

# A Pattern Language for Filipino Youth to Live a Self-Reliant Life

TAKAKO KANAI, Graduate School of Media and Governance, Keio University, [tkanai@sfc.keio.ac.jp](mailto:tkanai@sfc.keio.ac.jp)

MIZUKI OTA, Graduate School of Media and Governance, Keio University, [omizuki@sfc.keio.ac.jp](mailto:omizuki@sfc.keio.ac.jp)

TAKASHI IBA, Faculty of Policy Management, Keio University, [iba@sfc.keio.ac.jp](mailto:iba@sfc.keio.ac.jp)

---

This paper presents patterns for Filipino youth to live self-reliant lives. This pattern language is a collection of practical knowledge for Filipino youth in deprived areas, aimed at helping them overcome difficulties, secure desired employment, and live a self-reliant life. We have found three major elements important to achieving such a life: *CHALLENGE TO THE LIFE*, *CREATE BASIS FOR EXPANDING POSSIBILITY*, and *KEEP GENERATING VALUE*. To realize each of these three categories, nine patterns are tied together, each of which is discussed, *Breakout Drive*, *Caring Back Cycle*, *Capability Reflection*, *Transforming to Enablement*, *What's Next?*, *Network Expanding*, *Supportive Sideline*, *Pray for Hope* and *Cultivating the Next*. Additionally, we discuss the potential of utilizing this Self-Reliant Life patterns to support change the communication of youth in deprived areas of the Philippines.

Categories and Subject Descriptors: **[Applied computing]:** Education—*Collaborative learning*; **[Social and professional topics]:** User characteristics—*Cultural characteristics*.

General Terms: Human Factors

Additional Key Words and Phrases: pattern language, human development, life, Filipino youth

## ACM Reference Format:

Kanai, T., Ota, M. and Iba, T. 2024. A Pattern Language for Filipino Youth to Live a Self-Reliant Life. In *Proceedings of the 30th Conference on Pattern Languages of Programs (October 2023)*, 20pages.

---

## 1. INTRODUCTION

Nowadays, solving educational problems, medical disparities, and food problems in deprived areas of developing countries is an urgent issue. Focusing on the educational issues addressed in this paper, it is said that there are 138 million young people in the world who are out of education, due to various factors such as economic lack or being forced to work because of the poverty of their families, or difficulty in commuting to school (UNESCO, 2018). Particularly in the Southeast Asian region, there are cases such as students being unable to attend school because of having to work due to the need for financial support for their families, or due to students' early pregnancies and childbirths. It is also said that once students drop out of school, they have a higher probability of committing crimes and may fall into further poverty when they have their own families (Rumberger & Lim, 2008).

In the current situation, various systems and approaches have been established to solve these problems. For example, there are programs and vocational schools that provide learning opportunities on holidays for students who cannot attend school during the weekdays, and they offer a place for young people who have dropped out of school but still seek to learn again. While each country has provided support adapted to each region, it cannot be said that the existing systems alone are sufficient to support young people who are still facing family and economic difficulties. Even specifically in the Philippines, the target of this study, 3.3 million young people between the ages of 15 and 24 are still unable to attend school, and it is necessary to address this issue with a completely different approach from the conventional one.

To cope with this challenge, it is necessary to provide support that broadens one's life options, in other words, support for the way of life itself, which is different as compared to the conventional support provided in deprived areas in developing countries, which focuses on providing learning opportunities. Therefore, we considered that a pattern language, which verbalizes the essence of good practices for solving problems, would be the new key. Within the same deprived areas, many people proactively learn, pursue the work they desire, and lead self-reliant lives. By verbalizing and systematizing the practices of people who successfully lead self-reliant lives in

---

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. To copy otherwise, to republish, to post on servers or to redistribute to lists, requires prior specific permission. A preliminary version of this paper was presented in a writers' workshop at the 30th Conference on Pattern Languages of Programs (PLoP). PLoP'23, October 22-25, Allerton Park, Monticello, Illinois, USA. Copyright 2023 is held by the author(s). HILLSIDE 978-1-941652-19-0

deprived areas into a pattern language, it may become possible to propose solutions tailored to the environment and problems each individual faces.

In this paper, we created a pattern language by verbalizing the practical knowledge of people in deprived areas who learn on their own initiative, the work they want to do, and lead self-reliant lives. In Chapter 2, the process of creating the pattern language is described, followed by an overview of the patterns in Chapter 3. Chapter 4 introduces some of the selected patterns. Chapter 5 is a discussion section, and Chapter 6 concludes with a summary of this paper.

## 2. CREATING PROCESS

This pattern is based on the creation process devised by Takashi Iba's laboratory and the patterns in *A Pattern Language for Creating Pattern Languages* (Iba and Isaku, 2016). The creation of Pattern Languages is conducted in five major phases: Pattern Mining, Clustering, Systematization, Pattern Writing, and Pattern Naming. The following is a detailed description of the creation process for each of these phases.

