Welcome

*International Journal of Engineering, Applied and Management Sciences Paradigms* is an online journal and obey rules to ensure high ethical and professional standards in the field of publishing. This is a medium to publish articles that deal with theory and experimental demonstration of research. The journal support open access policy. The journal provides a medium to the researchers and academicians to express their ideas, views and help them to present and publish their new researches. Open access is the practice of providing unrestricted access via the Internet to peer-reviewed scholarly journal articles.

It is an Indexed and Refered Journal. All submitted articles should report original, previously unpublished research results, experimental or theoretical, and will be peer-reviewed. Articles submitted to the journal should meet these criteria and must not be under consideration for publication elsewhere. Manuscripts should follow the style of the journal and are subject to both review and editing. The journal will apply a double blind review procedure to select articles to publish in the journal.

**Indexing Services**

*International Journal of Engineering, Applied and Management Sciences Paradigms* is indexed in the following services:

1. UGC Approved List of Journals
2. Google Scholar

**Some Important Links of Author's Interest are:**

- Topics Covered
- Paper Format
- Copyright Form

This Website is Copyright Protected. All Rights are Reserved by the Publisher.
1. Review and Discussion: E-Learning Trends for Academia and Industry
   Tejinder Singh
   [PDF] Download Complete Paper

2. A Novel Technique for Reduction of Peak to Average Power and Bit Error Rate in MIMO-OFDM
   Yogeshwar Khandagre, Sanjeev Kumar Gupta
   [PDF] Download Complete Paper

4. Prototype Development And Testing Of A Power Electronics Converter For Green Energy Using dSPACE
   Akshajee Kumar, Ashoke Mondal, Subhajit Bandyopadhyay, Amir Salehdeen
   [PDF] Download Complete Paper

5. Prediction of the College Students with Bipolar Disorder who requires Psychology Motivation using Data mining techniques
   S. Peerbasha, M. Mohaned Surpudeen
   [PDF] Download Complete Paper

6. Searching Social Networking Sites using Semantic web and Natural Language Processing
   Amir Junaid, Sabina Prayadarshini
   [PDF] Download Complete Paper

7. A Cascaded Multi-Stepped Split Ring Resonator Inspired Bandpass Filter for S-Band Applications
   Sandeep Kumar Singh, Garima Mathur
   [PDF] Download Complete Paper

8. Capabilities and Limitations of FPGA ZedBoard for Computer Vision Applications
   Cesar A. Llorente, Suag Soon Yim, Je Yong Jung
   [PDF] Download Complete Paper
   Suhad H. Molaen, Hawnaa A. Abdulridha, Ali Abid Abojassim, Adnan Fakih Hassan
   PDF  Download Complete Paper

10. Gearless Variable Speed Wind Turbine In Ac/De Hybrid Microgrid By Using Fuzzy Logic Controller
    Babita Nanda, Ranjan kumar Jena
    PDF  Download Complete Paper

11. A Structural Assessment of a Concrete Building/Case Study
    Mazem Mesmar
    PDF  Download Complete Paper

    T S R Murthy
    PDF  Download Complete Paper

13. Removal of Nickel from Industrial Wastewater Using Date Seeds
    PDF  Download Complete Paper

14. Preparation of Chemical Inhibitors to Treat the Corrosion and Erosion of Machines
    Nawfel Muhammad Basri Mohn, Hayder H. Khaleel, Noor H. Dhuther, Dr. Nagham Mahnood Aljamali
    PDF  Download Complete Paper

15. Network Reliability Analysis for Unreliable Nodes and Software Failures Based on NHPP
    Thirumaranagan Shanumugan, D R Prince Williams
    PDF  Download Complete Paper

    P V Rajeev, R P Das, Dilip Kumar
    PDF  Download Complete Paper

17. Molecular structure and characterization of 5,7-diidio-8-hydroxyquinoline using spectroscopic (FT-IR and FT-Raman) and computational (Hartree Fock and Density Functional Theory) methods
    Seema, Ishu Rath, Vinuta, B. S. Yadav
    PDF  Download Complete Paper
18. Second-order nonlinear optical (NLO) properties and Thermodynamic parameters of 5,7-dibromo-8-hydroxyquinoline by ab-initio Hartree Fock and Density Functional Theory
Seema, Jayant Teotia, Vishrut Chaudhary, B S Yadav

