



PEARSON

J.P.Morgan



The of Education *Learning to Live Together*

16th UNESCO-APEID
International Conference



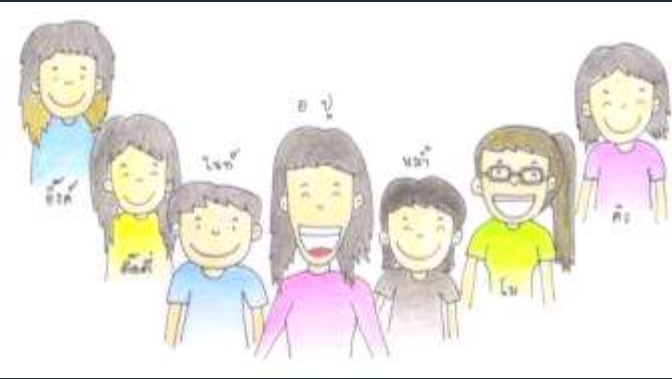
21-23 November 2012
Bangkok, Thailand

Strengthening Collaboration in Making Universal Design for an **Inclusive Society:**

Housing Improvement Projects for
People with Disabilities in Phayao,
Thailand.

WitiyaPittungnapoo

Faculty of Architecture, Naresuan University



Contents

Statement of Problems on Universal Design

About the projects

Why collaboration is needed

Factors of Success

Suggestions

Contributions

Conclusions

This paper will discuss certain techniques used to strengthen collaboration aimed at putting universal design into practice.

Improvements made to ten houses in Phayao Province, Thailand provide examples of how participatory design and collaboration among different organisations can make principles of universal design work in real situations.



Working Together



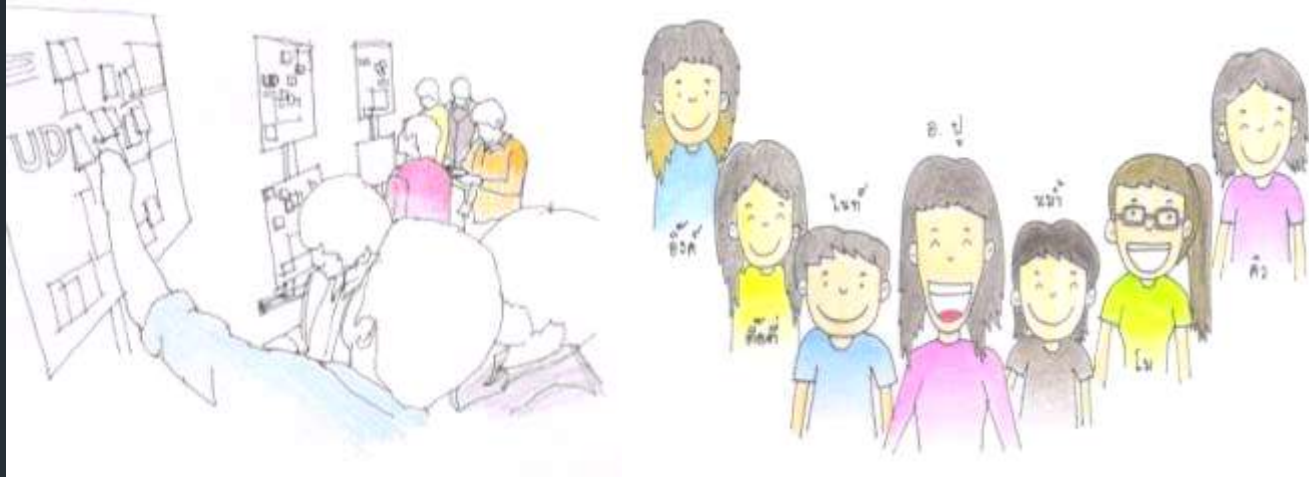
There were improvements made to **eight houses of people with disabilities** in Dokamtai District, and **two houses** in Phukamyao District, Phayao province.

Statement of Problems



Over the last decade, the concept of universal design has been considerably employed by a wide range of organisations in order to help people of all ages and disabilities have a better quality of life. However, **unless collaborations are achieved, just knowing the principle can be problematic**, and is not enough for pushing concept into practice.

