McClure, Jack, Lee, Juneseok, and Wacker, Sarah. "Turning Potential into Action-Research and Collaboration: A Report of the Eighth Annual International Lasallian Research Symposium." *AXIS: Journal of Lasallian Higher Education 10*, no. 2 (Institute for Lasallian Studies at Saint Mary's University of Minnesota: 2020).

© Jack McClure, PhD, Juneseok Lee, PhD, PE, and Sarah Wacker, PhD. Readers of this article have the copyright owner's permission to reproduce it for educational, not-for-profit purposes, if the author and publisher are acknowledged in the copy.

Turning Potential into Action-Research and Collaboration: A Report of the Eighth Annual International Lasallian Research Symposium

Jack McClure¹, Juneseok Lee², and Sarah Wacker³

Introduction

From Friday, September 20, through Sunday, September 22, 2019, the Eighth Annual International Symposium on Lasallian Research was held on the Twin Cities Campus of Saint Mary's University of Minnesota. It was co-sponsored by Lasallian Region of North America (RELAN) & Saint Mary's Institute for Lasallian Studies. Seventy participants from 20 countries representing 18 universities and many other ministries were present for the event. Brazil, Costa Rica, Italy, France, the Philippines, Mexico, and Palestine were among the places sending representatives. Simultaneous English-Spanish translation was provided. The research agenda continues to grow in depth and scope. Much of the work is grounded in the objectives established by the International Association of Lasallian Universities to further the mission through research. Among the topics explored were teaching, faith-life, women in education, sustainability, health leadership, immigration, social justice and Lasallian heritage. Father James Burns, president of Saint Mary's University of Minnesota offered a welcome suggesting that the gathering serve to deepen our association that has the "the human person at its core and society's poor as its focus." Dr. Tim Gossen of Saint Mary's University of Minnesota also extended a personal greeting noting the many additional opportunities underway that are already expanding collaboration and research. This paper represents a summary of some of the main events and findings of the symposium.

On Friday evening, Brother Andrés Govela, FSC, the president of IALU gave a presentation in Spanish about the Lasallian education tradition over the past three decades, titled "Reflections on the Role of Research in the Development of Lasallian Higher Education in Light of the Discourse of the Last Three Decades." The presentation began with the more than 150-year history of Lasallian higher education and how it has had an eruption of growth in the past three decades. His presentation was formatted around three topics: (1) questioning and justification of Lasallian higher education; (2) search for the identity of Lasallian higher education; and (3) expectations, roles, and tasks of higher education in the Lasallian mission. While in the 1990s there were many Brothers who weren't sure if higher education was the right arena for the Lasallian mission, it is now clear that education and the work of colleges and universities is very important for the Lasallian mission. Brother Andrés believes that the processes of searching for the identity of Lasallian higher education has been very important as it has allowed each college to adopt the Lasallian mission to their own context. Furthermore, the process of this search for identity has meant that colleges continue to adapt and search for meaning in the Lasallian mission. Even as each college has its own identity, they all incorporate core elements of the Lasallian mission, particularly openness, accessibility, and inclusion, search for social transformation, and producing quality education that responds to people's needs. As Lasallians,

our future work includes attending to the poor, reducing poverty and social justice, training young people for social and labor integration, encouraging dialogue between faith, culture, science and religion, promoting research, and systemizing methodologies in support of collaborations and networks. Brother Andrés also provided a brief history of IALU and its four main phases. He also discussed the IALU structure and how this has allowed for the formation of the IALU action plan and research agenda. The themes of the symposium matched IALU's research agenda, which has a few topics: (1) food, nutrition, and heath; (2) sustainability and environment; and (3) ongoing work on education and innovation.

Peter Stemp presented the Saturday keynote on "Deepening our Collaboration: De La Salle Solidarietà Internazaionale ONLUS and Tertiary Lasallian Institutions." Mr. Stemp began by introducing many folks, for the first time, to the non-profit organization that he directs. He outlined their task as creating partnerships with public agencies and private foundations for funding opportunities that otherwise would not be available. Listed as organizational priorities were: "self-sufficiency," "beyond the borders," and "child protection." Mr. Stemp defined the "how" of these projects as financial assistance, technical support, and capacity building. He described the 2018 initiatives with over 15 different non-profits, as 93 projects in 26 countries, 12,500,000 US dollars raised, and 70,000 beneficiaries. While these are significant efforts, Stemp noted the challenges and, more importantly, he called for researchers to help measure and share the impact of these initiatives to better steward the resources and refine the processes. With 92,000 educators, 1,000 educational centers in 79 countries and one million students, this network with 300 years of experience could continue to expand its reach and impact. There is a great potential.

