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**DO - IT – YOURSELF EXTENSION PROJECT: A SUSTAINABLE LIVELIHOOD TRAINING FOR ECONOMIC GROWTH**

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**Abstract**

Sustainability of a certain project or program requires bigger steps. Thus, this study Do-It-Yourself - an extension project of Cebu Normal University aims to make it sustainable and impactful to the residents of Barangay Nangka Balamban, Cebu, Philippines for them to be independent, skilled and employable individuals in the community. Concurrent mixed method was used in the collection and analysis of data. Additionally, the study was employing the Logic Model of Monitoring and Evaluation (M&E) Framework. This framework is designed to explain the essential theory of change which can be anchored in the extension project. There were 30 purposively sampled participants for the study. It was found out that after two (2) years of trainings the residents were able to acquire the necessary skills for them to become independent, skilled and employable in the community. The residents expressed that the project had transform their lives and somehow, they were able to sustain it in their own little ways as they embedded it as part of their daily life activities. Further, “Sustainable livelihood training alleviates the economic status of the people” is the theory of change formulated from this study. It was concluded that the transformation of the residents of Barangay Nangka, Balamban in Cebu, Philippines from unskilled to skilled, unemployed to employed and dependent to independent is contributed to Do It Yourself Extension project of Cebu Normal University and the residents’ willingness in completing the project.

**Keywords:** sustainable development, livelihood training, economic growth

**1.0 Introduction**

Sustainable development is considered to be a broader step in social change (Hvenegaard, Hallstrom, & Brand, 2019) which focused on the citizens’ view and perceptions (Calder, Beckie, & McMann, 2016) in sustainability planning and policy making (Termorshuizen, Opdam & Van den Brink, 2007; Blowers, 2013; Hallström, Hvenegaard, Stonechild, & Dipa, 2017) in answering the different issues in the community specifically in rural communities. Though, equivocality in terms of meanings and inferences can be felt and observed in sustainability in general (Dale & Robinson, 1996; Hanna, 2005) but still the most proclaimed way in dealing strategies in sustainability planning programs in helping local communities (Hanna, 2005).

In 2040, the Philippines envisions that the lives of Filipinos will be comfortable and stable as possible in terms of lifestyle, security, food and securing the future of Filipino children. The Filipino family dream of living in their own home/house, liberty to go where they desire and

total protection from just government (AmBisyon Natin, 2040). Additionally, it represents the collective long-term vision and aspirations of the Filipino people for themselves and for the country in the next 25 years. It describes the kind of life that people want to live, and how the country will be by 2040. Hence, technical studies were prepared to identify strategic options for realizing the vision articulated by citizens. However, even with the vision of the country the reality of the present overcomes the country's success that is threatened by rampant poverty among its constituents. Poverty remains one of the biggest challenges for the Philippines despite the country's generally good economic performance in recent years. Latest poverty data from the Philippine Statistics Authority (PSA) show that more than a fifth of the country's total population, or roughly 22 million Filipinos, were still living below the national poverty line in 2015. One of the causes is unemployment which is said to be one of the biggest hindrances to a country's economy.

Republic Act No. 7769 creates Technical Education Skills Development Authority (TESDA) *"to provide relevant, accessible, high quality and efficient technical education and skills development in support of the development of high-quality Filipino middle-level manpower responsive to and in accordance with Philippine development goals and priorities"*. With this, TESDA promotes and provides different scholarships and financial assistance in order to encourage more Filipino to take Technical and Vocational Education Training (TVET) for the many provinces in the country that have low employment rate. For example, in Cebu specifically in Barangay Nangka is one of the inhabited barangays of unskilled, low-skilled, unemployed and disadvantaged in this competing world of being hired. Hence, this project is geared in alleviating the economic status of the people towards a lifelong learning through livelihood training. Moreover, this project is anchored to Sustainable Development Goals of 2030 specifically on "Decent Work and Economic Growth". Thus, the project is named "Do It Yourself: A Sustainable Livelihood Training for Economic Growth" which provides opportunity for unemployed, unskilled or low skilled and disadvantaged individuals to be trained, independent and employable to the community through acquiring the necessary and basic skills such as changing faucets, changing and fixing pipes, electrical installation and other related electrical works, safety and energy management, floor mop making and TV antenna making. These activities are believed to be helpful in the transformation of the lives of the residents for them to become independent and employable.