19. Information Security Using Hilbert With Digital Signatures
Koduru Prasada Rao, G Lavanya Devi, K. Srinivasa Rao

20. Integrated Home Automation and Security System Using Arduino MEGA and GSM
Mohammad Abas Malik, Pz M Faheem Ud Din

21. Implementation of IFs and Detection of Financial Manipulation: A Case Study of Indian Automobile Industry
Nikhil Tripathi, CA Kamakshi Mehta, Bhawana Caudhary

22. Detection of Food Adulteration in Selected Food Items Purchased from Different Urban and Rural Areas of Chandigarh Region
Madhumita Bhattacharjee, Priyanka Arora

23. School Support for ICT Pedagogy Integration
Smita Malhotra, Anita Rastogi

24. A study of the antioxidant resource transformation of the 5 spice combination of Bengal in its pre and post cooking stages
Swarup Saha, Swarup Saha

25. Information Hiding using Tiny Encryption Algorithm Steganography on Video
Ashok Kumar Yadav, Ramnaresh, Kamaldeep Joshi, Abhishek Mahay, Abhishek Kumar, Kumar Sheetanshu, Pankaj Gupta

26. Development of Alert System using Viola Jones and KNN Algorithm for Safe Driving
Ashok Kumar Yadav, Ramnaresh, Raj Kumar, Abhishek Mahay, Abhishek Kumar, Kumar Sheetanshu, Pankaj Gupta
27. Lung Cancer Detection by using Adam Algorithm and Convolutional Neural Network
Ashek Kumar Yadav,Ramnaresh, Kamaldeep Joshi, Robin Singh, Shagufta Rana, Ashish Krishan, Ritika Sharma

28. Speaker Identification in Emotional Environment using Trajectory-based Stochastic Feature Mapping
Ranjit Kumar, Janath Yadav, Piyush Kumar Singh

29. Heavy Metals Contamination of Ground Water in Moga (Punjab): An Indexing Approach
Surenta Rani

V Ramanujam, T Viswanathan, K Annam Anma

31. Modified Leaky LMS Algorithm for Adaptive Beamforming
Praneet Raj Jeropolu, C. Amil Kumar, B. Rajendra Naik

32. Constructing Smart Campus Network Based on Internet of Things Technology
Ali Hadi Abdulwahid

33. Analysis of OBS Networks with Impatient Bursts and Server Breakdown
D. V. Neer Vaithika, M. Sabirigirraj, D. Srinitha

34. Auto-Recloser Circuit Breaker in Power System Based on Internet of Things for Smart Grid
Ali Hadi Abdulwahid

35. Comparative Study Between Different Types of Classical Controllers for BLDC Motor Drives
Sanjeev Kishorkumar Paseek, Pakitra Kumar Biswas, Upama Das
36. Smart Signal System to handle real-time vehicular traffic: A deep learning approach
Dinesh Kulkarni, Abhijeet Pise, Chetan Tal, Prakash Sharma

37. Adopting Multi-Disciplinary Perspective to Understand and Resolve Social Challenges
Ram Kumar Mishra, Geeta Putaraju

38. Pothole Detection and Maintenance System
Dinesh A. Kulkarni, Ayush Salunke, Hrishikesh Dadhich, Rishabh Kumar, Sridhar Kumar

40. Correlation Between Gastrophysics and Nanotechnology in Food Industry
Dulal Singh, Manzi Chikara, Amanjeet Bhatta, Nisha Jain

41. An Improved One-Time Pad Encryption using Cellular Automata with Two-Dimensional Parity Check
G. Kumaresan, N. P. Gopalan

42. Incarnational Service-Learning Model for Social Transformation for Industrial Revolution 4.0 Communities
Magdalena Pranata Santoso

43. Remote Solar Panel Temperature Monitoring in Microgrids
Tapash Kr. Das, Surajit Chattopadhyay, Arpindra Das

44. Vehicle Tracking System for Developing City using Artificial Intelligence with Image Processing
Hiral R. Patel, Ajay M. Patel, Satyen M. Parikh