Mr. Stemp pointed out the commonalities of the De La Salle ONLUS initiatives and the Sustainable Development Goals of the United Nations. In 2017 ONLUS documented contributions to nine of the 17 goals the UN has established with a deadline of 2030. In addition, eight areas of children's rights were promoted. All of this fit quite well, it was noted, into the three IALU strategic research themes for 2013-2018: (1) food nutrition and health, (2) sustainability and the environment, and (3) education and learning innovations. Mr. Stemp went on to briefly describe some of the ONLUS collaborative projects. Following hurricane devastation, work is underway to build housing on Tortgua in Haiti. Twenty-seven houses have been built, but more than 100 mothers and their children are on a waiting list for assistance. Described as "Reaching the Unreachable" (RTU) – in Tamil Nadu, India – children (many orphans and those affected by HIV) are taught through RTU schools, many receiving scholarships; and they also receive 20,000 healthcare consultations. Saint La Salle Secondary School was established in 2016 in the Karemeno sector of Nyeri, Kenya; it has residential facilities for 163 students. They have an internal farm producing products for the canteen and operating primarily using energy from renewable sources.

Another key initiative highlighted in Mr. Stemp's presentation was La Salle University of Africa which has identified three pathways to prosperity. They are: (1) teacher formation and training, (2) engineering for sustained innovation, and (3) development of compassionate and skilled health professionals. This represents collaboration of the most significant type. Six universities across Africa work together (Cote-D'Ivoire, Burkina Faso, Addis Ababa, Nairobi, and

Antananarivo). The links between these six and the 21 countries, 96 schools, 4000 staff and 64,000 students across Africa represent some remarkable opportunities.

Additionally, Mr. Stemp showed collaborations taking place for internships, speakers and service for a Lasallian formation and nursing practicum, a teacher exchange in Burkina Faso, centers for community development coordinated by the universities throughout Mexico (and serving as something of a model for Africa's efforts), staff formation, research on child rights and global citizenship, partnerships for summer and short-term student internships, collaborations with the universities of RELAF (Lasallian Region of Africa) for fund-raising and additional cooperation for sustainable development, and tertiary education and private sector organizations.

Finally, Mr. Stemp invited researchers and organizations to engage in further collaboration with De La Salle ONLUS. Possible areas of focus include: defining Lasallian development and how it fits with other strategic partnerships, building the tertiary networks in Africa, children's rights, gender equity, and environmental sustainability. Also, important would be monitoring and evaluation efforts and exploring joint funding opportunities. His final invitation had to do with encouraging us to connect within the network, to work toward further institutionalization of this collaboration, and to ask how ONLUS can support and help grow what is already underway.

In one large breakout session, Brother George Van Grieken, FSC, presented on "A Theology of Vocation: A Toolbox for Thinking About Vocations, Lasallian or Otherwise." It regarded the Lasallian vocation from the Church's historical perspectives. This review included looking at grace, vocational discernment, and the notion of calling. Brother George emphasized that to discover the vocation, hearing a certain harmony between "who I am" as a child of God and "how I live" in the world, with and for others are critical. In addition, feeling a profound resonance between their deepest sense of themselves before God and a particular path forward is warranted. The session clearly defined the vocational call so we might come to appropriate the adventures in God's presence that yet lie ahead, both for us and for those entrusted to our care.