### *1.1 Objective of the Study*

The aim of the extension project was to provide livelihood training for the residents of Barangay Nangka, Balamban, Cebu, Philippines who were unemployed, unskilled and less privileged. Thus, this study looked into the impact and sustainability of the D.I.Y extension project of Cebu Normal University in Barangay Nangka, Balamban, Cebu, Philippines.

## **2.0 Literature Review**

Community projects are relevant in alleviating the economic status of the people. Thus, sustainable projects must be viewed as one of the goals in the implementation of any community projects. Sustainable development is a priority issue in the field of municipal planning and policy making (Termorshuizen, Opdam & Van den Brink, 2007; Blowers, 2013; Hallström,

Hvenegaard, Stonechild, & Dipa, 2017). Sustainability is defined as the cohesive effort to connect environmental, social and economic decision-making with the support of the government. Similarly, rural communities in the considerations of equity engagement, and multi-level change integrated perspectives on issues of wealth and inequity are less common (Hallström, Hvenegaard, & Dipa, 2019). Conversely, according to Roseland (2000) of sustainable community planning, the practice of sustainability planning in Canada has proven to be highly diverse, fragmented, and often disconnected from other forms of planning, from local community engagement or legitimacy, from implementation, or from evaluation.

The role of the colleges and universities to be in one with the community progress is highly desired to create a partnership in which lessen the burden of the people in the community project implementations. There were numerous researches that explained the relationship of the rural scholars working directly with communities which in different forms action research is prescribed most frequently (Douglas, 2003; Markey et al., 2010; Ryser, Markey, & Halseth, 2013). The trend of partnership among the community and rural scholars have been observed in which faculty members were called to be the frontlines of the engagement (Bruns et al. 2003; Conway-Gomez et al., 2011; Grunwell & Ha, 2014; Loveridge, 2002). Similarly, faculty-community engagement is desired specially for the college and university students since the opportunity of applying real world learning opportunities is at hand (Bednarz et al., 2008; Bridger & Alter, 2006). Further, apart from university resources, development of core intellectual and academic work of the universities shared beneficial (Grunwell & Ha). Truly, there is great possibility for researchers and their students to engage in forms of "public scholarship" with rural communities that can ultimately become "win-win-win" situations due to the number of benefits that this can bring for all parties involved (Cantor & Lavine, 2006).

On the other hand, citizens' participation is vital in the success in the sustainability implementations of the community projects. To improved practices of sustainability planning for rural communities the need of promoting the citizen engagement and by identifying common barriers must be planned in advance (Hallström, Hvenegaard, & Dipa, 2019). The idea of citizen participation framework was introduced by Arnstein's (1969) and it was called the "Ladder of Citizen Participation" which pursues to discover and measure the role of citizen participation in shaping visions of sustainability planning. Arnstein's framework is considered, in the public decision-making field, to be an effective and appropriate way to understand citizen engagement (Collins & Ison, 2006; Baum, 2012; Garau, 2012). Conversely, the ladder also oversimplifies the complex stages of, and obstacles that arise during, a planning project by focusing solely upon power (Collins & Ison, 2006; Tritter & McCallum, 2006). Additionally, current studies have used Arnstein's framework on many issues, such as parents' participation on school councils (Stelmach, 2016), collaborative urban management (Kotus & Sowada, 2017), and the concept of post-collaborative participation (Bacqué & Gauthier, 2017). Similarly, another framework emerged in the lens of deliberative democracy explained that inviting citizens to share their problems and express their inputs (Goetz & Gaventa, 2001). Relatively, citizens must listen, evaluate, defend the process of constructive discussions until reaching the final decision (Carpini, Cook, & Jacobs, 2004). Indeed, working hand in hand in the implementation of community projects retrospect on the success of the projects.

