates globalization already proceeding around 1900 from material aspect.

Imagine a person, a man of luxury, who rides an Arabian horse, wears a leather jacket made in Lyons; who warms himself in a fur coat from the bearing Sea Coast or shades his head from the sun with a Panama hat. He refreshes himself with spices from the South Sea Islands, possesses gold from the Transvaal in Africa, and grooms himself with jewels from the Amazon Valley. Indeed, such a person would be depending on three different climates (tropical, sub-tropical, and frigid) to maintain his body temperature, on the soils of three different climates (tropical, sub-tropical, and frigid) to maintain his body temperature on the soils of five different continents to feed himself, and on five different races to enrich himself. (Makiguchi, *A Geography of Human Life*, 12)

In contextualizing globalization, he juxtaposes it with two other frameworks: nation-state and local community. He warns that narrow-minded focus either on globe or nation can make ones blind: “It is rather obvious that we should be careful not to fall into two extremisms: myopic nationalism on one side, and misguided globalism on the other” (Makiguchi, *Makiguchi Tsunesaburo Zensyu Vol. 3*, 6). Only after having in mind the importance of both national and global frameworks, Makiguchi signified that local community had to be the basic and the most important platform from which to
observe the world. It is therefore affirmed that Makiguchi’s idea that local community should be the locus of learning is still relevant to us today living in the age of globalization and of recalcitrant nationalism.

As clear from above, Makiguchi’s emphasis on local community has to be strictly distinguished from local parochialism, which claims local community is the paramount and only place to be cared for and world beyond that is unrelated. Makiguchi’s local-based education idea, instead, is that the local communities should be the foothold from which to observe the events taking place on national and global level.

In *Soka Kyouikugaku Taikei*, Makiguchi acknowledges a growing complexity of the society and points out that students were not aware of how society was organized. Here, as noted, Makiguchi uses the term ‘society’ to mean national, or even global society, rather than local community. Makiguchi continues that even though all students are greatly benefited from the society, they have difficulty in recognizing them and then failing in appreciating works of others. Makiguchi concludes that the primary purpose of education is to bring the unconscious aspects of society over children’s cognition through the direct observation of events taking place in local communities, allowing her or him to lead a life that is contributive to the society.

The education of having children understand the world through direct observations exercised in local community can be valuable to the experience of contemporary children, as it was to that of children in the early twentieth century. Not only does it allow pupils to have better recognition of society through tangible and concrete subjects found at local level—rather than through what are virtual-real and abstract—but also does it provide the students with opportunities to establish organic ties to the local environment, which this study has pointed out as weakening.

**Practice of Local History Education—Foxfire Oral History Project**

This last section illustrates how such local-based education can be beneficial to the experience of students in practical sense. A local-based education which already has long been practiced, the Foxfire Oral History Project, is presented as a case in which children, through first-hand experience, establish their ties with the local environment.

There are a number of elementary and middle school oral history projects currently in progress in Western nations especially in America and United Kingdom, one that pioneered the widespread practice is the Foxfire Oral History Project started in the mid-1960s in Georgia, United States. The Foxfire is a student-run oral history initiated in 1966 by an English teacher at Rabun Gap-Nacoochee School, a private school for pupils between eight to fifteen years old. Inspired by the writings of John Dewey, the novice teacher, taking due attention to students’ choices, decided that a magazine to be published with the hands of the students. Some of the students decided to write articles based on information and stories gathered from their families and neighbors—stories about the pioneer era of Southern Appalachia. ‘Foxfire,’ a glowing fungus found on rotting wood in the area, was the name the students chose for their magazine. Students begin by selecting a topic to research and a family member, neighbor, or other local elder to interview. She or he arranges to meet their contacts and record the interview. Back in the classroom, the interview is carefully transcribed word-for-word. Pulling information from the completed transcripts, the student then writes an article. By 1972, the demand for the Foxfire issues was so great that an anthology *The Foxfire Book* was produced. Over forty-five years of collected documentation about the culture of Southern Appalachia has sold nearly nine million copies. Through engaging in the project, students not only gain confidence in their own abilities but also preserve “their unique heritage and build [ing] a sense of community and place” (Foxfire Fund Inc. *Foxfire Brochure*).
One important characteristic of community history projects as represented by Foxfire is that it facilitates learning of students from real others—not through virtual-real media or abstract texts—and it will necessarily be accompanied by deep mutual understanding between the storytellers and the interviewees. Most of those storytellers are ordinary people who live in the same local community as the children, different in nature from standardized textbooks in which politicians and thinker are all important. This practice allow children to see history which is otherwise something distant and abstract as related and matters pertinent to themselves. Moreover, dialogue between students and local residents can overcome social boundaries, including ethnic barrier.

In one of the Foxfire magazines, two local residents, Aunt Arie (Ethnically European) and Annie Perry (Ethnically African American), learn from each other how they each make a basket, and the students (Ethnically European) interview and record this conversation. The story had become an article and it has been shared as a popular community history even ten years after Aunt Arie’s passing. This instance illustrates how local community history can connect people of different background together.

As shown, local-based elementary education as represented by Foxfire can allow students to have first-hand, proactive experiences, and in doing so they establish a deeper sense of connection to people with different background living in the same local community and to the land they live on.

Conclusion

This study has reintroduced Tsunesaburo Makiguchi’s foresight that local community should be the locus of elementary education, and has shown that his idea still has a living meaning today. With the case study of Orange County, CA, this paper has first elucidated the process in which suburban Americans are uprooted from local neighborhood, and suburban youths are robed of capability to have enriching experience locally. It is then suggested that Makiguchi’s concept of local-based education sheds light to the future of elementary education, as it offers children with fulfilling first-hand experience to appreciate the society and help them establish organic bonds to the local environment. Lastly, Foxfire Oral History Project, a community history project long practiced in Georgia, is presented as a case where children establish their ties to the land and people of their local community.
Bibliography


Abstract
This paper serves as a theoretical bridge to link two contemporary approaches to education that are grounded in the transformation and growth of students and society—Soka education and urban education. This is critical at a time when the dominant educational discourse centers on standardization and debates around knowledge and its role in education, especially when seeking ways to educate students from diverse backgrounds. Both Soka education and urban education acknowledge the importance of honoring students’ cultures and experiences, and this paper will establish a common language for educators who are seeking to imbue ideas of Soka education within urban school settings, while also providing current studies on curricular and pedagogic ideas in urban education that can further expand on the foundational ideas of Soka education.