### 2.1 Pattern Mining

To create the pattern language, we visited the Philippines from November 22 to December 1, 2022, and conducted interactive interviews for pattern mining. First, with the cooperation of the staff of Global Mindanaw Polytechnic Inc., a local NGO and vocational training school in the Philippines, we selected participants in order to create a pattern language for Filipino youth to obtain, maintain work, and become self-reliant life. They introduced 10 Filipinos who could be "role models for the local youth," as they have overcome various difficulties in their family environment and economically and are now able to live self-reliant life.

In addition, we also conducted interactive interviews with three people who have experience in supporting youth, especially Out of School Youth, in order to understand the situation of the local youth and the difficulties they are facing. The interactive interview was conducted in English by the participant and two interviewers, Takako Kanai and Mizuki Ota. Some participants preferred to speak in Visayan, the local language, and interviews were conducted with an interpreter who translated from Visayan to English. During the interviews, participants shared their life stories, discussing specific episodes of the difficulties they encountered and their efforts to overcome them, while also sharing their own perspectives (Figure 1). Patterns were discovered through a series of 13 interactive interviews, amounting to a total duration of 21 hours. All interviews were meticulously transcribed for the Clustering.



Fig. 1. Interview with Filipinos

### 2.2 Clustering

Next, based on the transcribed interviews, we took what we thought would be important practices for Filipino youth to overcome difficulties and lead independent lives and wrote them down on sticky notes. A total of 502 stickies were extracted by picking out all the information that was felt to be important based on the information from the interviews and transcribing it onto sticky notes. These were spread out on paper, and sticky notes with similar meanings were placed close to each other to separate the large number of sticky notes into clusters of meanings. When creating a grouping of stickies, we proceeded by telling each other which ones seemed to be close in meaning. When there are no more stickies to be moved and all stickies have been separated into clusters of meanings, the clustering is completed by creating a "pattern component," which is a sentence that describes the clusters of meanings.

## 2.3 Systematization

Next, systematization is proceeded based on the "pattern component". While clustering was a bottom-up process in which each meaning was examined in detail and a coherent set of meanings was gradually created, systematization requires a top-down perspective. While looking at all the "pattern component" as a whole, each participant considered what practices were important for Filipino youth to overcome difficulties and live self-reliantly, and then shared and discussed the elements that constitute the whole practice with each other. While discussing, we map out the entire practice and collect the "pattern component" that applies to the parts that make up the entire practice. Weaving back and forth between top-down and bottom-up perspectives, the whole is woven together to form a cohesive cluster of pattern components. They become the seeds of the pattern, for 27 in total. In this way, a structure of systematization is created with categories representing the overall practice, groups representing what is important for the realization of each category, and the seeds of patterns representing what is important for the realization of each group.

## 2.4 Pattern Writing

The next step is to write a sentence for each of the situation, problem, and solution based on the seeds of each pattern. While looking at the positional relationships of the categories and groups in the system, and recalling the specific practices mentioned in the mining process, the solution sentence is written by describing what is important (what) and what can be done to achieve it (how). Then, based on this, the corresponding situation and problem are described in one sentence each to form the framework of the pattern. Finally, the full description is completed by describing the forces that cause the problem and the consequences of implementing the solution.

## 2.5 Pattern Name

Finally, the full description is completed by describing the forces that cause the problem and the consequences of implementing the solution. Finally, give each pattern an attractive name that is easy to use in the usual way: name the act of "what should be done" contained in the content of the SOLUTION with an attractively symbolic name. In this case, the process was done simultaneously when a sentence of the pattern's situation, problem, and solution was created. This Pattern Language was created through this entire process.

## 3. SELF-RELIANT LIFE PATTERNS

The Self-Reliant Life Patterns consists of 27 patterns that describe important practices for Filipino youth to live self-reliantly in the work they want to do. Figure 2 shows the overall structure of Self-Reliant Life Patterns. The pattern language consists of three categories: *CHALLENGE TO THE LIFE*, *CREATE BASIS FOR EXPANDING POSSIBILITY*, and *KEEP GENERATING VALUE*.



Fig. 2. Overview of Self-Reliant Life Pattern

### 3.1 Challenge to the Life

This category describes practices that are important for Filipino youth to challenge to the Life. To engage in *CHALLENGE TO THE LIFE* for young people in the challenging conditions of the Philippines, it starts with

amplifying the feelings of dissatisfaction with their current situation and the desire for something better, leading to taking action, a process called *Breakout Drive*. In their daily lives, by *Touching a Different World*, one draw on the power of the world of imagination to overcome challenging realities, using it as sustenance to get through difficult times. Moreover, they find an *Inspirational Role Model* – someone they aspire to be like after a bit of effort – and use this as a source of support. By doing this, they don't let fleeting moments of wanting to live better slip away; instead, they use these moments as a springboard to take actions towards self-reliant living.

To create an indispensable, CREATE A SUPPORT SYSTEM for overcoming difficult situations, having a *Respect Mind* for those involved is essential. Furthermore, when taught something or helped by others, it's not just about expressing gratitude in words, but also embodying what you've received to *Prove with Progress*. Additionally, for those who help you daily, it's not only about receiving support but also giving back what you can at that moment, a process as the *Caring Back Cycle*. By doing so, you can create a sustainable and strong support system with the people around you.