In a second large breakout session, Dr. Lynn Albee from Saint Mary's University of Minnesota led a discussion on "An Aesthetic of Being Lasallian." Dr. Albee's thought-provoking presentation encouraged participants to see the beauty in a variety of everyday practices and events and then further this contemplation to view the work of Lasallians as also full of beauty. The presentation began with a video of the effort and beauty that goes into making a single clarinet reed. The art of the baseball stadium Wrigley Field was discussed, as well as other places where participants see beauty. Participants were asked to discuss where they experience art in everyday life and came up with ideas including utensils, emails, and clothing. This discussion led to ideas about the intentional undertaking of incorporating aesthetics into teaching and our work as educators. Students in the room made particularly astute observations about how aesthetics, including in classroom design and presentation slides, affected student learning. Connections were made between the field of disability aesthetics that encourages the artful way of living with a disability to the respect of all persons that is part of the Lasallian heritage. More connections were drawn between the lyrics and music of the song "Sir Duke" by Stevie Wonder and the complexity and honor that is part of the work of Lasallian educators. Overall the session encouraged participants to incorporate the aesthetic of Lasallian as the beautiful, artful ways in which we live all of our lives collectively with the twelve virtues and core principles guiding us along the way.

Additional breakout sessions took place throughout the day. While this is not a comprehensive listing of the work, what follows is representative.

Environment, Sustainability, and Health

Dr. Yelda Hangun-Balkir from Manhattan College made a presentation⁵ about air pollution and childhood asthma in the South Bronx of New York City. It was noted that the rates of hospitalization from asthma are about five times higher in the Bronx than the national average. Traffic and power generation are the main sources of urban air pollution that increase the pediatric asthma. In addition, she discussed future opportunities and challenges of biofuels research that she has performed with her students. She also discussed research and educational activities of the Center for Urban Resilience and Environmental Sustainability Activities (CURES), of which she is the director at Manhattan College.

Dr. Sarah Wacker from Manhattan College discussed⁶ her research on the biochemical characterization of a bacterium that promotes plant growth. As the global population continues to grow, increasing our agricultural productivity with minimal use of potentially toxic chemicals is a major challenge. Her research suggests one solution to this challenge is inoculation of soil with plant growth-promoting bacteria (PGPB), which can improve plant growth and agricultural yields by directly increasing plant nutrient availability or by indirectly decreasing plant susceptibility to pathogens.

In a similar vein, Dr. Jerry Kavouras, Ms. Lindsay Melvin, and Ms. Emily Bernhard from Lewis University presented⁷ their new method to monitor biological productivity of soils treated with glyphosate. Herbicides are applied to agricultural lands across the globe for the productivity of farmlands. However, evidence suggests that herbicides, such as glyphosate, alter microbial diversity in the soil. Therefore, there is great concern about its continued use. The objective of this work was to develop a methodology to monitor the effects of glyphosate in terms of functional and species diversity of microbial communities.

Nathalie Cruz Mora from Universidad La Salle Costa Rica discussed⁸ water management efforts at the María Aguilar River by involving many stakeholders. This included intervening a section of the river to improve its sanitary and environmental conditions. Specific efforts included training the neighbors, chemical analysis of the river, monitoring activities of interest and leisure among neighbors, and creating environmental leadership capabilities in the area. This initiative was born through the ECOLASALLE program, and they have incorporated other stakeholders of utmost importance: companies, safety committee, civil organization, non-governmental organizations, municipal police and others.

Dr. Juneseok Lee and Jarai Sanneh from Manhattan College discussed⁹ the development of decision-support systems toward sustainable drinking water infrastructure. They utilized machine-learning techniques to forecast the future failures of drinking water pipelines. The principal outcomes envisioned from the project include but are not limited to: (1) an improved

understanding of critical phenomena that occur within our building plumbing that are expected to lead to better planning, design, analysis, and operational decision-making; and (2) new opportunities to develop/optimize water infrastructure systems operations and management strategies.

Javier Catala from Manhattan College presented¹⁰ his ongoing research about Efficient Structural Design for Sustainability Using a Numerical Optimization. His research investigated a new structural optimization method that focused on the reduction of material and efficient use of material to achieve engineering design objectives. He demonstrated that his proposed optimization worked well for the case study on which he has worked.

Dr. Ankur Agrawal from Manhattan College discussed¹¹ computationally identifying inconsistencies in the modeling of comprehensive and standardized clinical reference terminology that can be used in Electronic Health Records, which is to facilitate the storage and transmission of patient data in a consistent and reliable way. The assessment shows that the database is not free from inconsistencies that may affect its use in clinical care and decision support systems. The proposed methodology is found to be effective in computationally identifying areas that may be in need of quality assessment.