Why collaboration is needed



Dillenbourg (1999:4) defined collaboration as a situation in which two or more people learn or attempt **to learn something together,**"

Collaboration is the "mutual engagement of participants in a coordinated effort **to solve a problem together**" (Roschelle and Teasley, 1996)

Roberts et al. (2008) noted that collaboration can be simply defined as **"...working together to achieve a common purpose** (ibid: 8)

Why collaboration is needed

- **People with disabilities** require **special spaces** for their vulnerability
- **Local administration** could not manage without any professional support
- **Relevant organisations** could reduce cost and improve efficiency to achieve provision

Why collaboration is needed

■ Any concept may not be implemented unless working together across boundaries is **done locally**



Development in Universal Design Education



Universal design has been imperative for making places friendly for all ages of people with different physical mobility. However, this concept remains new and has not been paid much attention in learning curriculum; particularly in the design field of study. There are a few ways to develop architecture students of Naresuan University.

Integrated UD into existing course

Launch UD as a new course

Memorandum of Understanding with relevant bodies may be alternative

Memorandum of understanding



Left: Naresuan University is one of the 11 institution partners of the National Office for Empowerment of Persons with Disability (NEP) on the 3rd National Seminar on Persons with Disabilities, 12 September 2011, Bangkok.

Right: The 4th National Seminar on Persons with Disabilities, 22 August 2012, Bangkok.

Academic service



Faculty of Architecture, Naresuan University and
The Institute of Health Promotion for People with Disability

Factors of success

- Clear Communications with a Shared Mission
- Mutual Understanding of Universal Design
- Learning by Doing
- Participatory Design
- Open Discussion on Resource Sharing
- Knowledge Sharing

Factors of success

■ Clear Communications with a Shared Mission

Initially, **an agreement was discussed** between the Institute of Health Promotion for People with Disability and the Faculty of Architecture at Naresuan University to have a shared vision and mission together as partners in order to improve housing conditions for disabled people in selected areas.

Communication with enough information, particularly at an initial stage, allows each partner to have mutual understanding about how to be involved in the project. (Hosley et al, 2003, cited in Allen & Clarke Policy and Regulatory Specialist Limited, 2010: 16).

Factors of success

■ Clear Communications with a Shared Mission



Importantly, clear communication with sufficient information is a powerful tool to increase students' awareness of their professional roles and how they can contribute and be involved with the project.

■ Mutual Understanding of Universal Design

There are two main approaches for achieving this.

First is to orient students to universal design principles **either inside or outside the classroom**, such as through lecture and knowledge management.

The **second** process is to give students direct experiences in **learning by doing**, such as by role play and participative professional learning from fieldwork. These will be presented respectively.

Factors of success

■ Mutual Understanding of Universal Design



□ **Educating** Architecture Students on Universal Design *either inside or outside the classroom*

Factors of success

■ Learning by Doing

Learning by doing is a crucial process to increase mutual understanding between architecture students and relevant stakeholders. This approach is more dynamic than lecturing only as it can encourage increased student participation. Learning activities can be offered in various forms to present students with opportunities to learn outside of the classroom. Moreover, **this process can provide opportunities for all stakeholders to meet and encourage their collaboration in real circumstances.**

Factors of success

■ Learning by Doing



□ **Role Plays:** This active learning process allows project participants to better understand the behaviour of disabled people and their difficulty in mobility. At this stage, project participants' awareness of the design for all has been increased.

Factors of success

■ Learning by Doing



□ **Professional Learning in Fieldworks:** It is a must do process for encouraging awareness of voluntary design for architecture students. **It provides real experience in problem solving.** The main purpose of this survey was to help the local poor allowing students to assess existing housing conditions and determine problems and limitations of access.

Factors of success

■ Learning by Doing in Fieldworks



Factors of success

■ Learning by Doing in Fieldworks



Factors of success

■ Participatory Design with Right Person Involved

Learning lesson gained from the participatory design process.

□ **Importantly**, universal design is a key principle to meet individual and/or special needs.

□ **Secondly**, local materials are preferable, which could be applied to the design due to limited budgets and in harmony with existing housing conditions.

□ **Thirdly**, simple construction and local building techniques are recommended, as they can be easily applied.