### **3.0 Methodology**

#### *3.1 Research Design*

The study used concurrent mixed method (Creswell,2003) in which the quantitative and qualitative methods are given the same weight in the collection and analysis of the data at the time. Additionally, the study was employing the Logic Model of Monitoring and Evaluation (M&E) Framework. This framework is designed to explain the essential theory of change which can be anchored in the extension project. Theory of change is the result of the desired goals from the planned and scheduled activities. The logic model deliberately integrates the assumptions which tell how project can be implemented and resolved (Gugui and Rodriguez-Campos, 2007). Simple narrative inquiry was used in the qualitative analysis. According to Creswell (2007), qualitative studies are used to give opportunity for the individuals to explain and share their life stories to understand a certain phenomenon. Questionnaire and semi-structured interview were the main research instruments in gathering the data of this extension project.

#### *3.2 Research Participants*

The study purposively identified 30 participants who have completed the extension project to ensure that they can explain and share the impact and sustainability of the D. I. Y. extension project. The researchers went to Barangay Nangka, Balamban, Cebu to ask the participants to answer the questionnaire that described their training experiences of the project. Additionally, semi-structured interview was used to gather and explain their life stories in relation to the impact of the D.I.Y. extension project of Cebu Normal University.

#### *3.3 Data Analysis*

Descriptive statistics was employed in the simple analysis of the data in the study. Percentile was used to describe the training experiences of the participants. While, Logic Model of Monitoring and Evaluation Framework were utilized in the presentation of the theory of change. Further, face to face semi-structured interview using interview guides was used in the qualitative data analysis. The participants were encouraged to speak freely on their thoughts, feelings and ideas regarding the two (2) years training of D.I.Y. extension project of Cebu Normal University. Significant statements were culled from the interview to be used in the presentation of the data. Furthermore, formulating themes from the significant statements were captured and presented to understand their personal level of experiences on the extension project.

#### *3.4 Ethical Consideration*

The researchers were aware of their moral obligation in terms of the confidentiality of the participants. The ethical measures in this study include consent, confidentiality and anonymity, privacy, and the right to withdraw from study were followed diligently (Speziale & Carpenter, 2003). Approval from the participants were obtained first before the conduct of the study. Thus, the participants were informed on the objectives of the study and explained to them that it is voluntary to join in conduct of the study.

#### **4.0 Results and Discussion**

Do It Yourself extension project of Cebu Normal University is about basic plumbing and finishing, basic electricity and electronics, floor mop making and TV antenna making. The training was conducted every once a month for two (2) years in capacitating the residents of Barangay Nangka Balamban, Cebu, Philippines who are unemployed, unskilled or low skilled and disadvantaged. This project is in response to the result of the need assessment done by Cebu Normal University and Barangay official which presented that most of their Barangay residents were unemployed. There are several studies that explained and presented the need of the academic people and/or Universities in helping and assisting the community (Douglas, 2003; Markey, Halseth, & Manson, 2010; Ryser, Markey, & Halseth, 2013) in looking into the issues and possible solutions in answering the raised issues (Bryant, 2010, Bruns et al. 2003; Conway-Gomez et al., 2011; Grunwell & Ha, 2014; Loveridge, 2002). Thus, the union of community and academic people or faculty members of the university is been part of the dictionary in terms of different terms such partnership, community extension, knowledge mobilization, community-engaged scholarship, and university-community partnerships which have proven to be effective in dealing some community specific issues which the university have the resources to mitigate such community issues. Further, Cantor & Lavine (2006) stated that this is a win-win-win scenario for the parties involved. Moreover, the project envisioned that after the training, the residents of Barangay Nangka have acquired the necessary skills to be independent and employable. Thus, participation of the residents in the extension project is essential and crucial in terms of its success and its sustainability. Matarrita-Cascante & Brennan (2012) believed that community development is multifaceted concept which is pretty inspiring in arriving answers to community problems. Therefore, people's participation in the planning and action of the community project has become the central theme of the community development (Honkalaskar, Sohoni, & Bhandarkar, 2017). To ensure that the extension project is sustainable, Logic model was created and used to explain the impact of the Do – It – Yourself extension project of Cebu Normal University for the community.

The logic model has two dimensions: first is the vertical dimensions which goals, problem statement, outcomes/objectives, outputs, activities and inputs were explained; and second comprises narrative summary, indicators, means of verification, person responsible and risks/assumptions can be explained. Below is the logic model of this extension project.