Universally, education serves many purposes in people’s lives, and educators within formal school settings (un)intentionally either reproduce or resist society’s values in the process of interacting with students. When educators engage in substantial critical study and reflection of themselves, their communities and its power structure, and society at large, along with both educational curricular subjects, as well as pedagogical practices, the possibilities for education as a form of resistance for societal transformation increase. Two contemporary educational philosophies encourage precisely this kind of critical analysis. This paper compares the essential philosophies, principles, and practical applications of Soka education to the ideas that have emerged in the past century from urban education, in order to explore ways these contemporary approaches to education share similar ideas, the ways in which they diverge, and how they can be in conversation with each other, in order to improve education for all students.

To begin, it is essential to provide a brief overview of the central ideas in both Soka education and urban education, along with brief historical contexts that considers the political and economic backgrounds that explain why both Soka and urban educators have sought alternative ideas, pedagogies, and curriculum to counter the dominant prevailing educational views. Resistance comes in a variety of ways, and approaches to pedagogical practices, as well as curricular options, can subtly (or not so subtly) challenge dominant ideology that maintains an unequal and unjust power structure. Attitudes educators have toward their students also have a significant impact on developing an educative process toward a more socially just world. These, then, are the critical points where Soka education and urban education intersect and share similar
approaches: pedagogical practices, curricular ideas, and teachers’ attitudes. First, it’s imperative to clarify the core ideas of both Soka education and urban education.

In general, Soka education focuses on the human being and helping each individual to discover his or her importance as a contributing member to society, who has value and can create value in society. Likewise, proponents of urban education seek to give urban students a voice where they have traditionally been ignored. These supporters recognize that the youth who fill urban schools are resilient and “worthy of every attempt to sharpen their minds and prepare them for a satisfying life far beyond the classroom” (Dyson fourth cover). Hence, on the important issue of whether formal education should be student centered, teacher centered, or subject centered, Soka and urban educators agree that the focus should be on the needs of each student with the main goal being human development, personal happiness, and responsible citizenship.

Furthermore, urban education advocates know that the certain population that typically makes up the bulk of the urban school student body are not considered when the powers that be hand down curriculum that teachers must follow:

> The demographics of urban schools compose largely of African American, Hispanics, and immigrant youth, yet a close examination of school curriculum reveals their knowledge, experiences, and history remain marginalized, subjugated, or altogether untold. (Parmar 87)

The critical pedagogy that most urban educators support teaches students to question such control and to challenge such practices. In a similar manner, the value-creating pedagogy promoted through Soka education was developed by Makiguchi as a response to the militarization of education in pre-World War II Japan. Hence, Soka and urban education seem to concur that standards-based curriculum that does not address the unique needs of each student diminishes the capacity for students to flourish as creative human beings with individual talents, interests, challenges, and goals.

Finally, one of the key components of Soka education is the quality of the relationship between student and teacher. The teacher’s genuine concern for the student, and the teacher’s efforts to address the needs and develop the character and potential of each student is paramount. There must be trust and mutual respect. The lack of such relationships is a significant problem in the urban school setting. Unfortunately, professional development and teacher education programs are not effectively preparing teachers to work in urban school settings (Milner). Milner also referenced a study that revealed that American teachers tend to prefer instruction that is more teacher-centered, keeping the focus on themselves and exerting their control over students, which definitely does not encourage a mutually desirable relationship. On the contrary, it promotes distrust and discord. Instead “education should provide students ‘care for their being,’ with a pedagogy that teaches love of self and others, inner strength, humanity, and humaneness, survival and struggle, and hope and knowledge” (Brock 52). While it is clear that Soka education and urban education share similar ideas of pedagogical practices, curricular ideas, and teachers’ attitudes, further discussion of the historical context of the two will help to realize additional comparative points.

The philosophy of Soka education is grounded in the idea that education should place children’s authentic lifelong happiness as its central goal. Daisaku Ikeda, the founder of contemporary Soka schools, bases much of his writings about education on the Japanese educator and author, Tsunesaburo Makiguchi (1871-1944), who lived in Japan in the era leading up to World War II-- when education was used as a vehicle to ingrain nationalistic ideas in students. Ikeda (2010) writes, “Makiguchi likewise strove to make what we would now term ‘the best interests of the child’ central to the theory and practice of education. He denounced the force-feeding of knowledge far-removed from the realities of the child’s everyday living. In its place, he called for education to have the happiness of children as its fundamental purpose” (9).
Dayle Bethel’s (1994) research indicates that Makiguchi had “sought to humanize the educational system and increase its effectiveness [and] had been thwarted at every turn by both the rigidity of the [Japanese] culture and the increasing dominance of the military in national life” (91). Bethel (1994), described the essence of Makiguchi’s ideas about Soka as follows:

...education is the key element in any move toward the revolutionary reconstruction of society. Not just any kind of education will do; value-creating pedagogy is the first step toward bringing about urgently needed changes in human attitudes, in educational institutions, and in the social structures of Japanese society. (95)

Soka education is a philosophical position that focuses on providing guiding ideas about the very meaning, purpose, and goals of education. While there is a Japanese organization, the Soka Gakuen Educational Foundation, that is responsible for overseeing all Soka schools that range from the kindergarten to the university level in Brazil, Hong Kong, Malaysia, Japan, Singapore, South Korea, and the US, each school seeks to foster students within the cultural contexts where they are located to grapple with and challenge problems unique to their cultures (qtd. in Ikekami and Agbenyega 47). What, then, unites these schools, and what are the guiding principles of Soka education?

Soka education is first and foremost student-centered, and all school staff share a central belief that each student has a unique inherent potentiality; Soka education is an ethos that asserts that all students have the wisdom and capacity to create value in the midst of any situation, resulting in students becoming authentically happy and empowered, who in turn contribute to the happiness of others in their community and world—ideas that emerge within students through dynamic and respectful relationships between students and teachers and while beginning within students’ hearts, ultimately impacts the world and cosmos (Gebert, 163; Goulah, 254; Goulah and Urbain 309; Ikeda 46; Sharma 11). While Soka schools promote core values of education for global citizenship that emphasize environmental education, peace education, human rights education, and development education, these curricular areas are not based on rigidly-defined curriculum; rather, each school seeks ways to emphasize these curricular topics in ways that naturally align with the culture and communities where the schools are located (Ikeda 120). Soka education, then, centers on the internal growth and development of teachers and students on an educative journey together that focuses on personal development, with the ultimate aim of societal changes through individual agency and empowerment to creatively address social injustices and create a more just world.

In order to explore ways that ideas from Soka education and urban education can be in conversation with each other, how can urban education be defined? Historians, such as David Tyack (5), have written extensively about the evolution of the American urban educational school system from community-based “village schools” to the “one best system” of efficiently-run urban schools situated in industrialized cities that emerged during the late nineteenth and early twentieth centuries, as the US economy shifted away from an agrarian society to a more technologically-advanced industrialized society. This paper will focus, however, on contemporary urban education, focusing on its challenges, possibilities, and unique contributions made by urban education scholars to the overall field of education.

