

# Design for All

Learning & Teaching Process in Thailand Context



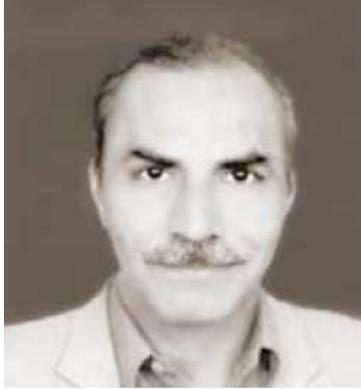
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**KMITL** Thailand

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## **Chairman's Desk:**



### ***Dr. Sunil Bhatia***

**One of my students asked me 'How do you differentiate amongst the terms protection, safety and security?' An idea struck in my mind 'Did you ever notice a newly born child covered properly with suitable clothes matching need of season to keep it away from the effect of heat or say cold? It is protected. In India, there is a superstition to protect a newly born child from evil eyes of others. Mother applies black dot with eyeliner on side of child's forehead. She r places specially designed pillows around her sleeping child on a bed to prevent it from a possible fall and not doing anything which may invite injury to the child since it is ignorant and has habit of rolling while sleeping. To protect from the mosquitoes mother uses safety net. A person or thing that prevents someone or something from suffering harm or injury is protection. A mother protects her child till she is confident that it is grown up and has developed proper sense of saving from all perils then only she allows him/her under strict guidance to perform assigned jobs.**

**Design of iron safe is for the protection of valuables from the burglars. Environment demands protection. What is virus protection for software? The Disk of the computer is write-protected .Is not all for protection? The objective of power system protection is for**

isolating a faulty section of electrical power system from rest of the live system so that rest of the portion may function without disturbance. Engineers have designed miniature circuit breakers with inbuilt protection. Barbed wire for fencing is protection from animals who may damage the standing crops. Design of umbrella is for protection from sun and rain. Cream with sunscreen is designed for protection from tanning and ultraviolet of sun light. Design of cave was used by an ancient ancestor for protection from vagaries of weather and possible from other animals attack. Nature has given every living being an inborn special feature that helps in protecting from enemies as long it is optimally exploited. Some fish have inbuilt character to produce electricity for giving shock to those who come for hunting. Similarly horse, deer can run faster and can protect from being prey of wild animals.

Safety is basically associated with products/ services and denoting something designed to prevent injury or damage: "a safety barrier"; "a safety helmet". Relative freedom from danger, risk, or some threat of harm, injury, or loss to personnel and/or property, whether caused deliberately or by accident can be prevented by safety. Why do we call safety razor? Is it not designed for safety of skin of the face? It does not cut with sharp edge and prevents for bleeding. Safety from fire, electrical and even working in mines demands safety. Davis lamp is safety lamp for mines workers. Safety shoes are designed for tea garden workers in different manner than who are working in rough terrain or in jungles. Safety match sticks are designed to ignite the fire when someone strikes the surface of match box that contains layer of phosphorus. Intervention of human is required to ignite fire. Pressure cooker's basic principle is use the latent heat and pressure of steam for faster cooking. That pressure can be reason of danger or when

outlet of steam is blocked and vessel fails to bear its pressure and it may burst and can harm or prove fatal for the user, it is designed with a safety valve as threshold level of pressure cooker crosses that safety inbuilt valve placed at the lid melts and releases the pressure of container upward. Design of fuse is safety of appliance but design of earth leakage device is protection from any untoward incidence because of faulty wires or appliances or both. Design of safety belt in automobile is for protection from anything goes wrong in vehicle and it can invite fatal accident that may prove reason of death of the user. During arc welding worker uses black goggles as safety from the protection of spark and high voltage light that can damage the eyes. Electrical home safety and associated potential hazards must be address by designers. Penicillin small doses are injected to test the effects on the person and if there is no adverse effects doctor administers complete dose otherwise does not inject this medicine. Is it not this act of safety of patient? Danger, No smoking area, exit, slow sign or blind turn ahead or no honking area or medicine is to keep in cool & dark place or medicine should be prescribed by medical practitioner are caution signals are nothing but for safety.