To CONFRONT CHALLENGES and overcome the difficult situations at hand, rather than being selective because it's not what one initially wanted, first, you choose a *Feasible Choice* at that moment. The option you choose at that time may be different from what you had anticipated. Instead of quitting immediately because it's not what you expected, you find the *Fuel for Continuation* in the process, learn, and devise ways to continue in the own style. Then, by doing a *Capability Reflection* on what you have been able to achieve so far, you will likely realize that your abilities have greatly expanded, which in turn fuels your enthusiasm for further challenges.

### 3.2 Create Basis for Expanding Possibility

This category describes practices that are important for Filipino youth to create basis for expanding possibility. To MAKE TIME FOR SELF possible, it's important to consult with family and colleagues to do *Transforming to Enablement*. Once an environment conducive to securing personal time is established, Filipino youth create a *Personal Promise* and set their own rules for perseverance. However, continuously striving during this personal time is not always feasible. By taking a *Pause for Momentum* midway, and refreshing themselves, they become capable of sustaining their efforts over a longer period.

To CHANGE BY EFFORTS, it's crucial not only to dive into learning opportunities but also to ask oneself that *What's Next?* to create new possibilities in those moments. This approach expands what one can do. Additionally, occasionally *Greeting to Pioneers* is essential, where Filipino youth meet and listen to those who have already embarked on paths they aspire to follow. Furthermore, reflecting on life's events and performing *Call as Destiny* can serve as motivation, especially in moments when one's spirit is close to breaking.

As capabilities increase and the desire to pursue more desired activities grows, it is beneficial to EMPLOY EVERY AVAILABLE MEANS. Leverage the skills of capable individuals, do what one can, and *Seeking Guidance* others for what one cannot, thereby embarking on higher-level challenges. Moreover, new opportunities and jobs often come from connections that are slightly removed from one's immediate circle, so it is important to continually do *Network Expanding*. Furthermore, when engaging in new endeavors, it is vital to communicate and *Thoughts Sharing* one's activities, increasing awareness of what one is doing.

### 3.3 Keep Generating Value

This is a category that describes important practices for Filipino youth to keep generating value. To ESTABLISH AS A VIABLE WORK, conducting a *Wanted Value Research* is necessary to understand where the value of the skills and abilities one possesses might be utilized. Even if one's main profession does not yield enough income initially, it is possible to undertake *Supportive Sideline* and gradually make the main profession sustainable. As one becomes able to earn through their primary occupation, they feel *Passion Profit* from what they truly want to do.

To GO BEYOND LIMITS, merely continuing the same actions leads to repetition. Thus, it's worth attempting to *Create Change*. However, just creating change doesn't always lead to success. When it seems futile to keep trying alone, *Relearning to Leap* can be important. Despite exhausting all possible actions, there are times when things don't go well. In such moments, *Pray for Hope* can be achieved through prayer and connection.

To GIVE BACK TO THE FOLLOWING, life is an *On-going Path* so it involves continuously learning, moving forward, and creating life. Then, based on what one can do, *Entering the Giver Role* and shifting to the side that creates opportunities. By *Cultivating the Next*, one increases the number of people who can live self-reliantly.



## 4. PATTERNS

In this section, the full descriptions of nine patterns are shown.

### 4.1 Breakout Drive

#### Breakout Drive



You want to live a better life.

▼ In this context

**Even though you want to have better changes in life, you can manage to maintain the status quo because your current daily life is functioning to some extent.** Even when questioning the situation, if there has been a persistent and unresolved issue, the inclination to accept the current state often prevails over attempting to change it. However, if you accept your situation as it is, the same situation will continue and will not change in the future. This will make you feel more and more helpless, and it may seem that nothing will change in reality.

▼ Therefore

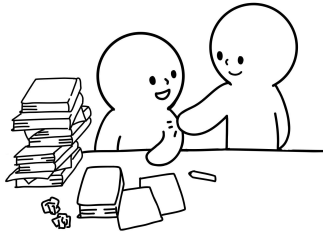
**Catch the feeling of wanting to break out of the current situation, amplify it, and turn it into the energy that moves you to take the first step towards change.** The feelings you have in your daily life, where you think, 'I want to be like this,' or 'I dislike my current situation,' are signals for living a better life. Seize them and take action towards what you feel is good. Starting something new may feel a bit troublesome at times. However, even small steps can accumulate and lead to significant change.

▼ Consequently

You can start by changing yourself, even though changing the situation only by your own efforts can be difficult. As you continue to take actions, through new encounters and events, you will begin to find opportunities that were previously unavailable to you, and you will become able to do things you once thought impossible. Taking that first step and changing yourself can be the beginning of leading a more self-reliant life.

## 4.2 Caring Back Cycle

### Caring Back Cycle



There are people who support you.