Lasallian Studies, Education, and Innovation

Dr. Michael Ratajczyk from Saint Mary's University of Minnesota presented ¹² his ideas on the ethics of Artificial Intelligence (AI), entitled "Character Virtue in Artificial Intelligence: A Study of Humanity in Big Data." Technology and artificial intelligence are changing our world; and it is important to consider how other Lasallians and Catholics, including Pope Francis, have responded. Dr. Ratajczyk's talk made it clear that since AI (and its connections to the internet) will operate without human control and may even be able to create their own legal systems, we must be vigilant about considering societal changes before they take place.

Dr. Jeffrey Sable of Christian Brothers University discussed¹³ his own use of the intonation "Let us remember that we are in the holy presence of God" at the beginning of each class period and his research on student perceptions of this and the articulation that "the classroom is a sacred space" on his syllabus. In his research of his own students, Dr. Sable found that these articulations of the Lasallian mission had a strong positive effect on student perceptions.

Sujey Ramos and Qua-Asia Fawcett from Manhattan College presented¹⁴ an alternative framework for thinking about student learning, which they believe better suits the Lasallian education system. They believe the spiritual domain of students should be balanced in education along with physical, emotional, and intellectual learning goals according to the Medicine Wheel approach to intercultural education. They also discussed their work with Supplemental Instruction (SI), where upperclassmen hold weekly study sessions for students who are enrolled in traditionally difficult courses.

Teddy Tandaju from Catholic University of De La Salle Manado (UDLSM) in Indonesia presented¹⁵ the changes he has made to the English-language course that is required for matriculation of all students at UDLSM. This course, which had remained unchanged for fifteen

years, has been transformed to include different learning levels as well as to embody aspects of the college's Lasallian mission. Students now taking the course receive education in effective communication, critical & creative thinking, service-learning projects, and teambuilding/entrepreneurship. The new format of the class has been taught three times, and each time it has been successful.

Some Additional Sessions

- Brother Enrique Alejandro González Cerna, FSC, presented¹⁶ on the components of twenty-first century Lasallian education in Latin America.
- Katherine Wortman-Otto and Dr. Jason Keleher discussed¹⁷ how advances in nanotechnology motivates Lasallian educators to implement a pedagogy focused on research into applications such as wound management, water quality, and information technology.
- Dr. Christine Beech and Dr. Lori Charron, as well as Colleen Dunne, shared¹⁸ the design of a new curriculum for engaging students around Lasallian identity, culture and vocation in the freshman classroom.
- Dr. Vivienne Angeles explored¹⁹ the experience of Catholic migrants converting to Evangelicalism.
- Hwa Seong Oh reported²⁰ significant results on the association of Lasallian mission and academic, spiritual, career and social impact.
- Dr. Bevalee Vitali discussed²¹ using Lasallian classroom practices learned from experiences of the Buttimer Institute of Lasallian Studies into a business management class.
- Gabrielle Kasper and Alyssa Zduniak described²² their work drawing on a feminist understanding of Lasallian values to develop tools to respond to the distorted sexual culture on college campuses with a project that they report reveals Lasallian language at the heart of the community as a useful tool for progressive sexual education and reform.

Roundtable Discussions on Communication and Future Direction of the Symposium

On Sunday morning, roundtable discussions were held. Regarding communication, Lasallian events and news were communicated between and among colleges/universities and other Lasallian organizations; but it was noted that there is room for continued improvement. There was some news, such as the 300-year anniversary of the death of Saint John Baptist de La Salle, which was well communicated between organizations; and there was other news, such as the upcoming beatification of Brother James Miller, FSC, in Guatemala, which is less well known/advertised. There were suggestions for more conversation during this annual symposium about Lasallian education, including possibly a "Lasallian salon," as well as strategies for better communication between symposia. Taking action – moving into the field and trying even small new efforts to collaborate – was recommended. Other suggestions included:

- Undergraduate students' participation at future symposia should be encouraged.
- Conference schedule could be reorganized to reduce conflicts, such that participants could attend the breakout sessions of their choice.

- Sponsorship for international conference travel/registration should be considered for international attendants.
- Conference could consider merging keynote speakers with lunch/breakfast.
- Overseas conferences could be considered (e.g. Philippines).
- Undergraduate research awards could be considered.