To protect the valuables of the house the designs of locks, doors, windows and ventilators are developed for environmental security. Financial securities are possible through bank, non-banking financial institutes and insurance. Freedom from risk or danger; safety also covers by security - doubt, anxiety, or fear; confidence. Job security are when no chance of losing .Child care is directly associated with security of development of the child on emotional, physical and mental state. Well-meaning care of the child makes better secured person and imbalance in personality is insignificant as compared to those who never receive proper child care. In the

restricted areas or trespasser will be prosecuted; fire arms are not allowed. All this nothing but security designs.

Another example is soldier wearing the armor that is for safety and he uses the shield for protection and carries the weapon that is for security. Design of earthen furnace for cooking was designed with the concept that heat should be channelized for faster cooking and it is protected from what extinguishes from high wind and above all it protects the user from any eventualities due to mismanagement of fire. Fire management is generally associated with safety. Forest fires are natural and need different handling what we do in household or industrial mishaps because that would occur from lightning may be in the result of no human activity, especially in very dry days. Designers have realized that fire suppression is important to protect damage but forest fire needs special controlling and arrangements because of its magnitude. Designers are left with option of don't care for prevention rather focus on how to safe guard the losses of further damage of properties and living beings and allowing the nature to create their own checks & balances. Fire safety reminds us the precautions that are taken to prevent or reduce the likelihood of fire and fire protection refers to mitigating the effects and fire safety generally handles the passive fire protection. Idea of covering the food protection is from unwanted elements that may fall and harm the consumer. Later on development of air tight containers is to maintain the status quo of the contents since it may set spoiled in open and may lose their crisp with humidity in air. This idea was further developed for creation of control environment to protect from spoiling which led to refrigeration industry. It has changed the face of human civilization. Design of Cutlery like spoon, fork, and knife is nothing but safety tools. In plant nursery, seeds are allowed to grow under

**control environments for healthy growth and these can stand their own since they sow seeds in different places where environment is conducive and special care can be handled effectively is called nursery. Is it not design of protection? Why designer has developed fencing & hedging when plant is in tender form? Is it not protection from animals?**

**It means there are three possible damage associated with design of products and services that is 'Protection, safety and security'. Ignoring anyone of these may cost heavy to the organization. Designers are using these concepts while doing their jobs but they more focus on functionality and believe these are things that are not minor. How should we arrange them in priority is tricky question? Idea of abode by primitive man was to protect from vagaries of weather and to feel safe he designed doors and for security he designed latches, locks and gradually electronic devices in our times .Is protection foremost important among all? In India a son becomes warrior to protect the weak and fight against the injustice that mother received highest respect in the society. If Child is learned, mother does not enjoy that respect what warrior's mother enjoys. It means society was respecting protection than safety or security. Social protection thus deals with both the absolute deprivation and vulnerabilities of the poorest, and also with the need of the currently non-poor for security in the face of shocks and life-cycle events. Government designs the reservation policy for specific groups that is nothing but social protectionism and it helps in bringing the community that is left out because of changes and imbalance may affect the mainstream progress. Indian government has recently passed a bill for Right of Education and Food security for every citizen. It is a kind of social security .One of the best ways to prevent and control occupational injuries,**

illnesses, and fatalities are to "design out" or minimize hazards and risks early in the design process. Addressing occupational safety and health needs in the design process to prevent or minimize the work-related hazards and risks associated with the construction, manufacture, use, maintenance, and disposal of facilities, materials, and equipment. We first consider what we can learn from "real world" security. In the real world, security decisions are based on three things: value, design of controls and an inbuilt system that should trigger when something crosses the specified threshold level for protection. We design level of controls depends on value of the asset is to be protected from unwanted incidence. We also assume that there is person who is interfacing with the system and responsible in catching and rectifying if any untoward incidence occurs in the system. Value is an important aspect of this characterization, because generally we do not protect things of lesser value. A constraint we place on any security mechanism is that it adds a minimum amount of interference to daily life. For example, locks must not be difficult or annoying in their use. If they are, it's likely that people will find ways to circumvent the annoyance and thus nullify the security protections the locks offer. In railways there is inbuilt security system for protection if driver slips into sleep or heart ache or health is not good to drive the engine properly and lives of hundred passengers will be at risk because of absence of normal driver who can control the engine. They have designed a lever that requires every five seconds a tapping from the driver to run the engine. If driver misses few tapping engine automatically applied brake and train stops. Sometime driver is confident or that tapping by foot is irritating and he disables the lever and engine does not require constant tapping to run the engine. That moment he is inviting serious dangers. Risk management allows recovery from a security

problem and decreases the need for complex and annoying locks. For example, rather than installing a complicated locking system for automobiles we buy auto insurance to help deal with costs that arise in the event of damage or theft.