45. Automating the Analysis of Medical Images
Paul Janecek, Clemens Bechter
46. Potential & Perspective Fragment of Nanotechnology on Energy Transmission Applications and Needs
Santosh Sanodiya, Keshavendra Choudhary

PDF  Download Complete Paper

47. A New Concept of an Intelligent Protection System Based on a Discrete Wavelet Transform and Neural Network Method for Smart Grids
Ali Hadi Abdulwahid

PDF  Download Complete Paper

48. Performance of Dual System Design Using UPBD Method
Durga Mihang, Satyabrata Choudhury

PDF  Download Complete Paper

49. Experimental Evaluation of Wear Behavior of Borex carbide and Short copper coated short Basalt fiber reinforced on Al 2014 based hybrid composite
Shantharaja M, Ranganatha S R, Krishnamurthy M C

PDF  Download Complete Paper

50. Helping Engineering Students in Malaysia Develop Positive Attitudes Towards Learning English as a Second Language
Ameen Akeem, Noor Zamah Bt. Abdul Rashid

PDF  Download Complete Paper

51. 4-Element Microstrip Patch Antenna Array with Slots for X-Band Applications
D. Rama Devi, E. Kunnamkunani

PDF  Download Complete Paper

52. Content-Based Image Retrieval Using Quadrants of Image: A Survey
S. Tanaseelan, S. Balaji

PDF  Download Complete Paper

53. Coverage Connectivity in Node Placement
Poonguzhal, P. Dhavachelvan

PDF  Download Complete Paper

54. Enhancing the lifetime of network using Hybrid Artificial Bee Colony (HABC) and Nelder Mead (HABC-NM) in K coverage m connected node placement problem of target based WSN
Poonguzhal1, P. Bhavani, R. Ramachandiran

PDF  Download Complete Paper
55. An Image Security System
S. Tamilselvan, P. Diwakarchelvan

56. Design and Implementation of Non-Isolated Bidirectional DC-DC Converter in Hybrid Energy System
Varnika Kulhari, Sunita Kumari, Sudhir Y. Kumar

57. Building Based, Semi-Quantitative Landslide Risk Assessment in Ritigaha Oya and Welihol Oya Sub Watersheds in Kegalle District of Sri Lanka
Sevandhi Rajapaksha, Hasali Hennasinghe, Gamini Jayathissa

58. BEG: Bin Oriented Energy Efficient Gathering of Data in WSN
Surbhi Gupta, Danish Ather, Gulista Khan

59. Ratio Analysis: A Study on Financial Performance of Ashok Leyland
Bhupinder Kumar Somy, Himanshu Goel

60. Designing an adaptive interactive conversational Agent
Shobham R. Jadhav, Sandeep A. Thorat

61. The study of Real Hypersurfaces of a Complex space form
Pavani N. Somashekhasram G

62. A Comparative Study on Mathematics Textbooks of NCERT, and West Bengal Board of Secondary Education
Sarpani Pramanik, Debjani Guka

63. Different Deterioration Rates Deteriorating Items for One Vendor One Buyer Supply Chain Inventory Model under Linear Demand
R. D. Patel, Jiten Patel
64. Economical Sensor Based Mis for Draglines
   Manoj S Tiwari, Manish Uttarwar
   PDF  Download Complete Paper

65. Modified SHA256 and its Comparison with Original SHA256 and SHA512
   Rohit, Sagar Kamra, Manu Sharma, Alka Leekha
   PDF  Download Complete Paper

66. Fuzzy rules applied in fuzzy Hamiltonian Graph
   S Prabavathi, A Manickam
   PDF  Download Complete Paper

67. Cost Overruns in Hydroelectric Projects
   Deepak Sangal, Virendra Kumar Paul
   PDF  Download Complete Paper
Incarnational Service-Learning Model for Social Transformation for Industrial Revolution 4.0 Communities