Table 1. The Logic Model

	Narrative Summary	Indicators	Means of Verification	Person Responsible	Risks/Assumptions
<b>Goal (Impact)</b>	Alleviate the economic status of the people through giving sustainable livelihood training.	The residents of Barangay Nangka are skilled and employed	Frequent hiring of their skills (Interview from the community)	Project Proponents	
<b>Problem Statement</b>	Most of the residents of Barangay Nangka are unemployed and poor and need training to improve their life status	Out of school youth and Jobless middle – aged adults in the Barangay	Interview and data from LGU	Project Proponents and LGU	No interest to join the training
<b>Outcomes (Objectives)</b>	At end of the training, skilled, independent and employable residents of Barangay Nangka	Hired in a certain company and self – employment	Actual interview and <u>Feedbacking</u>	Project proponents and Participants	Lack of trust and confidence
<b>Outputs</b>	Completed the basic livelihood training program for the unskilled & unemployed residents	Acquired training certificate that signifies that he/she completed the training	Attendance of the training	Project proponents and participants	Not completed the training
<b>Activities</b>	Six Training Modules	Complete attendance during the scheduled training	Attendance on every training	Project proponents and participants	Availability of the trainer and budget constraints
<b>Inputs</b>	CNU Funds, LGU support, Resource Speaker	MOA and Budget Utilization	Approved Documents	Project Proponents and Barangay Officials	No Sufficient Budget Qualified Resource Speakers

#### 4.1 Goals

Community goal setting must be a shared vision to all. Moss & Grunkemeyer (2010) said that consensus discussion of the members of the community is needed for a better support and comprehensive implementation of the goals. However, limited participation of community members can cause an unsatisfying and disheartening in creating the shared vision (Richards & Dalbey, 2006). Thus, commitment and wider participation is a must to craft and to implement the so-called goals for the community development.

The impact (goal) of the project is on the decent work and economic growth of the Sustainable Development Goals 2030 of United Nations. Decent work and economic work is defined as the higher levels of productivity and technology innovation, encourage entrepreneurship and job creation which are considered the effective measures to eradicate forced labour and unemployment. The indicator that the goal is achieved in the D.Y.I. extension project of Cebu Normal University is to check and to assess if the residents have acquired the necessary skills in the training and were verified by the trainers or implementers of the program. There were an increase hiring of the residents in the trained fields as narrated by them after the training program which emanates somehow that the residents have acquired the skills and made changes in their livelihood status in the community.

#### 4.2 Outcomes

After the training within two years, the residents then apply their learning on the basic plumbing, basic electricity and electronics, floor mop making and antenna making for them to be self-

employed and be employed in any related agencies. Moreover, other residents were even earning National Certificate from TESDA on this particular field since most of the resource speakers or trainers were TESDA accreditors. Thus, making the residents competent and become independent and improved their economic status. However, not all of them have succeeded in the training program, 9 or 30% of the residents were not able to apply the skills since after the training they were hired in other designated job.

### 4.3 Outputs

All the residents were able to complete the skill training on the basic plumbing, basic electricity and electronics, floor mop making and antenna making. It is expected for them to be able to perform the acquired skills based on the TESDA standards then it gives them the confidence to be employed.

Table 2. Training Experiences of the Residents

Indicators	Yes	%	A Little	%
1. Did you understand your trainer?	30	100	0	0
2. Did your trainer answer your questions?	30	100	0	0
3. Are the topics useful to you in your future activities?	30	100	0	0
4. Was the time spent for the training enough?	15	50	15	50
5. Was the time allotted for each topic adequate?	23	76.67	7	23.33
6. Did you learn all the skills that you would be able to use in the future/when the right time comes?	15	50	15	50
7. Was the arrangement/organization and the training good according to the expertise shown by the trainers?	24	80	20	20
8. Was the training organized in the appropriate place and at the appropriate time?	30	100	0	0
9. Were the materials provided by the trainers useful to you?	24	80	6	20
10. Were the activities conducted by the trainers significant to you?	24	80	6	20
11. Were the materials used in the activities appropriate to your level of knowledge/understanding?	24	80	6	20
12. Were the training helped you?	22	73.33	8	26.66