Packaging industries work to protect the content from any physical or chemical damages and it should be cost effective and easy to transport. If content is liquid for human consumption then food gradable plastic is permitted under strict guidelines but use of glass is age old practice for alternative. If egg is to be transported in bulk then best material is recycled paper trays by carving the shape of eggs for holding .Paper tray is safe for eggs and is placed on one above the other and prevents breakage during transportation. The best part is it is light, can be recycled and very economically. When designer designs of toys he always considers child is an asset not toy and avoids any sharp edge that may harm the child. Design of toy with no sharp edge is safety aspects. Every country has its guidelines for using the materials that should not be harmful to the people at large. These guidelines are designed for security. When waste plastic bottles are packed for transportation for recycle it does not require special design and we simply think for minimum volume for carrying maximum numbers of crushed bottles .They press the bottles with hydraulic to give the cube of minimum size and shape and wrap the plastic film around for binding . Cosmetic industries is focusing on plastic bottles because most of the content is made with petroleum but nail polish has volatile content they use glass bottle for safe and protected material. Clothes are for protection from vagaries of weather for user. Designs of various buttons, hooks and zip are for keeping safety in mind and not at the cost of security of the users. Design of Ignition in automobiles is that man has acquired his role and

vehicle should function. When he changes gears and properly uses accelerators, clutches then only vehicle moves. It is designed with protection, safety and security.

Design of condom is protection from unwanted pregnancy and safety from various diseases associated with private part that may prove fatal. It is designed with the idea that man agrees to woman if she insists for condom. It is man dominated society and woman has no say in this affair. To meet this challenge designers have developed the female condom. It is not popular among the masses because cost is high and awareness is missing. There are permanent family planning devices which are well accepted and popular among women but threat of AIDS has changed the perception. They are more cautious about non curable diseases rather than controlling pregnancy. Focus has shifted but our modern designers are not paying any attention in this area and still old methods are available in the market and no one is interested in using them because it is not meeting their objective of protection. ' Better design of safety protection and security is the reason of long life span of human being when compared to our ancestor's short life.' Our generation is enjoying too much protection, safety and security that is killing our genuine growth. Our ancestors had never experienced such huge volume of financial securities and economic independence what we are enjoying. It has made us less alert for future events and result is disaster comes to its beats the previous records and comes with new magnitude and creates new history. Our generation is more protected than all these generations of mankind has lived so far.

This special issue Guest Editor is Prof Dr. Antika *Sawadsri* of Department of Interior-Architecture, Faculty of Architecture, KMITL, Thailand and she did complete justice with our international

publication. Her students have showcased their works related to Thailand but appeal is universal .Her sincerity and dedication is unparalleled and Design for All Team feels like to stand and salute for her contribution for social cause. Once again we are thankful to her for making our readers to know what is happening in South East Asia in the field of Universal Design and it is sensitive issue and Asian peoples are handling this matter with high sensitivity and utmost care.

***Enjoy Independence Day of India (15th August 1947)***

***With regards***

***Dr. Sunil Bhatia***

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## **Forthcoming issues**

### **September 2013 Vol-8 No-9**

**"Inclusive Tourism: international perspectives, accessibility and inclusion in the Brazilian tourism" is topic suggested by Prof Regina Cohen Pro-Access Group - Federal University of Rio de Janeiro and she will be Guest Editor.**



### **October 2013 Vol-8, No-10**

**Pooja Yadav is a 12th grader at The Riverside School. An avid reader, she is passionate about literature and loves writing. In her free time, you can also find Pooja dancing, playing football, listening to music while enjoying a cup of coffee.**