▼ In this context

**If you are so occupied with yourself that you are not aware of what is going on around you, you will not be able to sustain a good relationship with those who support you.** The fact that you are able to live your life as you do now may have been made possible by the support of those who support you. However, when you live our daily lives as if this is a matter of course, it is easy to forget that the support you receive from those around you is there to help you. If you are only supported unilaterally, the relationship will not last long.

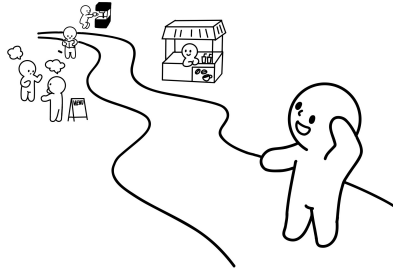
▼ Therefore

**By giving back what you can to those who support us, build stronger relationships with those who support you.** Think about those who support you and help them in any way you can. Even if it is a small thing, the attitude of caring for each other's relationship will lead to the creation of an ongoing support system.

▼ Consequently

By actively caring for the relationships you have, you can sustain them over time. Appreciating the time and resources others invest in supporting you, fostering a sense of gratitude, and extending care not only to yourself but also to others and the relationship will contribute to its ongoing strength.

## Capability Reflection



You have finished a whole series of things you were working on.

▼ In this context

**If you leave your experiences as they are and start working on something new, the insights and feelings you gained during your previous endeavors might slip away, leading to missed opportunities for learning.** After completing tasks, it's common to feel satisfied, but if you don't reflect, you may not understand why you succeeded. If the undertaking was successful, there were reasons for its success. However, if something you did was successful, there is a reason why it was successful, but if you just let the experience go, you will never know why it was successful, and even if there are hints in your actions, you will only see it as a coincidence that it was successful, and it will not lead to the next opportunity.

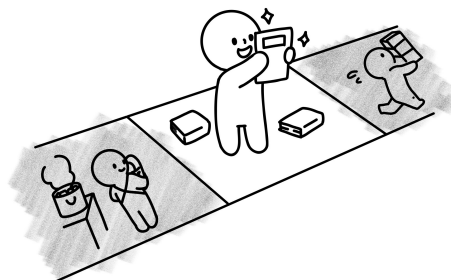
▼ Therefore

**Look back over what you have done so far and grasp what you have been able to do in terms of what you want to do.** Even if you were not sure if you could do something when you first started working on it, list the actions you have taken along the way from that point to this point. Savor the fact that each act is a series of actions that you can now do. Also, by looking not only at what you have done, but also at the people and environment surrounding you, you may notice something.

▼ Consequently

You may realize that things you initially thought were impossible have become achievable, and the scope of your capabilities has expanded. This awareness will instill confidence in your ability to tackle new challenges, as you can draw on the realization that you've overcome hurdles before. Recognizing your progress allows you to approach future endeavors with a positive mindset, eager to take on new challenges and continue your personal growth.

## Transforming to Enablement



You decided to back to school.

▼ In this context

**When you start working toward realizing your desire to study again, it seems that you may not be able to do so because you have to prepare for school fees, secure time to study, and deal with family and work, which cannot be managed by your own determination alone.** It is difficult to set aside a decent amount of time to learn in an environment where you cannot work during the hours you are in school, so you have to give up due to financial problems, or where your family asks you to do things for them. However, if you stay in the same situation, not only will you not be able to relearn, but your desire to relearn will diminish as well.

▼ Therefore

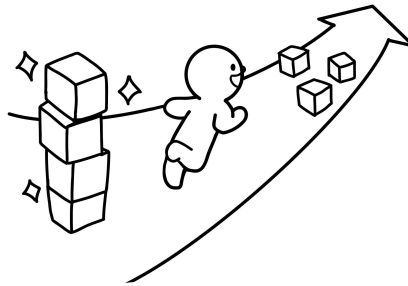
**Adjust your surroundings so that you can take time for your own learning for a certain period, and if you don't think you can do it now, think about how you can do it and create an environment in which you can learn.** For example, some people have been able to devote time to their families for a year when they couldn't get their families' approval, and then a year later, they were able to pursue higher education. If it is absolutely impossible for them to concentrate on their studies while staying with their families, some of them have considered how to live on their own and study again away from their families. And as for tuition, look for scholarships or look for information on any free programs that might be available.

▼ Consequently

By organizing your environment, you can carve out time for your future self to learn and grow. With the surroundings well-arranged, you can concentrate on learning without being distracted by external factors, focusing on the core of education. Moreover, if you can expand your possibilities through the knowledge gained, it may lead to better job opportunities, ultimately supporting your family.

#### 4.5 What's Next?

### What's Next?



You are learning in schools and other places.

▼ In this context

**When you are satisfied with the state of things because you are now able and viable, the stimulation and freshness that was there in the beginning will fade, or you will become bored.** When you feel this way and there is no need to do something new, you will continue to do what you are able to do now. However, the things you can do now can be done also in the future, so if you keep doing only those things, you will be repeating the same things, and what you can do will not grow.