In addition to the economic shift from an agrarian to industrialized means of production in US society, concurrent changes in the racial demographics that accompanied urban industrialization have had a huge impact on urban education. Due to restrictive employment and housing practices and laws based on racist ideology that have persisted throughout US history, which culminated in the passage of the GI Bill during World War II that favored white veterans, suburban home growth expanded for white Americans, resulting in primarily low-income African-Americans and immigrants living in the center of US cities (Tyack 278). Since US public schools are funded based on local property taxes, the current state of urban education that emerged from unfair US government-backed housing policies have resulted today in primarily segregated
suburban and urban schools, which have wide gaps in funding and achievement scores between students of color and white students (Jencks 27).

The prevailing view in the US is that contemporary urban education serves low-income students of color, whose poverty and cultures have been pathologized and criminalized, who are many times seen as “culturally deficient” and often referred to as “at risk” (Lipman, 16; Tyack, 290). This view, however, is based on a deficit approach to viewing urban students. Another perspective views the same students as resilient, resourceful, and full of enormous potentialities. Urban education can be considered a field of study that brings together the complex issues of the myriad economic, political, racial, social, and educational problems in the U.S. Much like Soka education, defining urban education, however, is challenging. Urban education is at the very core of our nation, and the work of scholars, educators, activists, parents, and students who strive to improve urban education is profound and significant. The stakes are high as Anderson and Summerfield suggest, since “How we invent the next phases of American urban schooling is how we invent the nation” (282). Race and racism are central to urban education, and this is a point that must be deconstructed and analyzed.

The complex connection between education and incarceration in the US has been studied widely. In her book, The New Jim Crow, Michelle Alexander chronicles how the US (in)justice system has systematically incarcerated black men, based on the “colorblind” language of Ronald Reagan’s “War on Drugs.” A consequence of this has been that in 2001, there were “nearly 20,000 more black men in the Illinois state prison system than enrolled in the state’s public universities” (185). This fact highlights how urban education struggles to provide a meaningful education especially to young men of color, when statistics show that more of these youths of color end up incarcerated than in institutions of higher learning.

What are some of the theoretical, pedagogical, or curricular ideas that have emerged from urban education? One theory often associated with urban education comes from the ideas of the former Harvard professor, Derrick Bell, who developed Critical Legal Studies; as it applies to education, it is called “Critical Race Theory,” or CRT. A key element of this theory is that while Marx and neo-Marxists theorized about class and labor, a theory about race had not been fully developed. CRT explores that ways in which “civil rights laws [of the 1960s] continue to serve the interests of Whites” (Ladsen-Billings 12), which has allowed for a Euro-centric power structure to maintain dominance in every aspect of our society. CRT provides a theoretical framework to unmask the ways that virulent racism persists in spite of laws that have been passed, such as civil rights legislation. Linking race to poverty, Jean Anyon argues that we must acknowledge “the proactive role of the federal government in maintaining this [urban] poverty—and therefore urban education” (29), resulting in the "haves" flourishing, while the "have-nots" are barely surviving.

Critical Race Theory examines school curriculum and exposes the ways that history and literature, for example, are taught predominantly from a Euro-centric view, which distorts, dismisses, or erases the stories of America’s most oppressed citizens, especially African-Americans. It is for this reason that CRT emphasizes the importance of people being able to tell their own unfiltered stories and truths, thus naming their reality, which often challenges the dominant discourse that places Whiteness, with its corollary values and norms, as the paramount reality (Ladsen-Billings and Tate 22). CRT, then, provides an important theoretical foundation for understanding the role of race in urban education.

Another key idea that is often associated with urban education is multicultural education, which emphasizes the importance of studying about, learning from, acknowledging, and celebrating the diverse cultures of students that comprise most urban schools. CRT scholars, such as Ladson-Billings, argue that multicultural education has become a way to minimize and appropriate the significant contributions of minority groups, and multicultural education has degenerated into one day or one month holidays that emphasize a particular food, dance, or type of music (Ladson-Billings and Tate 22). This, then, is a debate within the field of urban education: how to address
centuries of racism. The ways in which minority groups have been oppressed are usually overlooked or ignored, and CRT scholars believe that multicultural education does not provide opportunities for deep critical analyses of the structures of power and oppression that continue to define US society.

One pedagogy often associated with urban education is critical pedagogy, which evolved as ideas around progressive education—beginning with John Dewey—sought to imbue ideas about democracy within the educational process, while challenging aspects of education that dehumanized students. Antonia Darder et al explain that critical pedagogy has a long history of challenging the ways that society reproduces unequal relationships of power and comes from ideas of Paulo Freire, Myles Horton, Antonio Gramsci, Maxine Green, Ivan Illich, Herbert Marcuse, Michel Foucault, Henry Giroux, and Erich Fromm, to name a few (2). In general, some of the common threads in the ideas around critical pedagogy center on affirming the individual and collective agency of learners to critically analyze and take action to challenge oppression in their lived realities, based on a deep analysis of the nature of power in relationships in learners’ lives. Critical pedagogy, then, focuses on teachers and students together developing a critical consciousness about their lives and communities, in order to creatively and pragmatically take action within their own spheres of life (Darder et al. 12).

Another key component of urban education comes from the ideas of Geneva Gay and is called culturally responsive teaching, which has four guiding principles for educators. Firstly, culturally responsive teaching is “multidisciplinary and multidimensional,” in terms of considering the perspectives of all students and the lens of their ethnic and racial identities. Secondly, culturally responsive teaching entails educators serving as bridge-builders, who provide support to students to navigate and function in various cultural systems, while honoring theirs. Thirdly, culturally relevant teaching emphasizes the “importance of making cultural differences explicit in educating ethnically and racially diverse students,” (Gay 359), which affirms the beauty and strength of students and their cultures. Fourthly, culturally responsive teaching emphasizes that teaching practices and ideas center on cultural differences as assets, rather than as deficits, which honors and acknowledges the possibilities within each student, rather than focusing on their problems and pathologies.

Scholars in urban education approach students’ families and cultures from a view of the assets they contribute to students, rather than focusing on students’ deficits. This idea is called “funds of knowledge,” a concept that brings together anthropology and education. Initially, ideas of funds of knowledge emerged as teachers and academics conducted collaborative research to find ways to link families’ life experiences with teachers’ classroom practices. The ideas of funds of knowledge honors students’ families, their long-standing practices, knowledge, customs, social networks, and skills to not only survive, but to thrive, in the midst of challenging circumstances—seeing them as assets that can contribute to students’ learning, rather than as disadvantages that hinder students’ growth and learning. Linking students and families’ funds of knowledge to the classroom experience is a key element of this idea (Hogg 670; Moll et al 33).