The table explains the training experiences of the residents of Barangay Nangka, Balamban, Cebu, Philippines. The results showed that 100% of the trainees were able to understand, were satisfied, find it significantly important and timely training for them. This is indeed feasible since they were guided by experts all throughout their training. Indeed, this is true since the key of effective learning is through total guidance in independent learning (Cukurova, Benneth, & Abrahams, 2018). Further, in terms of the materials, organization, and appropriateness of the training they rated it 80%. Moreover, in the acquisition of the skills the trainees rated themselves 50% but the training itself was very helpful and useful for them. Training becomes the on-going efforts to improve the performance and training quality in order to sustain competitiveness (Jacobs & Washington, 2003). Thus, D. Y. I. project provides the residents the opportunity to learn something different and significant for their lives.

#### **4.4 Life Transformation of the Residents**

Most of the residents of Barangay Nangka, Cebu explicitly expressed that their lives have changed since the moment they joined the training program of “Do It Yourself Project” sponsored by Cebu Normal University.

*K11, K13, & K116 said that “It changes our lives since we have acquired new skills to be used in our daily life and in a way, can save expenses since we will not buy it anymore, we can make it already”. K14 & K110 expressed that “it added to our skills and very useful”. Further, K15 & K18 said “it is very essential to us since we have acquired the skills for us to alleviates our economic status”. Additionally, K17, K24, & K30 said “this is very relevant for us specially that we are just staying at home but then we can still earn money from this new acquired skill even if its small scale earning only”.*

Acquiring the necessary skills and knowledge emanates from the training is somehow a lifelong learning that channels transformative behaviour and attitude towards how you look at your life. Hence, experiential learning and/or training provides opportunity for valuable and memorable personal learning through hand-on experiences (Risk, 2011). Moreover, transformation is not only superficial but it ripples to the different aspects of life (Mair, & Sumner, 2019). In this, the residents of Barangay Nangka were indeed transformed into someone who are needed and independent in the community.

#### **4.5 Sustainability of the Training**

There are two sides of the sustainability of the training that hinders the residents: (1) is the lack of knowledge; and (2) is lack of finances to buy the materials. Moreover, most of the sustainability of the training is applied only within the households and not for commercialization of the product.

*K118, K120 K127 said that “Some of us were not able to sustain the used of the skills acquired since we don’t have enough money to buy for the materials needed example in making TV antenna and making floor mop”. Further, K11 K15 expressed that “We applied our learning mostly in our homes purpose only”.*



Indeed, material is as important as the training since it conveys the actualization of the training. Further, the range of materials can be used in the vicarious experience of learners in a teaching-learning situation (Samuel, 2009). Moreover, the sustainability can be projected in external or internal contribution of the community. Sustainability is the ability of an organization to continue its mission or program far into the future. All projects have to end eventually, indeed this true but the project impact should remain. Further, sustainable development is a systematic concept relating to the continuity of economic, social, institutional, and environmental aspects of human society as well as the non-human environment (Morfaw, 2014).

#### **4.6 Activities**

For the training program to be successful and be completed the following planned and scheduled activities were presented. First, strong commitment and linkages to the barangay officials were observed. Moreover, survey for the possible participants and needs assessment were conducted to ensure the expected number of participants. Second, on the training proper, 6 modules were prepared to ensure quality training. These are the following modules: *Module 1. Getting to Know You!* Is the planning conference between the proponents, barangay council and the expected clientele. This is the period wherein pouring out of ideas from both parties is expected so as to iron out any hindrances in the implementation of the next sessions. *Module 2. Am I ready?* To start a harmonious environment, there were values formation training on the importance of a lifelong learning and being a part of a working group. The participants are expected an output of reflection on how to be a great contributor to a successful group of working men with different personalities and dreams. Furthermore, the session opened their horizon that they are in the competitive world. Nobody is a menace to the society as long as they have a dream to make changes in their lives for their own betterment and for the place where they belong. *Module 3. Am I safe and comfortable at home?* This is the start of the training of basic skills; the energy management and safety. Participants were dealing with situations on how to safeguard their families. Basic tips on safety measures will be taken up in this session. How do we conserve energy? This is a part of the module that the participants will be taught on how to lower their electric bills and other energy consumptions. Output for this module was a group report or an individual report that will portray of a transfer of knowledge from the training venue to their own homes. *Module 4. Water is life.* The participants were trained on how-to put-up faucets and pipes without asking others to do for them. A penny can be saved through this because instead of paying others to replace faucet or pipe, they can do it themselves and even earn a living through their neighbourhood calls. Basic carpentry will also be included as finishing is one of the tasks in this module. This includes painting and vanishing. The expected output from these sessions was a creative application of what they have learned. *Module 5. Light makes things easy.* In this module, the participants were taught the basic electricity, such as electrical installation and other related electrical works. They were also exposed to handling electronic devices and how they can find solutions if ever problems come in. *Module 6. I can do it myself.* This session will be a showcase of talent exposure of the trainees. Actual demonstration highlighted the affair. Prizes were given to outstanding demo-trainees.