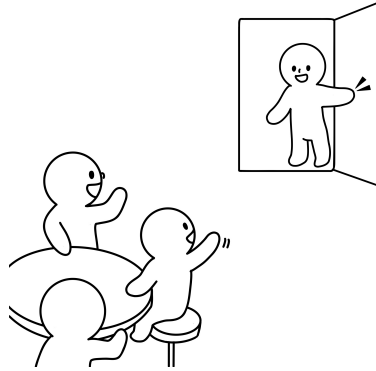
▼ Therefore

**Become an expanded and upgraded version of yourself by learning things you can't do now.** The new things you learn can be related to what you have done before, or it can be in a completely new field. For example, if you are a barista, you might learn how to design cafe latte art, which you have never done before, or you might learn about coffee beans. If you can't think of anything right away, you may want to think about it as you talk to others around you.

▼ Consequently

As you expand your capabilities, the visible world and the range of conceivable possibilities also get updated. Gradually, the level of challenges you can take on increases, and you'll notice that you've grown into a person who is willing to attempt even things that may seem difficult. Discovering the joy of acquiring new skills, you simultaneously savor the process and significantly broaden the choices available for your future self.

## Network Expanding



The people who are usually involved have become fixed.

▼ In this context

**Family and close friends are important, but when people only have close relationships, they often think similarly, making it difficult to have different perspectives.** People naturally associate with people who think like them. However, if you stay the same, your perspective can become limited. When you have limited relationships to rely on, it is difficult to be exposed to new opportunities, which brings another.

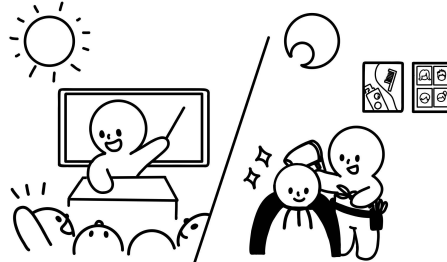
▼ Therefore

**You try to increase your connections with people on a regular basis.** Not only with family members and people you have been close to before but also with people you happen to meet at an event and who do not yet have a long history as a relationship. When you meet people with whom you don't usually interact much, you talk to each other, even briefly, about what you are currently doing. If you connect with people you meet on social networking sites such as Facebook, you can also contact them at a moment's notice.

▼ Consequently

The world expanding from your own connections continues to grow larger. Connecting from acquaintance to acquaintance, you may gain numerous new opportunities, perspectives, and stimuli. Through the relationships you've built, constantly updating and evolving, you shape yourself.

## Supportive Sideline



You have a job that you want to pursue as your main profession.

▼ In this context

**When you actually start doing your main job, you may find that it's not enough to make a living and feel like giving up, thinking it's impossible after all.** Especially in the beginning, the earnings might be small. However, choosing to earn from something you don't want to do, just because the income is low, not only wastes what you have learned so far but also prevents you from feeling fulfilled in your work and from living your life proactively.

▼ Therefore

**You work on several side jobs while earning income, allowing you to continue your main profession.** For instance, if you are a barista, you might start with your own small pop-up café as your primary job while also working in a local café, gradually transitioning to make it your sole profession. Similarly, there are those who, before being hired as teachers, worked as trainers at vocational schools or as part-time hairdressers, eventually becoming teachers. It's advantageous to choose side jobs that align well with your main profession or have different working hours.

▼ Consequently

You continue pursuing your desired work until it can sustain your life, eventually establishing it as your main profession. Taking into account the accumulation of your experiences, you gradually integrate them into your life. Being able to support yourself through what you truly want to do becomes a significant step toward leading a self-reliant life.



## Pray for Hope



You have been experiencing a series of things not going well.

▼ In this context

**You have done everything within your power to improve the situation, but despite your efforts, things still aren't going well.** As you continue without seeing a clear path to a better future, the realization that the difficult circumstances might persist both now and in the future can make you feel like giving up.

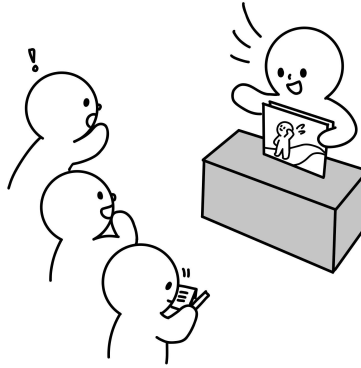
▼ Therefore

**By continuing to pray, you somehow maintain hope.** Having something to pray for every day signifies that there is still hope ahead for you. Moreover, through your prayers, you may gradually find release from mental anxieties. You persist in praying and waiting, hoping for the situation to improve.

▼ Consequently

You can somehow connect hope and overcome challenging times. By overcoming difficult periods, the experiences themselves can be looked back upon as part of the past, potentially becoming a source of confidence. Along the way, you might encounter views and opportunities that were never visible had you given up, believing in the possibility that there is a way beyond challenges in any situation.

## Cultivating the Next



There have been times when you feel like someone has lifted up your life.