Magdalena Pranata Santoso

Petra Christian University, Surabaya, Indonesia

Abstract- Service Learning is a meaningful academic activity to integrate knowledge, skills, and character formation in the community. The revolution industrial 4.0 communities with the development of communication technology have caused moral and social problems for children, adolescents, and even adults. So far there has been no research to transform the lifestyle of Industrial Revolution 4.0 communities that applied the Incarnational Service Learning, a new model of service learning which imitating the life and ministry of Jesus Christ during His lifetime. Research has been conducted at the Pelangi Kristus Christian School in Surabaya, Indonesia from 2015 to 2018, which applied this model. During these years, the high school students served 6-to-12-year-old children from poor families around the school regularly for two hours every week. As a result, these poor children showed better moral values compared to the period before they participated in this activity. Moreover, the students who served those children, showed better character growth compared to students who did not. This program has been included into the school curriculum for 8 years, starting in 2010, involving 10 served children. Until mid-2019, there are around 300 served children. The students' parents testified that their children who participated in the program showed good character changes. Service learning with the incarnation model is an effective character education and social transformation means for Industrial Revolution 4.0 communities.

Keywords – service learning, social transformation, character education

I. INTRODUCTION

The birth of the Industrial Revolution 4.0, according to Tristananda, produces changes in the way people think, live, and relate to one another [1]. Technological developments in the era of the Industrial Revolution 4.0 could lead to the presence of a lifestyle, which tends to promote the values of freedom and enjoyment of life as a human right to live without limits. Therefore, it can reduce the value of morality. According to Mulyono, the emergence of the phenomenon of life and individualistic materialistic attitudes, as well as the erosion of the noble values of national identity, have shown that we have not succeeded in maintaining and even developing the personality of Indonesia as a nation [2]. As a result, efforts to maintain Indonesia's identity are indeed a struggle against globalization during the Industrial Revolution 4.0. Erie Sudewo also writes his concern to the lives of young people who have a lifestyle of violence in the form of a fight to kill, the use of drugs, illegal acts and free sex [3]. Indonesia's young generation has experienced moral degradation and apathy toward social conditions. Many have followed the principle of pleasure and hedonism with materialism as the main purpose of life. Teenagers' lifestyle which includes consumerism, need for appreciation and recognition, have made young people lose their common sense and motivate them to act recklessly by taking action against the law. Many young people behave differently like those of the previous generation, because the millennium is already familiar with the digital world with the information and technology industry, leading lifestyle into gadget addiction, cyber bullying, and decline of moral values. People who respect the value of life and still honor God who created man with noble dignity, see that Indonesian young people are in need of social transformation. In the Industrial Revolution 4.0 era, we need young people who have these characters: creative, innovative, and having integrity, and upholding tolerance in accordance with Indonesian national identity. President Joko Widodo (Jokowi) said that the Industrial Revolution 4.0 has brought new challenges to the morality of society, both in Indonesia and in the world [4]. The challenge he meant is the emergence of social media. With the advent of social media, people can easily and quickly disseminate information. Wahyuni (2017) finds in her study that one of the factors influencing adolescent moral damage is a decline in moral education and the impact of globalization that offer freedom and luxury that are uncontrolled during the Industrial Revolution 4.0 [5]. Educational institutions has been blamed as one cause of moral decay in the young generation, for failing to design a curriculum to strengthen the mental formation, and character education that build the value of life becomes strong guidance in their lives. In the educational environment, teachers must teach character not only in the norms and values, but also in the form of internalization and concrete actions in daily life so that students can master and apply character values in daily life [5].

Reflecting on this social reality, there are three important points. Firstly, Indonesia's young generation is in an emergency crisis and needs help to prevent them from getting worse immorality. Secondly, an urgent need to help
young people realize the needs of moral and character education for social transformation. Thirdly, as educators engaged in educational institutions, we have the strategic position to conduct character education which can be a means to achieve effective social transformation in order to help young people have noble morality. Serving students for God at a Christian University, I am called and to be responsible for serving the younger generation who live in the Industrial Revolution 4.0. As Indonesians, we are called to protect our traditional values and to serve our young generation to become wiser generation who have high moral values of life. Also, as the person in charge at Pelangi Kristus Christian School, I realize that studying in the classrooms is not enough to build my students’ life-values and noble morality in order to have lifestyle as godly young people. Since the society of Industrial Revolution 4.0 does not provide space for character education, we need to apply the model of Jesus Christ, serving the society in His day, as if He is living in the present and serving the young generation of this age. This is the way Jesus Christ served the community: wherever He went teaching, He always built relationship with the community and transformed the society into a better life-values. Jesus Christ always built and served as a model of wholistic ministry. He lovingly served those who listened to His teachings, and He lived among those who suffered. Carmer wrote that the way Jesus Christ talked and interacted with others became a model for us for a very discreet life [6]. This is called the incarnational service learning.