Significant collaborations between and among institutions are well underway, and important research is being done. Some of these efforts may represent models upon which future work can be built. Continued growth of research and collaboration efforts will help with the stewardship of resources and serving the mission.

At the conclusion of the event, Dr. Roxanne Eubank, Anselm Academic (college imprint of Saint Mary's Press) and Saint Mary's University of Minnesota were thanked for their efforts to keep this vibrant enterprise on track. The next (Ninth Annual) symposium will be held at Saint Mary's University of Minnesota, and submissions may be sent to Lasallian Symposium lasalliansymposium@smumn.edu by Spring 2020.

Endnotes

- 1. Jack McClure is the program director of the EdD program and professor at Saint Mary's University of Minnesota. He has been with Saint Mary's for more than 13 years serving as faculty and in an administrative capacity. He has a BFA from Drake University, an MS from University of Wisconsin Stout, and PhD in adult education-human resource development from the University of Minnesota.
- 2. Juneseok Lee is an associate professor of civil and environmental engineering. Dr. Lee, who has a PhD in civil and environmental engineering from Virginia Tech, is a registered professional engineer of civil engineering in the state of California and board-certified diplomate, water resources engineer (D.WRE) from the American Academy of Water Resources Engineer.
- 3. Sarah Wacker joined Manhattan College two years ago as an assistant professor of chemistry and biochemistry. She received her BS in biochemistry and molecular biology from the University of Richmond and earned a PhD in biochemistry from Rockefeller University.
- 4. Lynn Albee, "An Exploration of an Aesthetic of Being Lasallian." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 5. Yelda Hangun-Balkir, "Air Pollution and Childhood Asthma in South Bronx." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.

- 6. Sarah Wacker, "Biochemical Characterization of a Bacterium that Promotes Plant Growth." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 7. Jerry Kavouras, Lindsay Melvin, Emily Bernhard, Sharbel Dawalibi, Mateo Diaz, Fatima Jabali, & Nicholas Pawlica, "Development of a Methodology to Monitor Biological Productivity of Soils Treated with Glyphosate." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 8. Nathalie Cruz Mora, "Citizen Observatories of the Water and EcoLaSalle." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 9. Juneseok Lee and Jarai Sanneh, "Development of Building Water Systems Management Tool." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 10. Javier Catala, "Efficient Structural Design for Sustainability Using a Numerical Optimization Technique." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 11. Ankur Agrawal, "Computationally Identifying Inconsistencies in the Modeling of SNOMED CT." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 12. Michael Ratajczyk, "Character Virtue in Artificial Intelligence: A Study of Humanity in Big Data." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 13. Jeffrey Sable, "Let Us Remember": Student Perceptions of the Lasallian Mission in the Classroom." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 14. Sujey Ramos and Qua-Asia Fawcett, "My Humanity Is Tied to Yours: An Alternative Framework for Infusing Lasallian Principles into Student Learning Outcomes." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 15. Teddy Tandaju, "A Special English Matriculation Program for Freshmen at Universitas Katolik De La Salle Manado, Indonesia." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.

- 16. Enrique Alejandro González Cerna FSC, "Lasallian Educational Quality and Its Components Both Traditional and Current in Latin America." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 17. Katherine Wortman-Otto and Jason Keleher, "A Scientist's 21st-Century Encounter: Using Nanoscience to Open the Door to Lasallian Research with Global Impact." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 18. Christine Beech, Lori Charron, and Colleen Dunne, "Prepare for Impact." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 19. Vivienne Angeles, "From Roman Catholic to Evangelical: Migration and Religious Conversion in Philadelphia." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 20. Hwa Seong Oh, "College Students' Perceptions of the Lasallian Mission Impact on Their Development." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 21. Bevalee Vitali, "Adding Lasallian Elements into Business Classes: Is the Christian Brother's Approach Still Relevant?" Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.
- 22. Gabrielle Kasper and Alyssa Zdunia, "Consent through the Lasallian Lens." Paper presented at the Eighth Annual International Symposium on Lasallian Research, Saint Mary's University of Minnesota, Minneapolis, MN, September 20-22, 2019.