In what ways do the ideas central to Soka education and urban education consider education as a vehicle for societal transformation? Soka education emphasizes the importance of fostering students who are able to have a deep understanding of the interconnectedness in all life, along with the power of each person’s agency to make significant contributions in their own communities. In order for this to occur, schools must be imbued with a culture of care, while teachers also challenge students to critically think about a wide range of social issues. Societal transformation, then, first begins as an inner journey, with the idea that “children who are nurtured from inside out have deep reflective dispositions that enable them to see every problem as an opportunity for improvement or innovation” (Ikegami and Agbenyega 49). Societal changes, then, according to core ideas of Soka education, begin within the hearts and minds of each teacher and student. The role of the teacher in caring for students’ growth, then, is key.
Urban educators seek to redress huge educational and societal inequities that continue to plague US society, with children in urban schools often being impacted the most. One persistent argument made is that issues of affordable housing, employment, and related systemic racial problems that are rooted in a white supremacist ideology, such as high rates of incarceration of men of color, need to be directly addressed while also addressing challenges schools face. Some scholars suggest that problems in urban education stem from decades of market-driven neoliberal economic and education policies that have enriched the wealthy and resulted in “capital accumulation, racial containment, and the privileged lifestyles of the wealthy few who have profited enormously from the policies of the past three decades” (Lipman 148). From the view of urban education, then, societal transformation must include a broad multi-dimensional approach that includes culturally relevant teaching practices in schools, in tandem with local, state, and federal policies that address housing and employment inequities that directly and severely impact urban students and their families.

At the root of these questions raised by Soka and urban educators are the issues of human nature, the role of government, and how people interact with others in a society. Does an individual’s personal success trump the overall collective good, including the well-being of those most marginalized? While much of the Euro-dominant American myth glorifies the notion of “pulling oneself up from one’s bootstraps,” this idea places individuals as the ones who take full responsibility for their successes, or failures. What happens when the government establishes policies to facilitate the success of some societal members, while ensuring that other groups have barriers to prevent the possibility of success? The result is huge societal and educational inequities, and this continues to this day and now more blatantly than ever.

Anyon’s central argument, along with many other scholars on urban education, is that many societal forces have converged to create and maintain large urban centers with high concentrations of people living in poverty. As a result, a myriad of problems are associated with families living in poverty, and these problems have a direct impact on children and education. In order to understand and address problems in urban education, then, policymakers must address other societal issues that impact urban education, tentacles that extend far beyond the doors of the schoolhouse.

Joe Kincheloe provides more insight and perspectives about urban education in a neoliberal economic system—much like Anyon described. Kincheloe traces the way that a negative lens is often used to define urban education and then, he reframes urban education to see students “from a rhetoric of ‘at risk’ to one of resilience” (9). He challenges us to step away from a deficit model of looking at students, while also pointing out ways that students in urban educational settings are often cognitively categorized and labelled as “low-performing” students based on standardized scores. Kincheloe reminds us of the impact of colonialism in conceiving a standards-based assessment system that disregards cultural contexts of students’ lives when considering their cognitive development. As a result of students who perform poorly on standardized tests, many teachers develop a “pedagogy of low expectations” (20) that results in students experiencing what Bourdieu has called “symbolic violence,” in which the knowledge, culture and beliefs are not grounded in the lives of the students, but rather imposed on them by their educators (31).

Part of the solution for Kincheloe, then, is two-fold. He suggests that a new theory of cognition is essential, and he and Shirley Steinberg developed the cognitive theory of post-formalism, which “asserts that most students who don’t suffer from brain disorders or severe emotional problems can (and do) engage in higher-order thinking” (18). According to this theory almost all urban youth—regardless of their scores on a standardized test—are absolutely capable of engaging in higher order thinking. If, however, teachers only teach the test and are consumed with low expectations, they may never provide lessons to students that would give them opportunities to engage in higher order thinking. Secondly, Kincheloe suggests that a new pedagogy is urgently needed, and that teachers in urban schools must move away from a pedagogy...
of deficit towards one in which teachers are “becoming educated as a critical practitioner [which] necessitates personal transformation” (11).

So, how do ideas based on Soka education and urban education differ? A central starting point for Soka education is a philosophical foundation that centers on nurturing students’ bodies, minds, and spirits, which refers back to the importance of student’s inner world being the source of any kind of societal changes. This occurs based on both teachers and students learning and growing together through self-reflection and a dialogical process within a context of a caring teacher-student relationship. Soka education, then, has a philosophical foundation that emphasizes the centrality of the attitude of teachers in the education process, but lacks a clear theoretical foundation. On the other hand, ideas from urban education are supported by strong theoretical foundations, such as Critical Race Theory, but there is no clear philosophy that supports the ideas in urban education. Soka, then, has a solid philosophical base, but lacks clear theory, while urban education has a strong theoretical component, but lacks a clear philosophy.

It is at this point, then, that Soka education and urban education can provide substantive support to each other. Urban educators can benefit from a deeper understanding of the philosophy of education that centers on students’ growth, the importance of an inner transformation of learners and teachers that occurs through dialogue, the paramount significance of teachers’ attitudes in the educative process, and ways that a curriculum for global citizenship expands students’ consciousness. Soka educators can develop a deeper understanding of contemporary education through deeply studying the ideas of critical race theory, which provides a clear understanding of the role of race and racism in shaping contemporary education in the US and worldwide, especially in the areas of assessments and curriculum that is Euro-dominant. Soka educators would also expand their capacity to teach by exploring the power of educators to counter deficit thinking of diverse students through the ideas of culturally relevant pedagogy and funds of knowledge.

In the area of pedagogy, both Soka education and urban education have foundational concepts that function to help students develop a critical consciousness. Makiguchi’s pedagogical ideas that are foundational to Soka education focus on how value is created through education. Knowledge alone will not be the source of a child’s lifelong happiness; what is critical is how the knowledge children acquire in a formal school setting can be a source of greater value to foster their growth far into the future. It is for this reason that Soka pedagogy includes an emphasis on experiential education.

Similarly, urban education centers on the ideas of critical pedagogy, which Paulo Freire championed in his work in Brazil with illiterate farmworkers. Critical pedagogy includes a dual process of developing knowledge while also raising a level of social and political consciousness that can be linked to community-based social change. In both Soka education and urban education, the starting point is where students’ lives are at, with the goal to expand their lives, rather than to mold them to succeed in pre-determined standards established by educational or government bureaucrats. Rather, both Soka and urban education emphasize the centrality of the community as the starting point for education, along with experiential education as significant for students to learn in the most meaningful and impactful ways.