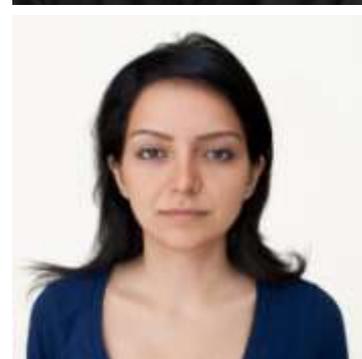


**Anshul Aggarwal is the Global Catalyst at Design for Change. He loves traveling and reading.**



### **November 2013 Vol-8 No-11**

**Ms Elnaz Davoudi , Industrial Design Centre of San Francisco state university will be the Guest Editor and this special issue will be supervise by Prof Ricardo Gomes.**



## **December 2013 Vol-8 No-12**

**This is our concluding issue for 'Student Designer year of 2013' with Industrial Designers of Society of America (IDSA).**

**Prof Sooshin Choi, Director, School of Design, Associate Professor of Industrial Design, University of Cincinnati and Education**



**VP of IDSA will supervise the special issue. The Guest Editor will be Krista Alley, who is attending Master of Design Program at University of Cincinnati. Both are working on Inclusive Design and its successful applications.**

## **“Women Designer year of 2014”**

### **January 2014 Vol-9 No-1**

**IMMA BONET** Executive Patron of Design For All Foundation has accepted the invitation of Guest Editor for our inaugural issue of our declared new series for highlighting the contributions of women in social movements of Design For All/ Universal Design.



### **February 2014 Vol-9 No-2**

**Dr. Lalita Sen** Professor Urban Planning and Environmental Policy Ph.D., Northwestern University SPA/COLABS BLDG SUITE 402F

Areas of Specialization: Accessibility, Accessible Transportation and Mobility for Seniors Disabled, Housing, Accessible Tourism, Universal Design,

Emergency Management of Vulnerable Population, Application of GIS in Spatial Analysis and Community Development, International Policy on Accessible Transportation, Smart Growth and Health Service Planning, International Policy on Accessible Transportation



### **March 2014 Vol-9 No-3**

**Dr. Margaret H. Teaford, PhD** , Honors Director ,Associate Professor-Clinical, School of Health and Rehabilitation Sciences, The Ohio State University would like to focus on assessing the needs of women in designing environments and applying Universal Design. And she will be the Guest Editor of special issue



## **April 2014 Vol-9 No-4**

**Valerie Casey** is a globally recognized designer and innovator. She is the Founder of the global social impact NGO, The Designers Accord, and the CEO of the US-based innovation consultancy, Necessary Projects. Casey was named a "Guru" of the year by *Fortune* magazine, a "Hero of the Environment" by *Time* magazine, a "Master of Design" by *Fast Company*, and one of the "World's Most Influential Designers" by *BusinessWeek*. The World Economic Forum has honored Casey as a "Young Global Leader." She will be Guest Editor of this issue focusing on women, design, and social impact.



## **May 2014 Vol-9 No-5**

**Rachna Khare** is a Professor of Architecture and the co-ordinator of Centre for Human Centric Research (CHCR) at School of Planning and Architecture, Bhopal. Prior to this she was Senior Research Fellow, Jamsetji Tata Universal Design Research Chair at National Institute of Design, Ahmedabad. Rachna is a recipient of the Fulbright Doctoral Fellowship and was affiliated with Georgia Institute of Technology, Atlanta, USA during her PhD in Inclusive Design. Her interest in the field of 'Universal Design' has earned research grants and awards nationally and internationally. She has published extensively and is one of the authors of *Universal Design India Principles* released in 2011.



## June 2014 Vol-9 No-6

**Josyane Franc** is the Director of the common Department of International Affairs for the Cité du design and Saint-Etienne higher school of art and design (ESADSE). France



## July 2014 Vol-9, No-7

**MITZI BOLLANI** Architect, Sculptor & Product Designer. She runs her own Architectural & Design Practice based in Piacenza since 1978, and focuses her work on the research of the psychological well-being for the users of her projects, acting as a primary target accessibility and safety for all individuals.



Mitzi Bollani is one of the founders of the "Design for all" concept that she applied the first time in Genoa: "Civis Ambiente – Accessible mobility in the Historical Centre": starting from the needs of people with activity limitation such as physical, sensory and mental or cognitive limitation, spaces, buildings and products were designed to be easily accessible to all, without losing the aesthetic value and above all without incurring in additional costs.