These modules were used together with the invited experts of the different fields of the trainings. It was ensured by the trainers that all the residents were able to embed and to apply their

acquired skills to real scenario of the training. Application and hands on activities were given and asked from the participants as a form assessment and evaluation of their trainings.

#### **4.7 Inputs**

The extension project was funded by the Cebu Normal University through E – HELP agenda. The funding covers the expenses for the training materials and equipment, resource speakers and/or experts, and the project implementation per diem. The resource speakers were highly qualified since most them are TESDA accreditors.

#### **5.0 Theory of Change**

The logic model was used by the researchers in defining the theory of change. For the two years of the implementation of the project, the residents were able to acquire the necessary skills and knowledge in basic plumbing, mop making, basic electrical installation and antenna making. This allows them to be independent, skilled and even employable in the community. These, somehow lead to the improvement of their economic status in the community. The theory is “*Sustainable livelihood training alleviates the economic status of the people*”. This theory of change is been the goals and objectives of the Sustainable Development Goal of 2030 on Decent Work and Economic Growth.

#### **6.0 Conclusions**

The transformation of the residents of Barangay Nangka, Balamban in Cebu from unskilled to skilled, unemployed to employed and dependent to independent is contributed to Do It Yourself Extension project of Cebu Normal University and the residents’ willingness in the implementation of the project. Additionally, life changes once an opportunity will be given especially for those who needed it the most.

#### **7.0 References**

- AmBisyon Natin 2040. <http://2040.neda.gov.ph/about-ambisyon-natin-2040/>
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Planning Association*, 35(4), 216–224. <https://doi.org/10.1080/01944366908977225>
- Bacqué, M.-H., & Gauthier, M. (2017). Participation, urban planning, and urban studies: Four decades of debates and experiments since S. R. Arnstein’s “A ladder of citizen participation”. In C. Silver, R. Freestone, & C. Demaziere (Eds.), *Dialogues in urban and regional planning 6* (pp. 65–96). New York: Routledge.
- Baum, J. (2012). *Institutionalizing citizenship participation: The role of NGOs in democratizing land security in Phnom Penh* (Doctoral dissertation). New York: Columbia University.
- Bednarz, S. W., Chalkley, B., Fletcher, S., Hay, I., Le Heron, E., Mohan, A., & Trafford, J. (2008). Community engagement for student learning in Geography. *Journal of Geography in Higher Education*, 32(1), 87-100.
- Blowers, A. (Ed.) (2013). *Planning for a sustainable environment*. London: Routledge.
- Bridger, J. C., & Alter, T. (2006). The engaged university, community development, and public scholarship. *Journal of Higher Education Outreach and Engagement*, 11(1), 163-178.
- Bruns, K., Conklin, N., Wright, M., Hoover, D., Brace, B., Wise, G., Pendleton, F., Dann, M., Martin, M., & Childers, J. (2003). *Scholarship: The key to creating change through*