As a former student in a Soka school, Soka University of America, as well as through research and observations, several important points emerge to illustrate the importance of the core values of student-centered Soka education, but the most significant aspect centers on the level and depth of care extended to students. To feel valued as a learner is a liberating experience, which serves as a source of inspiration. From the very mundane, such as the quality and kind of food available to students, to the ways students are provided numerous opportunities to engage with guest scholars, to the numerous thoughtful details about how to provide abundant support to
students as emerging scholars. These factors—and so many more—serve to buttress and embrace students on the Soka educational journey.

Ultimately, then based on our research and personal experiences, Soka education and urban education have many shared ideas, some differences, and several opportunities wherewith one can inform the other. Both are committed to addressing societal inequities by first educating students to develop a critical consciousness, who will then take appropriate actions in their communities to address those issues. Soka education and urban education both stress the importance of centering students on their communities and honoring their communities and unique cultures. As educational philosophies, Soka education and urban education represent opportunities for the unencumbered flourishing of the human spirit, against all odds by honoring all students, with their unique gifts and rich experiences they bring to the educational experience.

Works Cited


Soka Science: Crafting an innovative curriculum for fostering humanistic scientists, clinicians, and contributive citizens

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Abstract

The modern understanding of the natural world and human health is increasingly complex. Undergraduate science education should convey the skills and basic information crucial for understanding the rapid changes and challenges that humanity will face in the future. Currently, however, science courses have too often become solely an exercise in rote memorization, repetition of technical calculations, and execution of experiments whose fundamental purpose is often opaque to the student. Those who succeed in this system tend to be proficient at regurgitating facts, but often lack skills in ethics, critical thinking, creativity, and contributive citizenship. The purpose of our research is to synthesize the best practices in innovative science pedagogical approaches with the foundation of Soka Education philosophy to create a unique curriculum for globally-minded, contributive future scientists. We identify key ways in which institutions like SUA can train ideal scientists, clinicians, and more broadly, non-professional citizen-scientists who would be prepared to help solve the complex problems facing modern society today and in the future. Many of these problems are multifaceted, and require interdisciplinary approaches that join not just a technical and scientifically-sound solution, but also depend on a with a well-designed implementation system or strategy accounting for human, social, and economic factors to ensure success.

We emphasize three fundamental aspects of what we consider to be an ideal undergraduate science education: 1. the importance of the integration of humanities and science, 2. critical thinking and creativity as essential qualities of scientists, and 3. instilling the importance of contributive citizenship in the curriculum. Rather than continuing to view science and the humanities as separate and opposing disciplines, modern education at universities and especially at liberal arts colleges should draw these fields closer together by fostering interdisciplinary collaboration as well as providing rigorous training for students in both subjects. This approach to education provides an avenue through which the humanities can improve the sciences by providing a foundation in ethics as well as moral and social context to guide scientific investigation and technological development for the benefit of society. Training in the sciences in conjunction with the humanities is imperative for to equip students to be equipped with the skills needed to create meaningful solutions to many of humanities humanity’s pressing problems.
Within the realm of fostering critical thinking and creativity, we encourage problem-based learning and evaluation formats, including case discussions and oral exams, respectively. Evidence is emerging that demonstrates improvements in comprehension and application of scientific principles with these sorts of learning structures. We also encourage science courses to include discussions of what may be controversial topics, such as climate change, vaccines, evolution, and abortion, to help students confront their biases, develop an understanding of evidence-based information, and help create better solutions for our society’s pressing problems. Additionally, an ideal curriculum would emphasize contributive citizenship—the importance of engaging more with communities, community engagement, being leaders in society, leadership, and advocacy for positive change based on knowledge and wisdom.

Not every student will eventually pursue a science-focused career, or even undergraduate concentration, but this does not diminish the importance of a rigorous general science education for every student. This education could focus more on the societal impact of science and technology and such courses could address both historic and contemporary science with an emphasis on ethics, and would be appropriate for STEM-focused students as well. We believe that a firm foundation of scientific knowledge and developed skill in critical analysis is imperative for any individual who desires to be a contributive citizen in modern society, a goal that we wish for every student to have. We look forward to working alongside the contributive citizens, the influential thinkers, and the pioneering leaders who will be shaped by this new approach to science education.

The modern understanding of the world and human health is increasingly complex. Undergraduate science education should convey the skills and basic information crucial for understanding the rapid changes and challenges that humanity will face in the future. Currently, however, science courses have too often become merely an exercise in rote memorization, repetition of technical calculations, and execution of experiments whose fundamental purpose is often opaque to the student. College-level basic science courses, the last science classes many students ever take, are frequently taught as lectures by a single professor and a handful of teaching assistants to a class of hundreds of students. Those who succeed in this system tend to be proficient at regurgitating facts, but often are not truly taught skills and understanding. As such, these individuals and lack skills in ethics, critical thinking, creativity, and contributive citizenship. Changing the status quo of science education will require fundamental change not only in the curriculum, but also how courses are taught and the organizational and incentive structures at undergraduate institutions.

In 2015, the science journal *Nature* dedicated an entire issue, entitled “Building the 21st Century Scientist,” to addressing this exact topic. They stress,

> [F]or generations, classes in science, technology, engineering and math (STEM) have been focused almost exclusively on building knowledge alone [...] Creative thinking, problem solving, motivation, persistence and other ‘twenty-first-century skills’ can, and should, be taught and fostered through well-designed courses. (“The Scientist of the Future”)

The purpose of our research is to synthesize the best practices in innovative science pedagogical approaches with the foundation of Soka Education philosophy to create a unique curriculum ideal for globally-minded, contributive future scientists.

Not only is our research timely given this increased focus on curriculum revitalization among science educators, but also because of the development of the new concentration in *Life and Health Sciences* at Soka University of America. We aim to identify key ways in which SUA can train ideal scientists, clinicians, and more broadly, non-professional citizen-scientists who would be prepared to help solve the complex problems facing modern society today and in the future. Many of these problems are multifaceted, and require interdisciplinary approaches that join not just a technical and scientifically-sound solution, but also depend on a with a well-designed implementation system or strategy accounting for human, social, and economic factors to ensure success. It is our hope that
SUA-educated individuals would be equipped to tackle some of these issues, such as climate change, pandemic infectious disease, sustainable housing, and access to information technology through inventive and creative integration of scientific information with a robust understanding of human nature, policy, economics, art, and philosophy. Our goal is to make a meaningful contribution to not just the discussions about developing science education at SUA, but how to do so at any other institution. As such, we emphasize three aspects of what we consider to be an ideal undergraduate science education: 1. the importance of the integration of humanities and science, 2. critical thinking and creativity as essential qualities of scientists, and 3. instilling the importance of contributive citizenship in the curriculum. We will also discuss the impact of science education for all students, not just those who intend to become professional scientists, and will offer our recommendations for institutions developing new science curricula.