▼ In this context

**There is an abundance of knowledge and lessons to be had from experiences, but if they remain unshared and closed within you, they won't benefit those around you.** It's not something you could have done from the start, as you've been fully occupied with yourself and your immediate circumstances. It's only through your journey so far that you've arrived at this point. However, the value within you is inaccessible to anyone unless you choose to open up and share it.

▼ Therefore

**Nurture others by utilizing what you have experienced so far, just as those who have helped you have done.** You will return the benefits you have received to others, society, and the world. As you pass on to others the lessons you have learned from your experiences, the growth of others can become your joy and the purpose of your lives.

▼ Consequently

The experiences and knowledge cultivated throughout this journey will be passed on to others. Because it has been a path of personal effort and trial and error, it will become valuable learning for others as well. The things I have gained will be utilized as lessons for the next generation, contributing as a helping hand in shaping their lives and creating a continuous connection.

## 5. DISCUSSION

Until now, support for solving educational problems in deprived areas has been offered through opportunities for vocational and technical training, as well as through academic support at secondary or higher education levels, serving as a receptacle for those wishing to re-engage in learning. However, these support methods are only specialized for specific choices in a part of life, and even if a person has the opportunity to learn, it is up to the individual to choose that option. Individuals are largely locked into the habits and ways of thinking that have been prevalent up to this point.

Therefore, this study focused on the practical knowledge of people who overcome difficulties and live self-reliant lives, and created a pattern language. The findings obtained here will be applicable not only to a single choice or life phase but will also empower individuals facing long-term difficulties to share practices crucial for living a self-reliant life.

The Self-Reliant Life Patterns developed in this study represent a new approach to support, contributing to changing the nature of communication within vocational training schools, one of the focus of this research. Sociologist Niklas Luhmann posited in his social systems theory that society's constituent elements are communications (Luhmann, 1998). This theory views society as a chain of communications, asserting that it's these chains, rather than individual actions or thoughts, that form social structures. In other words, to change society, it is necessary to change its constituent communications.

For example, when considering a vocational training school as a society, much of its communication content revolves around work methods, technical and economic matters. It is natural for such communications to occur in vocational training schools. By introducing Self-Reliant Life Patterns, there will be increased opportunities to discuss not just work but also one's life, thus contributing to a change in discussion points and topics. Conversations might evolve to include patterns like *Breakout Drive* or *What's Next?*, increasing discussions about life, in addition to work and economic matters.

Communication about how one will live and how to be self-reliant, which may be challenging within a family setting, can find its place within vocational training schools. While changing society is challenging, altering the content of communication within vocational training schools can gradually change the discourse, and consequently, society itself. This approach to altering communication is a new method of support, not previously explored in the field of developmental aid. However, further verification is needed to confirm the effectiveness of the developed pattern language in changing communication within vocational training schools.

## 6. CONCLUSION

In this paper, we created the Self-Reliant Life Pattern, a pattern language for Filipino youth to overcome difficulties and live self-reliant lives, and found a total of 27 patterns in three categories: *CHALLENGE TO THE LIFE*, *CREATE BASIS FOR EXPANDING POSSIBILITY* and *KEEP GENERATING VALUE*. This paper also presented 9 of the 27 patterns—*Breakout Drive*, *Caring Back Cycle*, *Capability Reflection*, *Transforming to Enablement*, *What's Next?*, *Network Expanding*, *Supportive Sideline*, *Pray for Hope* and *Cultivating the Next*. This pattern language was created to support the practice of Filipino youth in difficult situations in impoverished areas and is expected to be utilized locally in the actual field, particularly showcasing an approach to change communication within vocational training schools.

## ACKNOWLEDGEMENT

We would like to thank the 13 participants who took time out in the midst of busy days to cooperate in the Mining Interviews. We also thank Global Mindanaw Polytechnic Inc. especially, Ms. Fleurabelle V. Torres for setting the mining interview. Advice and comments given by Joseph W. Yoder has been a great help as a shepherd. Additionally, we appreciate the participants of the Writers' Workshop: Branislava Vranić, Valentino Vranić, Aleksandra Vranić, Ceci Fernandez, Alistair Cockburn, Rio Nitta, Kaito Shiota, Kiyoka Hayashi, Haruto Aoki, and Aoi Imai for their contributions. We would also like to express our sincere gratitude to the Keio SFC Academic Society for supporting our travel expenses.

## REFERENCES

- Philippine Statistic Authority, 2017, One in Every Ten Filipinos Aged 6 to 24 Years is an Out of School Child and Youth. <https://psa.gov.ph/press-releases/id/119882>.
- Rumberger, R. W., and Lim, S. A., 2008, Why students drop out of school: A review of 25 years of research. California Dropout Research Project Report.
- Iba, T., and Isaku, T., 2016, A Pattern Language for Creating Pattern Languages: 364 Patterns for Pattern Mining, Writing, and

Symbolizing. In *Proceedings of the 23rd Conference on Pattern Languages of Programs (PLoP'16)*, Monticello, Illinois, USA.  
DOI: <https://dl.acm.org/doi/pdf/10.5555/3158161.3158175>  
UNESCO, 2023, EDUCATION & LITERACY: Out-of-School Children and Youth. <https://uis.unesco.org/en/topic/out-school-children-and-youth>.  
Luhmann, N., 1998, *Social Systems* (J. Bednarz and D. Baecker, Trans.; 1st ed.). Stanford University Press.