- outreach. *Journal of Higher Education Outreach and Engagement*, 8(1/2), 3-11.  
<https://files.eric.ed.gov/fulltext/EJ1096899.pdf>
- Bryant, C. (2010). Co-constructing rural communities in the 21st century: Challenges for central governments and the research community in working effectively with local and regional actors. In G. Halseth, S. Markey, & D. Bruce (Eds.), *The next rural economies: Constructing rural place in global economies* (pp. 142-154). Cambridge, MA: CABI.
- Calder, M. J., Beckie, M. J., & McMann, S. (2016). Municipal sustainability planning, community engagement, and rural revitalization. In L. Hallström, M. Beckie, G. Hvenegaard, & K. Mundel (Eds.), *Taking the next steps: Sustainability planning and collaboration in rural Canada* (pp. 89–115). Edmonton, Alberta, Canada: University of Alberta Press.
- Cantor, N., & Lavine, S. (2006). Taking public scholarship seriously. *Chronicle of Higher Education*, 52(40), B20.
- Carpini, M. X. D., Cook, F. L., & Jacobs, L. R. (2004). Public deliberation, discursive participation, and citizen engagement: A review of the empirical literature. *Annual Review of Political Science*, 7, 315–344.  
<https://doi.org/10.1146/annurev.polisci.7.121003.091630>
- Collins, K., & Ison, R. (2006, June 4–7). Dare we jump off Arnstein’s ladder? Social learning as a new policy paradigm. In *Proceedings of PATH (Participatory Approaches in Science & Technology) Conference*, Edinburgh.
- Conway-Gómez, K., Williams, N., Atkinson-Palombo, C., Ahlqvist, O., Kim, E., & Morgan, M. (2011). Tapping Geography's potential for synergy with creative instructional approaches. *Journal of Geography in Higher Education*, 35(3), 409-423.  
<https://www.tandfonline.com/doi/abs/10.1080/03098265.2011.594997>
- Creswell J.W. (2003) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Thousand Oaks, California: Sage Publications.
- Cukurova, M., Bennett, J., & Abrahams, I. (2018) Students’ knowledge acquisition and ability to apply knowledge into different science contexts in two different independent learning settings. *Research in Science & Technological Education* 36:1, pages 17-34.  
<https://www.tandfonline.com/doi/abs/10.1080/02635143.2017.1336709>
- Dale, A., & Robinson, J. B. (Eds.). (1996). *Achieving sustainable development*. Vancouver, British Columbia, Canada: UBC Press.
- Douglas, D. J. A. (2003). *Towards more effective rural economic development in Ontario: An applied research project*. Guelph, Ontario, Canada: University of Guelph, School of Environmental Design and Rural Development.
- Garau, C. (2012). Citizen participation in public planning: A literature review. *International Journal of Sciences*, December, 21–44.
- Goetz, A. M., & Gaventa, J. (2001). *Bringing citizen voice and client focus into service delivery*. IDS Working Paper 138. Brighton, United Kingdom: Institute of Development Studies.
- Grunwell, S., & Ha, I. S. (2014). How to revitalize a small rural town? An empirical study of factors for success. *University-community collaboration with a small historic rural tourism town*. *Journal of Rural and Community Development*, 9(2), 32-50.  
<https://journals.brandonu.ca/jrcd/article/view/858>