I. INTEGRATION OF THE HUMANITIES AND SCIENCES

Science aims to build an understanding of the world through careful observation and quantitation, but much of the natural world and human experience is not easily measured. For this reason, science alone cannot ever fully elucidate the complexities of experiences in this world. This idea is often emphasized in discussions of the importance of the humanities in an increasingly technological era, such as in an article by Leon Wieseltier (Gilbert), who wrote, “people in trouble don't turn to regression analysis[,] their souls require the fortification and the wisdom that only humanistic thinking can provide.” However, a point that is often overlooked in these discussions is the fact that the humanities alone also do not provide the means to address all of the problems facing the world.

Rather than continuing to view science and the humanities as separate and opposing disciplines, modern education at universities and especially at liberal arts colleges should draw these fields closer together by fostering interdisciplinary collaboration as well as providing rigorous training for students in both subjects. The impetus reasons for doing this is multifaceted are numerous. From an academic perspective, students who receive a well-rounded education should be able to synthesize information from a broader range of topics and would thus contribute novel ideas to the community.

For practical reasons, well-rounded students may find it easier to adapt to a rapidly changing employment environment. For economic reasons, the current funding environment for education is extremely competitive, and educational institutions are more likely to receive financial support for the sciences than the humanities. Edward Slingerland, Professor of Asian Studies and Canada Research Chair in Chinese Thought and Embodied Cognition at the University of British Columbia, wrote, “I will go out on a limb and predict that we will never have a multibillion-dollar center dedicated to semiotic cultural anthropology or deconstructive unpacking of Elizabethan sonnets [...] money is pouring into the sciences because they are achieving results and discovering exciting new things about who we are and the nature of the world in which we live” (Slingerland).

Interdisciplinary training in both the sciences and the humanities provides many opportunities, both for the student and society as a whole. Students who receive a broad education grounded in both science and the humanities have a holistic understanding of the world that differentiates them from individuals who received only a technical or liberal arts education. This approach to education also provides an avenue through which the humanities can improve the sciences by providing a foundation in ethics as well as moral and social context to guide scientific investigation and technological development for the benefit of society. Training in the sciences in conjunction with the humanities is imperative for to equip students to be equipped with the skills needed to create meaningful solutions to many of humanities humanity's pressing problems.

While many college students have placed the humanities and the sciences in a Venn diagram where the two circles do not overlap at all, the modern university could provide space and understanding for students to recognize the essential unity of science and philosophy. In his dialogue
with Daisaku Ikeda, Jim Garrison, professor of philosophy of education at Virginia Tech University, explains the struggle against and potential benefits of reuniting the arts and sciences:

Students with degrees in science or engineering are confident in the powers of these disciplines but rarely have exposure to courses in the philosophy or ethics of science [...] Many of the nonscientists among my students often participate in the contemporary rage against reason. What they are rightly rebelling against is scientism: the narrow, dogmatic use of scientific results rather than the tentative methods of hypothesis, testing and revision that are never absolutely certain. [...] From Francis Bacon, Auguste Comte and others, Dewey took the notion that the sciences can allow humankind to take control of its destiny intelligently by engineering a better future, but only if we are caring, careful and fully reflective. (Garrison, Hickman, and Ikeda)

Neither science nor the humanities should resign to reductionism or dogmatism, which is so often the trend of both fields. Both arenas of study foster skepticism. Scientists and those practicing the humanities alike question the nature of this world. Scientists identify some a question, some detail about the world that humanity does not yet understand. T, and they postulate an explanation, a solution, and rigorously test that hypothesis in an effort to establish greater understanding. The sciences in their purest sense are not only about technicalities only, of knowing facts and figures, or simply accurate calculations, but rather, discovering the fundamental truth of the world. Like the humanities, the sciences embody are concerned with discovering the unknown and gaining greater understanding of the mysteries of our existence, but but they simply with a different approach do so with different information and perspectives.

II. CREATIVITY AND CRITICAL THINKING AS ESSENTIAL QUALITIES OF SCIENTISTS

In regard to science courses, the acquisition of knowledge alone is insufficient to produce genuinely talented scientists, and accordingly, science courses should be structured to provide training in critical and creative thinking instead of the simple conveyance of facts. Rather than rote memorization, more active approaches to scientific inquiry is essential. Many studies have begun to show that undergraduate students perform better academically over time and retain more information when they engage with ideas, struggle with problem-solving, and make mistakes. They build the cognitive processes for understanding an overall system rather than knowing the single association of one correct answer to one question (“An Education”; Mayer; DeHaan). Universities are beginning to incorporate active learning, cooperative learning, and problem-based learning styles into their curricula (Waldrop).

Some universities particularly those with large-enrollment courses have taken a first step toward participatory learning just beyond lecture courses. The most common technique involves audience participation during large lecture-based courses via clicker-questions. These are often multiple-choice questions presented to students during the lecture whereby students can submit their responses via clicker technology. One study found that when courses included clicker questions during classes, rather than having traditional lectures, students had significantly higher course pass rates, higher exam point totals, higher attendance rates, and higher course grades overall. (Freeman et al.) Another study found that students performed better on examinations requiring data interpretation if they had participated in a course which used clicker questions. This study also found however that students in courses using clicker questions performed either the same or more poorly on standardized exams assessing the accumulation of medical knowledge and exams assessing critical thinking (Council 30). Much of the information regarding this curricular structure has come from small single-institution or single-course studies or from anecdotal sources. Given the literature developed thus far on clicker questions in lecture courses, we can conclude that when presented with the options of lecture-only courses versus lecture plus clicker questions courses, clicker questions
may help but they do not fundamentally alter how the sciences are taught. The development of ideas and understand remains unidirectional with the clicker-questions serving simply as a check-in to see if the aggregated cohort of students understood the facts stated by the lecturer.

We do not advocate for the usage of this as a full solution to teaching creativity and critical thinking in the sciences. One reason is that clicker questions often serve as a distraction from addressing fundamental deficiencies with the lecture-based course structure. The quantum increase in participation does not fundamentally change the students’ experience to one of engagement in their learning. Additionally, students can often get questions correct without having a correct understanding of the system about which they are being questioned. Individuals sometimes develop incorrect conceptions of a scientific system that will allow them to get some answers clicker questions correct, but without thorough engagement regarding the system of study as a whole, students may fail to grasp the correct concept of the overall system (Council 15–16).