Thus, we design integrated curriculum for students of Pelangi Kristus Christian School, by modelling the ministry of Jesus Christ: integrating all learning process with service learning which is integrated into the curriculum. All students from elementary to secondary school will be equipped to become professionals who can carry out social transformation in the society of Industrial Revolution 4.0. According to Wilson, the identity of such school is the school of life, which integrates faith in God as the basis of life [7], a Christian school whose curriculum fully integrates the practice of the Christian faith in all areas of student learning. We are committed so that all students can learn effectively with a fully faith-integrated curriculum. According to Lockerbie (2005), such curricula – that can translate Christian faith that influences their thinking, their way of thinking, their way of life, and perspective on life and their speech, and apply fully to their profession in the future – is designed to be applied to students aged 3 to 18, with patterns of interaction and integration so that each student can apply the learning process along with the service learning to the closest community with a friendship approach [8]. The school curriculum integrates knowledge, faith, character, morality, which enhance the personality of every student with a quality of life of intelligence, morality and love for others, and always ready to serve others in need. Applying this model of service that is effective in character education for the students who are active in this learning process, can be an inspiration and driving force for implementing a character education curriculum that integrates service learning for social transformation in the society of Industrial Revolution 4.0.

II. INCARNATIONAL SERVICE LEARNING AS A MODEL

Thrall and McNicol clearly stated that one’s character is formed within the community [9]. Paul Gieschen agrees with this idea. His view is that children who are joyfully and consistently involved in ministry within the community can develop Christ-like character [10]. Serving those who are in need within the community by love of God is one of the most effective learning processes to develop Christ-like character. Gieschen also recommends that in educational process it is important to design a spiritual training with activities that enable the students to be involved in mission. The students can learn how to show love and take care of others. In addition, Gieschen asserts that character education can actually be done only by the Holy Spirit since doing mission is a ministry towards God’s heart [10].

2.1 Lingenfelter & Mayers stated:

A working definition of incarnational ministry is “the immersion of one’s self into a local culture and ‘becoming Jesus’ to that culture.” Incarnational ministry seeks to dispense with ministry “from a distance” and embrace ministry “up close and personal”—the love of God and the gospel of Christ are “incarnated” or embodied by the person ministering. Just as the Son of God took on human flesh and came into our world, we should adopt the culture to which we are ministering and “become Jesus” within it [11].

A central tenant of the incarnational ministry concept is “living the good news rather than preaching the good news [11].” The Christian understanding of the word incarnation is that “the Word became flesh and dwelt among us”. We are to be Christlike. We are followers and learners of Jesus. We are to communicate His love to the world. In incarnational service learning, there is an emphasis on being engaged with people and living a life of Christlikeness. This incarnational service learning is modeling the traces of the ministry of Jesus Christ as He

---

1 Pelangi Kristus Christian School, Jemur Andayani XXII - 4, Surabaya, Indonesia.
2 Mark 1:29-34.
3 John 1:14.
himself ministered the people while He was on the earth. Eventually, Robert Sullivan believes that as Jesus gained more and more followers and notoriety, word spread beyond Galilee, that He had performed those miracles, healed the sick in order to forward a moral point or to instill faith instead of to demonstrate His supernatural power [12]. Jesus Christ also did say that He is the truth, which means that He is the incarnation of the truth. His life, His actions and His emotions illustrated how people should live out the truth God has revealed. According to the Bible, in Philippians 2:5-9, He who has become a servant and become just like humans, ministered to sinners: those who live in evil and whose lives are in vain. This ministry of Jesus Christ is referred to as the incarnational service learning, as a means for the character educational process to carry out a social transformation for younger generations of Indonesia. The incarnational service learning that a Christian school can do is employing an educational curriculum that provides the way for all students to serve the community, primarily the younger generation, focusing on children aged four to fourteen. Wilson (2008) stated that serving the Lord must be founded in our devotion to Him, a devotion that is revealed in the process of life [7]. Supporting what Wilson said, Hull explains that believing in Jesus Christ means living the life of Jesus, loving as He loves, serving as He serves, fully imitating Jesus [12]. Only life like this can bring social transformation to people around us.