Factors of success

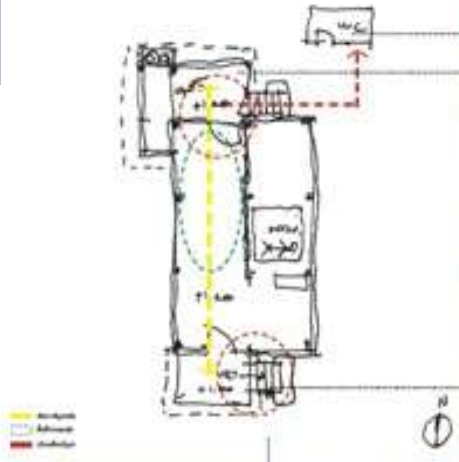
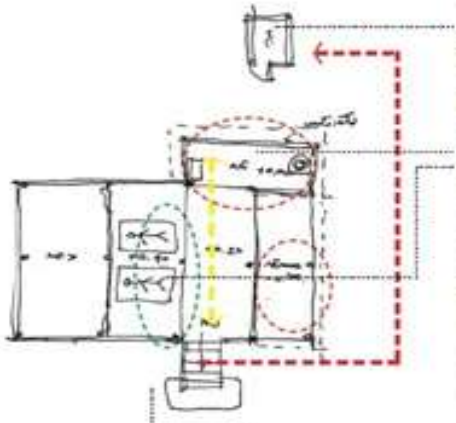
■ Participatory Design with Right Person Involved



Each house was presented for each disabled person's case. **All feedback and comments have been taken into account** to revise and develop the final designs.

Factors of success

■ Participatory Design



Examples of housing improvement in Phukamyao District, Phayao province, in Thailand.

Factors of success

■ Open Discussion on Resource Sharing



After the estimated costs were calculated for the participatory design was, **the allocation of budget was discussed** among the designer team, the Institute of Health Promotion for People with Disability, and the local authorities, **in order to put the design project into practice.**

Factors of success

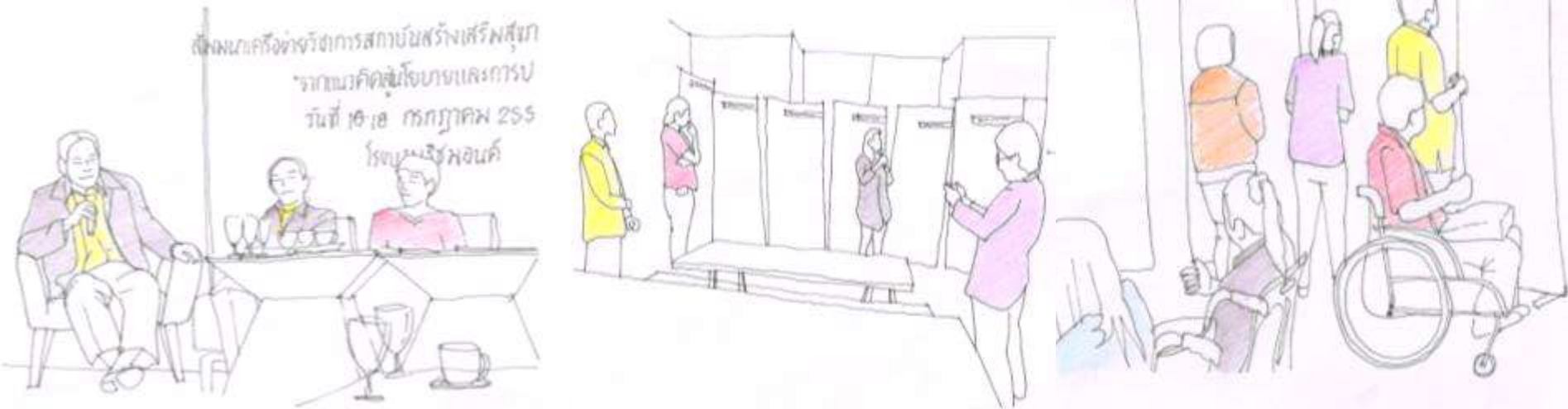
■ Open Discussion on Resource Sharing



Moreover, **collaboration can be developed with other parties**. This project suggested that working with the private sector may be an option worthy of consideration. Property development enterprises could be involved to put plans into practice, as they could donate funding to support the project.