One way to address this issue has been to employ problem-based learning, a structure that may work better in courses with smaller class sizes. In this format, students typically work in small groups with a guide or facilitator to lead. Each session begins with a problem or case, and . For example, as an example of this approach as applied to medical school: students may be given the symptoms and vital signs of a person showing up to the emergency room and they must strategize what steps they want to take toward proper diagnosis and treatment. As applied to the basic sciences, students would be given a system to analyze, propose explanations for how it is regulated, and design experiments to test these hypotheses. In these settings, Students students work cooperatively to grapple with problems, assessing ideas and various solutions. They bring together facts they learned, stitching them together into useful applications toward solving complex problems. The facilitator simply guides the conversation and helps students develop solutions without lecturing information. This structure better resembles education “in real life settings” so emphasized by educators like Tunesaburo Makiguchi (Ikeda, Soka Education for the Happiness of the Individual). Additionally, this accords with a German philosopher’s understanding that, “ideally the relation between professor and student involves a Socratic equality of status with a mutual stress on standard, not on authority” (Ikeda, “The University of the 21st Century”).

One challenge for Instructors instructors in these types problem-based learning of courses is that they must also be willing to learn from and with the students rather than serving as merely a source of information. Often times after learning some subject very wellOver time, particularly after teaching a particular topic repeatedly, instructors can often develop automated thought patterns via through which they confront that subject and other related subjects, narrowing their intellectual field of view. One science professor suggested that professors must reverse-engineer their understanding to identity the components of the structure in which they have assembled their knowledge (Council 16), and thus help students undergo the process of developing these thought patterns and create accurate conceptual frameworks. The body of information in the sciences is also constantly expanding and what an instructor may have learned in their schooling may no longer be relevant.

While some may argue that this the problem-based format of learning does not allow for the time to gain the full body of information required to perform well on exams like the Medical College Admissions Test (MCAT), others advocate counter that students will inevitably forget much of the information learned in lecture-based courses anyway. Curricular structure in science courses should require that students learn a few things thoroughly in a way that will allow them to retain what they learn for the long term and help students develop the a cognitive framework that serves as a foundation for future learning (Council 15–16; Waldrop). In With this structure, students will need to take greater responsibility for learning outside of class (Knight and Wood). One set of course instructors explained their approach:

We have replaced in-class reading quizzes with pre-class written responses to the reading, introduced a research-based mechanics textbook for portions of the course, and incorporated cooperative learning into the discussion sections as well as the
lectures. These improvements are intended to help students learn more from pre-class reading and to increase student engagement in the discussion sections, and are accompanied by further increases in student understanding. (Crouch and Mazur)

The sciences are ever-expansive. Rather than approaching each nugget of information as something that could be memorized, students would benefit more from becoming individuals who comprehend systems and therefore can understand even greater volumes of information in the future.

Cooperative learning formats, e.g. problem-based learning, appear to produce results superior to competitive or solely individualistic learning. One study found that cooperative learning promoted greater student achievement than competitive styles or individualistic styles (Johnson, Johnson, and Smith). In another small study assessing problem-based learning examined a course entitled Connecting chemistry to your life, in which students learned about chemistry in relation to daily life activities. They expressed that the course was “more interesting” and they felt as though their learning and understanding improved (Council 6). Gijbels and others have anecdotally described that students had a better understanding of how concepts linked together and their ability to apply information they learned surpassed that of students in lecture-based classes (Gijbels; Council; Waldrop).

In many cases, cooperative learning produced added benefits to simply understanding scientific information, helping students improve interpersonal relationships, social support systems, and self-esteem (Prince). One longitudinal study at North Carolina State University assessed student performance in chemical engineering courses taught in an active- and cooperative-learning format relative to that of students in traditional courses. The experimental group performed better in regard to retention of information. Additionally, students in the experimental group were more likely to graduate with degrees in chemical engineering and pursue advanced study in the field (Felder, Felder, and Dietz), perhaps suggesting that students who engaged in active-learning were more interested in the subject matter relative to those who took traditional lecture courses. Studies at other engineering schools have produced similar results (Terenzini et al.; Waldrop). The evidence from studies assessing cooperative learning structures appears to demonstrate academic, social, and professional benefit from such learning structures relative to lecture-based courses.

In addition to changes to curricular structure, undergraduate science education would also benefit from changes in methods of evaluation. In accordance with changes to the learning environment, examinations should assess students’ problem-solving abilities, not just their ability to regurgitate answers or to respond to multiple-choice questions (Gijbels; Council 28). One study found that curricular changes that used smaller class sizes and problem-based learning led to improved conceptual understanding of topics, but same or decreased performance on quantitative final exam (Hoellwarth, Moelter, and Knight). One instructor found that oral examinations better helped to assess students’ differences in thinking processes (Wampold et al.). Examinations in multiple-choice format, while consistent with standardized testing, place no value on encouraging problem solving. Instead this format highlights “the one correct answer” or the “best correct answer” as the only important aspect of a problem. Major scientific discoveries are always preceded by multitudes of mistakes and incorrect ideas about the true nature of a system. The process of developing an understanding of a system and learning from one’s mistakes about it should be encouraged, because this is the true nature of scientific discovery.

In conjunction with changes in curricular structure and examination formats, some science professors are finding encouraging results from engaging students in topics that may be socially controversial. One professor of evolutionary ecology indicated that he started each course by requesting that each of his students, “Please offer a brief and concise definition of evolution.” The course took time to confronted alternate conceptions of evolution, discussing scientific evidence and debate. This instructor indicated that he substantially reduced course content and shifted class time
toward increased writing and classroom discourse. At the end of the course, he found that students experience notable gains in overall learning and final exam scores (Council).

In an age where fact-checking is no longer valued, so-called fake news predominates and most people engage in discourse solely with those sharing similar beliefs, this sort of courageous education helps foster learning, critical thinking, and a deeper understanding of human behavior and society. This can lead to meaningful social change and may help promote acceptance of evidence-based solutions to problems, such as vaccines for combating preventable infectious disease, adoption of clean energy policy to combat global warming, or wider access to safe abortions for the promotion of women’s health and well being well-being.

V. GREAT SCIENTISTS ARE CONTRIBUTIVE CITIZENS

An ideal science curriculum would emphasize the importance of engaging more with communities, being leaders in society, and advocating for positive change based on knowledge and wisdom. This would apply to all students of science whether they become scientists professionally or choose to pursue other paths. However, given the current structure of science education, often the ultimate purpose of learning or experimentation is often lost. An ideal science curriculum would emphasize the importance of engaging more with communities, being leaders in society, and advocating for positive change based on knowledge and wisdom. This would apply to all students of science whether they become scientists professionally or choose to pursue other paths. Tsunesaburo Makiguchi explained that education should enable individuals “to become responsible, healthy cells in the social organism, to contribute to the happiness of society and, by doing so, to find meaning, purpose, and happiness in their own individual lives” (Makiguchi and Bethel). Similarly, Daisaku Ikeda emphasizes that students should “cultivate their creative abilities in the effort to provide a rich vision for the future and contribute in a meaningful way to society” (Ikeda, “Be Creative Individuals”). We believe that the most unique aspect of a Soka Education-based science curriculum would be this emphasis on contributive citizenship.