## APPENDIX

To give an idea of the overall pattern language, the summaries of all 27 patterns are listed.

### A.1 PATTERNS FOR PRACTICING “Challenge to the Life”

#### A.1.1 Strengthen the Determination

Patterns for practicing Strengthen the Determination are shown in Table 1.

Table 1: The summaries of the patterns for Strengthen the Determination

Pattern Name	Pattern Summary (Context/Problem/Solution)
<b>Breakout Drive</b>	You want to live a better life. In this context, even though you want to make changes for the better life, you can manage to maintain the status quo because your current daily life is functioning to some extent. <b>Therefore, catch the feeling of wanting to break out of the current situation, amplify it, and turn it into the energy that moves you to take the first step towards change.</b>
<b>Touching in Different World</b>	One step forward to nurture a better life. In this context, the current situation continues to be tough and difficult. <b>Therefore, by temporarily leaving the here and now, you regain the energy to live with the power of a different world.</b>
<b>Inspirational Role Model</b>	You are living your daily life to cultivate a better life. In this context, if you are constantly caught up in the past when thinking about the future, your future plans will merely be an extension of the past. <b>Therefore, find someone close to you who has a similar direction that you can reach with a little effort, and take action based on their presence.</b>

#### A.1.2 Create a Support System

Patterns for practicing Create a Support System are shown in Table 2.

Table 2: The summaries of the patterns for Create a Support System

Pattern Name	Pattern Summary (Context/Problem/Solution)
<b>Respectful Mind</b>	You are looking for help from those around you. In this context, even if you wish to learn something and think of asking for guidance with respect, it doesn't always get communicated to the other person. <b>Therefore, show your respect and desire to be taught by your words and posture, and try to convey them to the other person in words.</b>
<b>Prove with Progress</b>	You received assistance. In this context, merely expressing gratitude for the kindness and support received is not enough to build a lasting relationship with those who support you. <b>Therefore, build a lasting relationship with those who support you by making a personal effort and communicating your actions back to them.</b>
<b>Caring Back Cycle</b>	There are people who support you. In this context, if you are so occupied with yourself that you are not aware of what is going on around you, you will not be able to sustain a good relationship with those who support you. <b>Therefore, by giving back what you can to those who support you, build stronger relationships with those who support you.</b>

#### A.1.3 Confront Challenges

Patterns for practicing Confront Challenges are shown in Table 3.

Table 3: The summaries of the patterns for Confront Challenges

Pattern Name	Pattern Summary (Context/Problem/Solution)
Feasible Choice	You are facing a difficult situation. In this context, you are faced with a limited number of options, you are selective because they are not what you are looking for, and you are focused only on what you can't do. <b>Therefore, think about what you can do to change the situation, and then take action, starting with what is feasible now.</b>
Fuel for Continuation	You received assistance. In this context, merely expressing gratitude for the kindness and support received is not enough to build a lasting relationship with those who support you. <b>Therefore, build a lasting relationship with those who support you by making a personal effort and communicating your actions back to them.</b>
Capability Reflection	You have finished a whole series of things you were working on. In this context, if you leave your experiences as they are and start working on something new, the insights and feelings you gained during your previous endeavors might slip away, leading to missed opportunities for learning. <b>Therefore, find some kind of enjoyment in what you are currently working on, and try to make your situation as positive as possible.</b>

#### B.1 PATTERNS FOR PRACTICING “Create Basis for Expanding Possibility”

##### B.1.1 Make Time for Self

Patterns for practicing Make Time for Self are shown in Table 4.

Table 4: The summaries of the patterns for Make Time for Self

Pattern Name	Pattern Summary (Context/Problem/Solution)
Transforming to Enablement	You decided to back to school. In this context, when you start working toward realizing your desire to study again, it seems that you may not be able to do so because you have to prepare for school fees, secure time to study, and deal with family and work, which cannot be managed by your own determination alone. <b>Therefore, adjust your surroundings so that you can take time for your own learning for a certain period of time, and if you don't think you can do it now, think about how you can do it and create an environment in which you can learn.</b>
Personal Promise	You set aside time for yourself to relearn. In this context, if you continue to spend your time in the same way as before, you will not be able to make the most of the time you have secured for yourself. <b>Therefore, make the most of your limited time by setting your own rules related to what you are currently working on.</b>
Pause for Momentum	You work hard every day on what you decide to do. In this context, you know that you have to work hard, but it is difficult to keep that feeling alive. <b>Therefore, ensure a healthy balance between your mental and physical health and what you want to do by taking a break from your usual mode and taking a little time off in between.</b>

##### B.1.2 Change by Efforts

Patterns for practicing Change by Efforts are shown in Table 5.