Factors of success

■ Knowledge Sharing



- This process **allows for frequent communication** to occur throughout the mission process.
- Experiences gained from different organisations provides opportunities for all **to learn how to achieve collaboration and to avoid obstruction.**

Factors of success

■ Knowledge Sharing



- It can be implemented during **various forms of activities** to allow all stakeholders and other parties the opportunity to participate.
- For example, **exhibitions, seminars, presentations, and academic conferences** are all examples of knowledge transfer.

Suggestion

■ University has an important connected role in leading voluntary academic service for helping society in several ways:

- to encourage collaboration among scholars to work with relevant organisations, with a memorandum of understanding as a case in point.
- to create learning environments which promote knowledge sharing and management, and deliver academic service to communities beyond the campus.
- To develop learning curriculum which should integrate service mindedness in line with professional practice.

Contributions

- Several benefits gained from collaboration for making universal design happen.



- **Better and mutual understanding** on universal design was achievable **for relevant stakeholders**.
- **Enhancement of students' service mindedness** was evident.
- Design plans implemented **made housing conditions for disabled cases** better and more comfortable.
- **A sense of support** to the community and public caring has been increased in both the **university and in relevant parties**.

Contributions



Eventually, promotion and support of public minded intellectuals has sustained collaboration between Naresuan University and relevant bodies, especially within the community for the foreseeable future.

Conclusion

■ Making universal design more practical for better inclusion in society is desirable, and achieving this **collaboration from relevant organisations should be further encouraged.**

■ This paper highlighted that **collaboration is a key process to put universal design into practice.** It presents experiences and approaches which were gained from the improvement housing project for people with disabilities in rural areas of Phayao as a case study.

Conclusion

- To strengthen collaboration across relevant organisations by
 - clear communication,
 - mutual understanding of universal design,
 - learning by doing,
 - participatory design process,
 - open discussion with resource sharing,
 - and knowledge sharing and transfer.

Conclusion

Learning from the housing improvement project suggested that **collaborative work** may be a means to implement universal design **in developing countries** where the majority of the population is still poor and mainly lives in rural areas. **The nurturing of professional volunteers has been a challenge to Thai universities**, it seems a likely way **to develop intellectual resources in order to achieve better inclusive societies**. However, this will never happen unless promotion and support from all bodies are achieved for the future.

References

Allen and Clarke Policy and Regulatory Specialist Limited, (2010). *What Works to Achieve Effective Collaboration between Community Organisations*. Retrieved July, 2012, from [http://www.communitymatters.govt.nz/vwluResources/publications-lottery-WhatWorksCollaboration/\\$file/publications-lottery-WhatWorksCollaboration.pdf](http://www.communitymatters.govt.nz/vwluResources/publications-lottery-WhatWorksCollaboration/$file/publications-lottery-WhatWorksCollaboration.pdf)

Centre for Universal Design of North Carolina State University. (1997), *Principle of universal design*. Retrieved September 27, 2010, from <http://accessit.nda.ie/exploreampdiscover/the7principles>.

Dillenbourg, P. (1999). What do you mean by 'collaborative learning?' In P; Dillenbourg (Ed.), *Collaborative learning: Cognitive and Computational Approaches*, Oxford: Elsevier, 189-211.

References

Lai, E., R. (2011). *Collaboration: A Literature Review*. Retrieved March, 2012, from <http://www.pearsonassessments.com/hai/images/tmrs/Collaboration-Review.pdf>

Pittungnapoo, W. (2012). Collaboration to improve housing for disabled: a case study of pilot projects in Phra Yao. *Proceeding of the 4th National Seminar on Persons with Disabilities 2012: Disabilities Inclusive Development Challenges for ASEAN Community*, 77-84.

Pittungnapoo, W. (2011). Comprehensive environmental design for disabled. *Proceeding of the 3rd National Seminar on Persons with Disabilities 2012 National Conference 2011: Inclusive Society*, 143-151.

Roberts, J., & O' Connor, P. (2008). *The inter-agency services collaboration project*, The Wellesley Institute. Toronto.

The Royal Institute, Designation of universal design in Thai. *Official Letter No. RT. 004/1867*. Dated 16 December 2011.

Thank you for attention



WitiyaPittungnapoo

Faculty of Architecture, Naresuan University

Phitsanulok Province, Thailand

Email: witiyap@nu.ac.th