## **August 2014 Vol-9 No-8**

**Ms. Yasmeen Abid Maan, Assistant Professor, City and Regional Planning Department, LCWU Lahore College for Women University (LCWU), Jail Road, Lahore, Pakistan, is nominated as a Guest Editor and key Note will be by Prof Atiq Ur Rehman .**



**Ar.Yasmeen Abid Maan. (Assistant Professor at Deptt. Of City & regional Planning, Lahore College for Women University, Lahore, Pakistan.( Registered Member , Pakistan Council of Architects & town Planners)**

**With over ten years' experience in architectural design, I have exceptional skills and experience in planning, detailing, designing and coordinating projects both in the public and private sectors. My communication, , problem-solving and leadership skills, combined with knowledge of theory and practical subject teaching, make me a highly valuable instructor in both Architecture and City & regional Planning department.**

## **September 2014 Vol-9, No-9**

**Prof Lylian Meister, Dean of the faculty of design at Estonian Academy of Arts, Estonia, will be the Guest Editor. This issue will be about Design for All field research and outcomes in Estonia.**



## **Guest Editor:**



***Dr. Antika Sawadsri***

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***Dr. Antika Sawadsri has been a full-time lecturer in the Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang (KMITL) Thailand since 2004. In 2011, she achieved her PhD from the School of Architecture, Planning and Landscape, Newcastle University, UK. Her doctoral research focuses on the social construction of 'disability' and the role of disabled people in mobilizing access issue in public places in Bangkok. This thesis was examined by Professor Rob Imrie from King's College, who wrote the book 'Inclusive Design' (2001). Currently she teaches both undergraduate and graduate levels in which the design and research process concerns with ageing and disabilities.***

**In the last two academic years, Antika sought to find teaching techniques and learning methods for applying conceptual about 'design for all people' into architectural studies with Thai students. Antika interests not only academic works related physical environmental design, but also the learning process that can transform attitude toward 'disabled users' and 'enabling spaces'.**

For instance, there are study methods for the students who have never had disability experiences. The course provides opportunity for the learners to have direct experiences such as through a simulation of being wheelchair users or blind. Both learning processes involving with disabled people in classroom and simulation as disabled users are inspired from two key written works. First, "Rethinking Architecture", by Lifchez (1987) which inspires applying the participatory approach in the architectural design classroom. The participants with different abilities took roles in the design course as the buildings' users. Another chapter written by Patricia Moore in the Universal Design Handbook (2001) on the empathy approach in conducting research about ageing by characterized herself as an old lady who was challenged by her physical condition. These methods found extremely useful not only in helping students understand in-depth the physical obstacles, but also remind those learners the negative effects of design without disabled people in mind.

**"Universal Design is not about dimensions. It is an attitude." *said by Wolfgang Preiser, Senior Editor of the Universal Design Handbook. Such message really inspires my teaching process.***

***Apart from academic responsibility, Antika also serves as a committee as well as a facilitator in both governmental and non-governmental organizations working on accessibility of disabled people in Thailand such as National Office for Empowerment of Person with Disability (NEP), Thai Health Promotion Foundation, TV media and NGO.***

## ***Disseminate learning and teaching process***



***Figure 1 shows a participatory approach in teaching and learning through the design for all concepts, where the disabled user shared their firsthand experiences with the architectural students in class***

***Source: © Copyright 2013 by Antika Sawadsri***



***Figure 2 shows another learning and teaching method: the disability simulation that the architectural students mocked as person with various kinds of impairment***

***Source: © Copyright 2013 by Antika Sawadsri***



**Figure 3** *The one-day workshop organized by the Faculty of Architecture, KMITL and the TV media*

**Source:** © Copyright 2013 by Tawan Kokkheur

**It experienced an importance in adopting Universal Design or Inclusive Design concept in the architectural classroom. The learning process can create significant awareness toward the responsibility for those designers and architects of tomorrow. The faculty of Architecture at KMITL emphasizes on learning through participatory approach as a key method in teaching and practicing inclusive or design for all concept. Recently in June, there was a design workshop aimed to underpinned awareness toward accessibility issue for design students. Although it was a one-day activity, the objective is to strongly encourage students to change attitude about disability and understand the affect of lacking of accessible built environments. This workshop was incorporated with the public media, a television program, under a name: "Universal Design Ambassador Meets the New Design Seeds".**