Many approaches could be implemented in the discussions of contributive citizenship in a science curriculum. One example would be for students to study and discuss the four attributes of global citizenship that Daisaku Ikeda set forth in his speech entitled “The University of the 21st Century”: 1. Respect for life, 2. Respect for cultural difference, 3. Spirit of working for the common people, and 4. Achieving democracy (Ikeda, “The University of the 21st Century”). For many people, science has distilled down to the sole motivation and validation of publishing research, but with no greater purpose beyond that. On the other hand, other scientists have caused direct harm, both purposefully and inadvertently, by contributing to the development of devastating weapons, such as cluster bombs or land mines, or have engaged in harmful or murderous medical experimentation, such as with the Tuskegee Syphilis study or Nazi medical experimentation.

Dr. Joseph Rotblat, a physicist whose work on splitting the atom contributed to the development of nuclear weapons, advocated vehemently against the development and use of such weapons. He spent his life working for the advancement of peace and disarmament, while also continuing his work as an exemplary scientist and was award the Nobel Peace Prize in 1995 (Nobel Media). Inspired by Dr. Rotblat’s life, Daisaku Ikeda urged young students as follows:

Unless acted on, even the ideal of reverence for life can end up being a mere slogan without the power to transform reality. It must, therefore, be established as a genuine philosophy in our own hearts and in the hearts of others. We must put this philosophy into practice through concrete actions for peace, working one step at a time toward its realization. (Ikeda, “The University of the 21st Century” 248)

Scientific discoveries and advances in technology require wise implementation and burgeoning young scientists should be taught better how to go about doing this via a curriculum in contributive citizenship.
Those at Soka University of America are fortunate to have great scientists featured on campus. Wangari Maathai, whose academic training was in the biological sciences and anatomy, was an activist for democracy, human rights, and environmental conservation. She was awarded the Nobel Peace Prize in 2004 for her work with the Green Belt Movement, an initiative that used tree planting campaigns to address poverty alleviation and environmental protection (The Green Belt Movement). Linus Pauling is also a notable figure in the annals of scientific history. He was awarded two unshared Nobel Prizes, one in chemistry and the other for peace. His life’s work includes advancing research in chemical bonding, identifying the alpha-helical protein structure, developing greater understanding in the physiological role of vitamin C, contributing to greater understandings of molecular disease-specifically with sickle cell anemia, advocating for a ban on nuclear weapons testing, and making complex science information more understandable to the general public (Linus Pauling Institute; Ikeda, “On the Opening of the Linus and Ava Helen Pauling Hall and the Linus Pauling and the Twentieth Century Exhibition- A Message of Felicitations”). A science curriculum that encourages students to become contributive citizens could also include a study of great scientists such as these two individuals.

VI. CONCLUSIONS
Soka University of America is in a unique position among undergraduate institutions as it prepares to expand its science curriculum alongside its existing liberal arts offerings. This presents a valuable opportunity to craft a comprehensive, rigorous science curriculum that emphasizes critical thinking, creativity, and contributive citizenship that will be a benefit and asset to students, the university, and society as a whole. The challenge will be to do so without diluting the character and community of the institution or dividing it along lines of intellectual specialty. While we believe that science and the humanities are deeply intertwined, current prevailing thought holds them separate and opposing. Soka should break that model as it presses forward in developing its new concentration in Life and Health Sciences.

VII. Soka also has an opportunity to study the impact of its curriculum and student support and advising infrastructure from the inception of the new concentration in order to be responsive to the needs of its students, as well as agile in the deployment of the science curriculum to identify both successful and unsuccessful approaches and adjust as necessary. This could be done within each course, throughout students’ undergraduate career, and continuing as an alumni survey. The study instruments should track the career paths of its graduates as well as assess student satisfaction to gauge efficacy of instruction methods and curricular structure.

VIII. Not every student will eventually pursue a science-focused career, or even undergraduate concentration, but this does not diminish the importance of a rigorous general science education for every student. This general science education could focus more on the societal impact of science and technology. Such a curriculum could address both historic and contemporary science with an emphasis on ethics, and would be appropriate for STEM-focused students as well.

A firm foundation of scientific knowledge and developed skill in critical analysis is imperative for any individual who desires to be a contributive citizen in modern society, a goal that we wish for every student to have. Numerous substantive and deliberate discussions will be required in the coming decades to formulate solutions to the critical global issues we will face, and we should be preparing students to make meaningful contributions to those discussions and drive toward solutions instead of wasting precious time debating misinformation and falsehoods. The threat posed by climate change is too significant to waste effort debating whether it is real, the risk of pandemic disease too great to ignore. We look forward to working alongside the contributive citizens, the
influential thinkers, and the pioneering leaders who will be shaped by this new curriculum help to solve these problems.

Should there be different goals for students majoring in a STEM discipline and for other students, who require only a general knowledge of the subject matter? The goals for general education students may include more emphasis on societal issues than the goals for STEM majors.

- 1. We recommend that institutions track teaching methods, curricular structure, and the performance and satisfaction of students. This could be done within each course and throughout students years in college. As with other studies, we encourage keeping track of students career choices.

**REFERENCES**


Soka Studies: A Review

Nozomi Inukai

Abstract

*Soka* means value creation in Japanese, and the field of *soka* studies focuses on the educational philosophies and practices of three Japanese educators, Tsunesaburo Makiguchi (1871-1944), Josei Toda (1900-1958), and Daisaku Ikeda (1928-). The English-language literature on *soka* studies has grown from almost nonexistent to over 40 in the past decade, but the research is still not well-known. The purpose of this literature review is to identify key concepts and practices in *soka* studies and to provide a survey review of all accessible English-language literature on *soka* studies, which include peer-reviewed journals, books, and book chapters. This review is organized into the following four sections: 1) brief history of *soka* education, 2) key concepts and practices in *soka* studies (i.e., happiness, value creation, human education, global citizenship, and dialogue), 3) categorization of existing English literature on *soka* studies into historical/biographical, comparative/philosophical, theoretical, and empirical and autobiographical studies, and 4) implications and suggestions for future research. By providing an overview of the current state of the field, this review hopes to further accelerate research on *soka* studies in the English-language academia and make potential contribution to the larger fields of educational philosophy, curriculum, and teaching practices.
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