Table 5: The summaries of the patterns for Change by Efforts

Pattern Name	Pattern Summary (Context/Problem/Solution)
What's Next?	You are learning in schools and other places. In this context, when you are satisfied with the state of things because you are now able and viable, the stimulation and freshness that was there in the beginning will fade, or you will become bored. <b>Therefore, become an expanded and upgraded version of yourself by learning things you can't do now.</b>
Greeting to Pioneers	You want to grow more. In this context, although you have a vision of the future that you are aiming for, what you will do to reach that vision remains vague. <b>Therefore, meet with people who are related to the path you want to take and ask them for specific advice on what you should do from now on.</b>
Call as Destiny	In the midst of working toward your decision, you may feel that you are struggling. In this context, sometimes you feel like running away from the hardship in front of you and think you can't do any more. <b>Therefore, by turning coincidental events into a belief in destiny, you can transform them into a source of motivation and strength.</b>

### B.1.3 Employ Every Available Means

Patterns for practicing Employ Every Available Means are shown in Table 6.

Table 6: The summaries of the patterns for Employ Every Available Means

Pattern Name	Pattern Summary (Context/Problem/Solution)
Seeking Guidance	You are trying to tackle something you have never done before. In this context, when you think of taking on a challenge beyond what you are capable of doing, you may think of giving up without trying because you don't know what to do and you can't do it on your own. <b>Therefore, you don't have to do it all alone. Even if you don't think you can do everything on your own, you can try to do something a little more difficult that you cannot do on your own by doing the parts you can do and getting help from those around you.</b>
Network Expanding	The people who are usually involved have become fixed. In this context, family and close friends are important, but when people only have close relationships, they often think similarly, making it difficult to have different perspectives. <b>Therefore, you try to increase your connections with people on a regular basis.</b>
Thoughts Sharing	There are things you are working on. In this context, even if you are doing a lot of work in your own way, the people around you may not always be aware of it. <b>Therefore, make sure that people around you know about your efforts by communicating what you are doing.</b>

### C.1 PATTERNS FOR PRACTICING "Keep Generating Value"

#### C.1.1 Establish as a Viable Work

Patterns for practicing Establish as a Viable Work are shown in Table 7.



Table 7: The summaries of the patterns for Establish as a Viable Work

Pattern Name	Pattern Summary (Context/Problem/Solution)
Wanted Value Research	You are trying to take what you have learned and make it work. In this context, you are unsure how to turn what you have learned and your strengths into a career. <b>Therefore, you visit workplaces related to your skills to observe how they operate and learn how they provide value and sustain themselves as businesses.</b>
Supportive Sideline	You have a job that you want to pursue as your main profession. In this context, when you actually start doing your main job, you may find that it's not enough to make a living and feel like giving up, thinking it's impossible after all. <b>Therefore, you work on several side jobs while earning income, allowing you to continue your main profession.</b>
Passion Profit	You have started to earn a living through your main profession while doing several other jobs. In this context, you still have much to do in your job and often feel a sense of inadequacy. <b>Therefore, you learn, do some work, support each other with others around you, and realize the joy of being able to make a living as a job and earn income on your own.</b>

### C.1.2 Go Beyond Limits

Patterns for practicing Go Beyond Limits are shown in Table 8.

Table 8: The summaries of the patterns for Go Beyond Limits

Pattern Name	Pattern Summary (Context/Problem/Solution)
Change Making	You have started to feel stuck even you have reached a point where your work is somewhat established. In this context, you may want to do something new and break out of a stuck situation, but it will either be a personal and very specific niche perspective or a general one that many people are already aware of. <b>Therefore, change things up with different combinations of existing items or by using them in slightly different ways.</b>
Relearning to Leap	You are diligently working every day. In this context, your thinking has become stagnant, with no new ideas emerging, and your work has turned into a repetitive cycle of the same tasks every day. <b>Therefore, to leap further in what you are currently doing, you will take some time to relearn.</b>
Pray for Hope	You have been experiencing a series of things not going well. In this context, you have done everything within your power to improve the situation, but despite your efforts, things still aren't going well. <b>Therefore, by continuing to pray, you somehow maintain hope.</b>

### C.1.3 Give Back to the Following

Patterns for practicing Give Back to the Following are shown in Table 9.

Table 9: The summaries of the patterns for Give Back to the Following

Pattern Name	Pattern Summary (Context/Problem/Solution)
On-going Path	You have overcome a difficult situation and completed work. In this context, it might be relieving to see the situation improving after managing to get through a tough phase. <b>Therefore, by continuing to learn and move through what you care about and what you think is important every day, you will continue to create your life in the future.</b>
Entering the Giver Role	There have been times when you feel like someone has lifted up your life. In this context, when you were helped or saved, there might not have been much that you could do, so you probably found yourself receiving opportunities more than creating them. <b>Therefore, create opportunities to elevate both yourself and those around you by utilizing what you have cultivated so far.</b>
Cultivating the Next	There have been times when you feel like someone has lifted up your life. In this context, there is an abundance of knowledge and lessons to be had from experiences, but if they remain unshared and closed within you, they won't benefit those around you. <b>Therefore, nurture others by utilizing what you experienced so far, just as those who have helped you have done.</b>