**The event started by a lecture from the department of tourism to shared their experience of lacking of accessible facilities in public places and how those impeded tourists with different physical requirements. Then it followed with a simulation which the students had to play as disabled roles. The forty students were divided into nine groups to be as wheelchair users, and the blind.**



**Figure 4** *The mobility orientation for the volunteers before they simulated as wheelchair users*

**Source:** © Copyright 2013 by Tawan Kokkheur

Before those volunteers beginning to explore, they were trained mobility orientation such as the group who play as a visual impaired person with guiding volunteer, the blind was told how to stop when the guided person lift up their angle. The volunteer who sit in a wheelchair was trained how to move their small front wheels with careful so that it will not get stuck and cause injury and the volunteers who will be assistants were also trained how to lift wheelchairs safely for both the disabled and themselves.



**Figure 5** *Mobility orientation: (from left to right) one student put on a cloth to close the friend's eyes in a simulation as a blind, another group of students were being trained by the disabled volunteer in moving her wheelchair up and down the stairs*

**Source:** © Copyright 2013 by Tawan Kokkheur

Then the students and the invited-disabled volunteers left the building to conduct access audit. The most challenged access point was found at the different steps such as the stairs in front of the Architecture building and uneven pavement of footpath. The students were record their experiences as the disabled users at every obstacle point.



**Figure 6** The volunteers were being interviewed their experience as a wheelchair users and a blind after the disability simulation

**Source:** © Copyright 2013 by Tawan Kokkheur



**Figure 7** The participants including disabled volunteers and students started the access audit in front of the School of Architecture building

**Source:** © Copyright 2013 by Tawan Kokkheur

Through this access audit, the students also learnt that the details in architectural features are very important. For instance, small gaps of the duct-covered rack can cause severe injury for wheelchair users (in the set of pictures below).



**Figure 8** In the demonstration during access audit: Mr. Krisana, the wheelchair-using TV host, was pointing at a hazard point (metal duct-covered rack) where the small front wheels of wheelchair can get stuck and cause injury

*Source: © Copyright 2013 by Tawan Kokkheur*

As soon as the access audit was done, all of the volunteers came back to share their experiences together. The crucial step of this event was the involvement from the participants who have firsthand experiences of (in)accessible facilities, the disabled volunteers. The wheelchair users gave the students their access requirement along the design process and design solution. Each group prioritized the access need of the real users so as to the aesthetics.



**Figure 9** the disabled volunteers were working together with the students after disability simulation and access audit. They were trying to find the design solution that response to the spatial requirement of everyone.

**Source:** © Copyright 2013 by Tawan Kokkheur

When the time of final design came, every group presented their design solution to the participants. Then the best design solution will be voted by those participants. Interestingly, the students did not only consider design solution that response to specific needs of the impairment in which they did in the access simulation, but they also prioritized on the solution that can fit with all users including non-disabled ones. For instance, one group proposed design of a new ramp that blends well with the existing building. Another group proposed a solution for the gap on the duct cover which can prevent accident from the front wheels of wheelchair getting stuck. Some group focused on the designed detail such as a proposed solution of the walkway in front of the building without roof. The students proposed a cover designed for that walkway so that the wheelchair users who use their hand to roll the wheel can enter the building easily when there is rain and its design can go with the existing appearance of the surrounded environment. (See example of the proposed design solution in the figures below)



**Figure 10** The final accessible design solution proposed by nine groups of students and got votes from the participants

**Source:** © Copyright 2013 by Tawan Kokkheur

In sum, through this event, which aimed to disseminate the learning process of accessible issue, it experienced that by using television as a medium, the participants seemed keen to take part with the activity. The result from the evaluation showed that over eighty percent satisfied with the knowledge about 'design for all' they earned through those activities. Nonetheless, some participants suggested that there should be more time in doing access audit and disability simulation so that the participants can experience and understand deeper the struggle of inaccessible facilities. This can be said that such learning process by doing through firsthand experiences is still a crucial component of universal design and inclusive design concept. Furthermore, this process should be included in all architectural curriculums in order not only to raise awareness amongst the design of tomorrow, but also empowering the disabled people as the expertise at all stage of the design industry.