Our high school students have been serving the children in a learning process during the weekend. They serve the children in poor communities living around our school. The students go to places around our school where they meet families of low-income. They are invited to come to our school every weekend. We allow them to use our school library that they may read many good books and literature. The children can also join several activities and training to equip their lives with something better and more valuable. In this project, we have been applying the following three aspects of incarnational ministry. Firstly, the students of Pelangi Kristus Christian School from grade six to grade twelve have been serving poor children as an expression of love to God and them. The students appreciate the lives of the children they serve. Our students help the children and serve them in a true sense of identity, so the children would not fill their lives with hedonism and consumerism. On the other hand, they can find that the true identity as God's creation is very valuable, that they are precious before God and they have their uniqueness. Therefore, in this pattern of incarnational service learning, each of our students shows a genuine friendship and love, as well as appreciation to every child they serve and gives new meaning to their identity because of the Almighty God who created them. Secondly, every child should serve the children who come from different backgrounds. Aspects of differences include age, ethnicity, religion, and culture. That is why our students must learn to be humble and be ready to let go of their status and pride. They learn to be open and respect differences, also to see different backgrounds and statuses with sincerity and show genuine kindness and appreciation. Our students have been applying the principle of the incarnational service learning by imitating Jesus Christ who does not see men as an object but as a precious subject and beloved ones. Our students learn to love the children whom they serve as they love themselves.

Here are some concrete things done by our students. Before serving the children, they would prepare the learning materials according to the age of the children. Our students would add lesson material by giving real examples from their lives. Our students realised that they were not only serving and teaching the children, but they also set an example through their words, attitudes, and deeds. They always prayed for every child they were serving, because they believed that only God could transform the human heart. The students understood that they could only serve the children with God's blessing. Before entering the classroom for the teaching and learning process, they invited the children to play together or read books so that the children could experience friendly fellowship. Therefore, the learning atmosphere became comfortable, and the children could learn happily. Although the age differences between the students and the children are not significant, the children can show respect to our students. The children learned well, and they diligently followed the learning process held every Friday for 90 minutes from 3:30pm to 05:00pm. Our students provided snacks and small gifts to appreciate the children who learned with passion and perseverance. They also apply classroom discipline. Not only did they show the attitude of being serious teachers, but they also treated the children as siblings. In the learning process, our students applied competitions, games, and teaching creativity that helped the children understand the material well. Finally, all our students should learn to have a motivation in their hearts and a clear purpose that they were serving the children as they would have served the Lord Jesus Christ Himself.

III. APPLYING THE INCARNATIONAL SERVICE LEARNING

There are three aspects for applying the Incarnational service learning. The first aspect that becomes a curriculum in this Incarnational Service Learning is the spiritual aspect. The goal is that every child who receives this social

---

transformation through the incarnational service learning by the students is increasingly aware that the life given by God is valuable. The children will grow with the awareness and knowledge that since life is precious and given by God, they should not waste it by filling it with wrong things. The second aspect is the moral aspect. The children have an awareness that obeying God's truth is a necessity for the good of their lives. Living the values of good morality is a good thing for themselves and others. Necessity to do the good and right things also grows in a responsible attitude toward life by not destroying lives with negative things. It awakens their spirits to be a mentally and morally healthy young generation by avoiding violence, sexual immorality, and drug addiction. The third aspect is the intellectual aspect. The children have the belief that every child gets gifts of talents from God the Creator. Every child has a clear and strong motivation to develop self-potential positively. They may have the basic and strong motivation for a meaningful purpose in life, and they can dedicate their lives to the family, community, and the nation, Indonesia. Palmer describes this model of service learning as learning center where the students learn within a community where the truth is spoken and practiced in a relationship of love [13]. He also believes that a community of truth is a community bound together in a relationship, which is the only true way of knowing reality or truth because a learning space has three important characteristics, which are: openness, boundaries, and hospitality [13]. By openness, the students learn for flexibility and providing new and different ways to relate, work, plan, even think. Believing that they are loved by God, they could feel secure to share their lives with the children they were serving. Boundaries are needed for the students' character building, that they may learn to live according to God's values. This young generation needs to learn hospitality by showing care and looking after the interests of the children they were serving as their own.5 The incarnational service learning, which Jesus has modelled, guides the students into all truth, to model a life of grace and mercy, to live in humble service to others, to extend the grace Jesus has given, and to love others as Jesus loves us [14]. Practicing incarnational service learning is an effective learning process to encourage our students to live transformed lives marked by love for God and others and to equip them for a strive to make the world a better place.