- Gugiu, P.C., & Rodríguez-Campos, L. (2007). Semi-structured interview protocol for constructing logic models. *Evaluation and program planning*, 30 4, 339-50.
- Hallström, L. K., Hvenegaard, G. T., Stonechild, J. L., & Dipa, N. J. (2017). Rural sustainability plans in Canada: An analysis of structure, content and influence. *Journal of Rural Studies*, 56, 132–142. <https://www.sciencedirect.com/journal/journal-of-rural-studies/vol/56>
- Hanna, K. S. (2005). Planning for sustainability: Experiences in two contrasting communities. *Journal of the American Planning Association*, 71 (1), 27–40. <https://www.tandfonline.com/doi/abs/10.1080/01944360508976403>
- Honkalaskar V. H., Sohoni, M., Bhandarkar, U. V. (2017). Selection of development agenda with the community by the generation of a shared understanding. *The Journal of Rural and Community Development*, 12(1),75-97. <https://journals.brandonu.ca/jrcd/article/view/1372>
- Hvenegaard, G. T., Hallström, L. K., Brand, K. L. P. (2019). Implementation dynamics for sustainability planning in rural Canada. *The Journal of Rural and Community Development*, 14(1), 54–76. <https://journals.brandonu.ca/jrcd/article/view/1608>
- Jacobs, R. L., & Washington, C. (2003). Employee development and organizational performance: A review of literature and directions for future research. *Human Resource Development International*, 6(3), 343-354. <https://doi.org/10.1080/13678860110096211>
- Kotus, J., & Sowada, T. (2017). Behavioural model of collaborative urban management: Extending the concept of Arnstein’s ladder. *Cities*, 65, 78–86. <https://doi.org/10.1016/j.cities.2017.02.009>
- Loveridge, S. (2002). Keys to engaging faculty in service: Lessons from West Virginia’s community design team. *Journal of Planning Education and Research*, 21, 331-339. <https://journals.sagepub.com/toc/jpea/21/3>
- Mair, H., & Sumner, J. (2019). Critical thinking for sustainable development at the Cree more 100 Mile Store. *The Journal of Rural and Community Development*, 14(3), 146–163. <https://journals.brandonu.ca/jrcd/article/view/1633>
- Markey, S. Halseth, G., & Manson, D. (2010). Capacity, scale and place: Pragmatic lessons for doing community-based research in the rural setting. *The Canadian Geographer*, 54(2), 158–176.
- Matarrita-Cascante, D., & Brennan, M. A. (2012). Conceptualizing community development in the twenty first century. *Community Development*, 43(3), 293-305. <https://www.tandfonline.com/doi/abs/10.1080/15575330.2011.593267>
- Moss, M. L., & Grunkemeyer, W. T. (2010). Building shared visions for sustainable communities. *Community Development*, 41(2), 240-254. <https://www.tandfonline.com/doi/abs/10.1080/15575330903477309>
- Morfaw, J. (2014). Fundamentals of project sustainability. Paper presented at PMI® Global Congress 2014—North America, Phoenix, AZ. Newtown Square, PA: Project Management Institute. *Philippine Institute for Development Studies* (2017). <https://www.pids.gov.ph/infocus/128>

Ryser, L., Markey, S., & Halseth, G. (2013). Developing the next generation of community-based researchers: tips for undergraduate students. *Journal of Geography in Higher Education*, 37(1), 11-27.

<https://www.tandfonline.com/doi/abs/10.1080/03098265.2012.696596>

Republic Act No. 7769.

<http://www.tesda.gov.ph/uploads/File/REPUBLIC%20ACT%20NO.%207796.pdf>

Richards, L., & Dalbey, M. (2006). Creating great places: The role of citizen participation. *Community Development*, 37 (4), 18-32.

<https://www.tandfonline.com/doi/abs/10.1080/15575330609490193>

Risk, L. (2011) Learning by Doing: Toward an Experiential Approach to Professional Development. <http://conference.ifla.org/ifla77>

Roseland, M. (2000). Sustainable community development: Integrating environmental, economic, and social objectives. *Progress in Planning*, 54, 73–132.  
[https://doi.org/10.1016/S03059006\(00\)00003-9](https://doi.org/10.1016/S03059006(00)00003-9)

Samuel, A. W. (2009). The Importance of Instructional Materials in our Schools an Overview. *New Era Research Journal of Human, Educational and Sustainable Development*, 2. 61-63.

Speziale, H.J, and Carpenter, D.R. (2007). *Qualitative research in nursing: advancing the humanistic imperative*, (4th ed.), Philadelphia. Lippincott, Williams and Wilkins.

Stelmach, B. (2016). Parents' participation on school councils analysed through Arnstein's ladder of participation. *School Leadership & Management*, 36(3), 271–291.  
<https://doi.org/10.1080/13632434.2016.1247048>

Termorshuizen, J. W., Opdam, P., & Van den Brink, A. (2007). Incorporating ecological sustainability into landscape planning. *Landscape and Urban Planning*, 79(3), 374–384.  
<https://doi.org/10.1016/j.landurbplan.2006.04.005>

Tritter, J. Q., & McCallum, A. (2006). The snakes and ladders of user involvement: Moving beyond Arnstein. *Health Policy*, 76(2), 156–168.