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# 1 | The Journey

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*Tada Suwansereekasem*

*Nattanaï Chanpaiboonkit*

*Bachelor of Architecture, KMITL*

To admit, when we first chose the class titled 'Universal Design', we weren't very well aware of the importance of such classroom more than, well, simply a subject. As an Interior Architectural Design student we often pay our attention around 'aesthetics'. It is, fortunately, this class and all the experiences we have gathered that remind us there are much more than what we have thought.

This article is a story about our little journey in understanding the circumstances of people with disability, difficulties and needs relating to architectural design, through their eyes, and through our own experiences. Without further ado, let us begin.

## *"Mission I'm Possible": the assignment*

It was the third week of the subject. We were teamed up into three. Upon our surprise, we were given a simple assignment; walk from the classroom on the fourth floor of the main building, downward to the canteen, order something, and get back.

There was one catch though, one of us has to play as a leg-injury patient, whom the only means to walk is with the aid of crutches. The teacher then gave us a pair of wooden crutches along with one huge skiing boot to wear on an "injured" leg to weigh it down.

**The other teams were handed blindfolds with guiding canes, and wheelchairs, with various destinations and objectives.**



***Figure 11 The simulation that the group's volunteer to walk with crutches while they had to complete the given tasks***

***Source: © Copyright 2013 by Antika Sawadsri***

**Then off we go, and a simple, everyday route is instantaneously turned into an obstacle course. Everything was against us; the steep and narrow stairs, the busy walkway, and the uneven pavement. When we reached the canteen, our "patient" was definitely struggling, and his arms were giving up. Ordering something, taking it to the table, and even sitting down weren't easy either due to the proportions of the counters, the depth and length that are beyond arm's reach and so forth. Not to mention the feeling that you're the person who always needs help and weighs everyone down. And we had to redo the same thing again, now going back up! We had to switch roles time to time. It wasn't long until we realized how inappropriate our faculty's architecture as a whole was for people with disability and even temporarily injuries.**

**We finally returned, exhausted as we sat down and discussed what we've just experienced. One of the conclusions was the concern in designing and building things for everyone are usually ignored.**

Another conclusion, the big one, is the one we have learned a rather hard way, that we should always keep in mind how people feel coming upon difficulties and feel helpless about it. As far as today went, our experiences should be a great reminder.

*The teacher told us again that, in order to design for everyone with the most efficiency, we must first entitle everyone "us", not that the people without disabilities are "us" and the other ones are "them". And by that, the standard of mind has been set, a standard for everyone.*

We then were given a week to address the problems we've met and introduce designs that should be adapted to the respective areas. Feeling inspired with a slight mixture of disappointment to current designs in the faculty, we put in our best efforts. The time was short, but we think we've managed to get in every bit of ideas into a presentation board, as seen here.



**Figure 12** The presentation board; full of ideas, but a little messy, a point we took care of later on.

**We're hoping that right now, someone somewhere is considering making these ideas real.**

### ***"A Dream Home": the project***

**The following week, as we were presenting the last assignments, there was arrival of a group of people with various disabilities invited by our teacher. They were to share their experiences and thoughts with us, furthermore letting us compare how we feel in our last assignment to how they feel in living everyday life. The big part of this talk, though, was that, as both Architects and Interior Designers, we would design a house for them that answer to their needs, letting us expanding our area of understanding in Universal Design. Slightly panicking, we were introduced to the user our team will be designing for; a real life, three-dimensional user, Mr. Preeda Limnontakul. A middle-aged wheelchair user arrived with his assistant. We began our "interviewing". Things went surprisingly well in the process, as Mr. Preeda was kind and keen to answer all our questions.**



**Figure 13** *Our team worked with Mr. Preeda, the wheelchair-using volunteer*

**Source:** © Copyright 2013 by Antika Sawadsri

Something that we have to get across to readers, in the past days of learning, we always get to understand our "users" through sheets and sheets of paper. These were mere characteristics of these users were addressed in specific points through texts, and what other traits they may have hidden under the flat surfaces were left to the depths of our imaginations.