Our Christian school has applied the principles of the UNESCO’s Five Pillars of Education6 as well as developed basic life skills from United Nation Educational Scientific and Cultural Organization’s curriculum. We chose the UNESCO’s curriculum and follow The Regional Handbook on Life Skills Programs for Non-formal Education [15]. On the Development of NFE Skills in UNESCO’s curriculum, there is one point that can be applied for the children, which includes the five areas of learning need, identifying family life, and responsibility. The learning objectives are that the children will be able to explain the family members and their responsibilities as well as to describe the five ways of expressing empathy, etc. The students elaborate the unit in contextual skills, generic skills, and literacy skills. We believe that following a good curriculum can enable the students to reach the purpose of this incarnational living ministry for social transformation among youth generation. We believe that this curriculum can answer the needs of young generation that they may be able to face the challenge of the modern life values. Using this curriculum, we believe that the children can grow as a better young generation who develop good intellectual aspect and strongly hold the moral and spiritual values.

The students implemented UNESCO’s curriculum that integrates students' learning process in literacy, contextual and generic skill in a well-proportioned way. In this incarnation living ministry, the students can make friends and show God’s love and care for the children as their new friends [16]. Furthermore, these four-to-fourteen-year-old children can have a process of education and learning experiences for social transformation, such as computer skills, English, Mathematics, drawing, painting, arts, and crafts. Also, the students have been educating them to utilize electronic devices for positive purpose, such as listening to good music, and watch some educational videos and films, etc. Our school teachers also participate in this ministry by teaching some health and sex education according to the students’ age. All these services, learning processes, and activities have a purpose for the children, that they may have something better and precious for their future lives, so they may be transformed and have better values and character.

Our students have been applying the incarnational service learning to children outside our school environment. This service learning can give positive impacts for the students themselves. Through this service, the students can finally

5 Philippians 2.5-6.
6 Learning to know – the development of skills and knowledge needed to function in this world (e.g., formal acquisition of literacy, numeracy, critical thinking and general knowledge). Learning to do – the acquisition of applied skills linked to professional success. Learning to live together – the development of social skills and values such as respect and concern for others, and the appreciation of cultural diversity. Learning to be – the learning that contributes to a person’s mind, body, and spirit. Skills include creativity and personal discovery, acquired through reading, the Internet, and activities such as sports and arts. Learning to transform oneself and society – when individuals and groups gain knowledge, develop skills, and acquire new values as a result of learning, they are equipped with tools and mindsets for creating lasting change in organizations, communities, and societies.
develop their leadership competence as they serve and lead the children as their younger brothers and sisters. From the personal reflections written by the students during this service-learning process at Christian leadership class, they mentioned that they learnt how to make plans, develop ideas, give positive influences, be role models, develop courage, and build relationship with others. They also learnt to solve problems and make decisions. John Collier shared that what he was seeing that in many cases, the service-learning ministry involving students could change the hearts of students who understand and pursue the nexus of faith and action. Many have moved beyond simply undertaking service learning to fulfil a curriculum mandate. They have reached the point at which serving others is integrated into their lives as Christians, as an outworking of Jesus’ love for them. Those whom they have served have seen a compelling model of faith in action [17].

In our school, the students study about Christian Leadership program from grade seven to grade twelve as an essential part of the school curriculum. Thence, the students who are serving the children can gain many benefits for their learning process. The students will experience the process of growing in understanding about Christian Leadership not only in a concept, but also in a concrete process. Besides, they are growing in their character and personality, regarding patience, sincerity, kindness, attention, diligence, and creativity. While doing their preparation in this service learning, they also learn how to share money, invest time, and make friends. By serving them, the students can certainly learn how to take care of and show compassion for other children’s needs as well. Not only the students, but the teachers also serve the mothers who are accompanying their children by discussing the children’s education, improving their skills and competencies so that they may have more entrepreneurial spirit to improve their economic life.

IV. CONCLUSION

How to transform industrial society 4.0 to have noble morality through effective character education to instill moral? Elkind and Sweet stated that the best forms of character education also involves students in honest, thoughtful discussion, and reflection regarding the moral implications of what they see around them, what they are told, and what they personally do and experience [18]. Incarnational Service learning is a powerful approach to teaching in which academic goals are accomplished through community service. This activity takes the students well past merely performing the service—they also select it, plan it, and then reflect on their entire experience. In addition to academic content, students practice valuable practical skills like organizing, collaborating, and problem solving. And they exercise such important character virtues as showing respect, taking responsibility, empathy, cooperation, citizenship, and persistence. Incarnational Service Learning is, in a word, transformative. A lot of them deal with community needs related to health, poverty, social issues, and the environment. Other good service-learning activities involve helping other students through mentoring and peer or cross-age tutoring. Believing that incarnational service learning can be an effective process education for social transformation for the children, we started this ministry since 2010 with 10 children. Those children as at-risk generation would be transformed to become a better-valued generation. After 8 years, now we have been serving approximately 300 children from several areas around the school. By God’s blessing, we can see that those children are blessed and growing intellectually, mentally, emotionally, as well as spiritually. After following this incarnational service-learning process, most of the children reached excellent academic achievements. They also made progress in their learning motivation. Also, we can notice the cessation of bad habits such as dirty words, disrespectful behaviors, rebellion against authority, laziness, and gadget addiction. The parents of the children testify that the children’s behaviors now are more positive compared to the moment before they attended the service learning program. By teaching the value of morality in every learning process, the children produce positive results. Therefore, the children’s parents also want to follow the children education program provided by the school teachers.

We have expanded the service area from the school’s immediate neighborhood to other neighborhoods around the school. The expansion of this area occurs because the surrounding community has seen the benefits for the children served by our school. Other parent communities asked our students to serve younger children who cannot visit our school. In the last three years, we have successfully served four communities around our school with children aged four to six. The number of children who attend incarnational service learning in each community is about 20-25 children. The neighborhoods have opened their local public places for our ministry. So far, we have planned and given a recommendation to develop a synergy between schools and universities for such service learning. In the synergy of schools and universities, lecturers of a university can also do service learning by serving the parents of the children who have been attending the service-learning programs held by the school. Working with students from nearby campuses can have a positive impact. Children with their families may get more attention, love, and better services. Children will be more confident that their lives are valuable because they are loved and get so many benefits that have direct impacts on the learning process in school. This synergy will definitely give positive impacts. Incarnational Service Learning can be one solution to the reality of moral degradation that threatens the
young generation of Indonesia. This ministry could be a new hope to answer the moral crisis that has been hitting the young generation. By God's grace, incarnational service learning can be a tool of social transformation for Industrial Revolution 4.0 communities.

V. REFERENCES


About the writer:
The writer, Magdalena Pranata Santoso, 62 years, married, has one son, a Christian educator, has been serving God at Petra Christian University, Indonesia, since 1985 as a lecturer for several subjects, namely: Christian Ethics, Christian Leadership, and Christian Education. Since 2010, she has been trusted to be the Coordinator of Center for Servant Leadership, and since 2016, the Dean of Faculty of Teacher Education. In 1996, she founded a Christian school for children ministry for students aged three to eighteen with a mission to equip the students to become God’s ambassadors who will accomplish God’s calling for His Kingdom’s sake. Her education background: M.A. in Theology (1980); M.Sc. in Religion and Sociology (1995); and D. Min. in Leadership and Christian Education Ministry (2010).