This, of course, is entirely different.



*Figure 14 The design team was presenting a design of dream home to the wheelchair-using volunteer*

We later learned that Mr. Preeda is a cerebral palsy patient, a condition he received after a fatal car accident eleven years ago. He was a hardworking man, so hard in fact, that the loss of sleep took effect when he was driving his car. The lower part of his body was left permanently paralyzed and his hands and arms were a difficulty to operate. We were briefly in silence over that information.

Things seemed ugly, but Mr. Preeda turned them around. He loved working at home, and being in a condition he is gave him more

time to work and organize his business, now relating to aids for people with disability on the websites and other forms of Information Technology.

*"Recently some people call me the 'professional disabled person."* He said with a chuckle. How he perceives life in such way so much inspired us.



*Figure 15 Mr. Preeda Limnontakul, an inspiration.*

We were given two weeks this time, for a scaled model of the house we'd be designing, and for the presentation plate.

And the presentation day arrived; Mr. Preeda has returned and was keen to know what we've come up with.

The house we've designed consisted of a central room for the bed where Mr. Preeda would be mostly on and it can be moved via an electric motor to where he would be working. It might sound like a matter of advanced technology, but from the information we've researched, it can be economically achieved.



**Figure 16** The final presentation of the design for Mr.Preeda's a dream home Mr. Preeda appreciated and complimented, saying he would contact us if such project were to come to reality.

### Conclusion

Surely, all of these we were designing were still conceptual and a variety of ideas stitched together by our, still, little knowledge. It

is the experiences, however, that has educated us and expanding our perceptions toward how everyday designs are and how we can help to improve them in the near future. We would like to thanks our teacher, Dr. Antika Sawadsri, for her devotion and passion to Universal Design, and of course, for giving us these opportunities to be inspired and show what we are capable of. As well as thanks go to Mr.Preeda for letting us see the world through his eyes, the pair of eyes we had wrongly thought was filled with sadness, but actually was brighter than what we could have imagined before. It was a rough journey into the architectural design world, and it will still be for us, but all the things we've gathered along the paths, people we've met and the friends that walk along will make sure we get there.



**Figure 17** Picture of our team with Mr. Preeda on the final day of the project

**Source:** © Copyright 2013 by Antika Sawadsri

## **2| It's a Part of Me**

***Knitha Sae-Jia***

***Thipanan Pornthearak***

***Nutthida Tangtatarakul***

***Paveerak Limpisatien***

***Bachelor of Architecture, KMITL***

**When a person was born, he or she automatically owns unique gifts or talents that could potentially change one's way of life. Blessed with all their beautiful bodily features that work towards perfection, love and acceptance from their family and communities surrounded them. They gain respect as individuals and can make their own decisions in life. However, that is not the case with all people. Some were born with loss of or no limbs and they cannot function properly without assistance or others with brain dysfunction or body disfigurement, and so on. Instead of earning respect from their society, they are targeted for alienation, abuse, and social defame. Disability can be something they cannot rid themselves of: It is a part of them. The main goal of the disabled is for their communities to accept them.**



***Figure 18 Our group are presenting the proposed design of a home scaled model for the invited user with visual impairment***

## ***Problems faced by disabled people***

**We have studied about people with disability, see and talk with the real people with disability: visual, hearing and mobility impairment. We will know about the hardship, feelings and needs in their indoor and outdoor life. For the public hardship, such as, when the wheelchair gets on and off the bus or taxi. The driver hardly feels sympathy with them. They may think people with disability make them waste their time and often have an excuse that they are in hurry to return the car. All of these can be led the driver's ignorance. There are lots of barriers in Bangkok or many places, the footpath is uneven or there are many obstacles: security guard's box office, sign poles, motorcycles, trashes, trees, opened duct, and stray dogs' droppings block the ways. Therefore, it can be problems when the disabled going out and about in public places. It is hard to make everybody understand them. Perhaps they will use sign language. However, not everyone can understand them all. For the people with visual impairment, they will not know the new route if no one takes them in the first time.**

**After we talked and learned from real people with disability, it made us to contact, learn and understand more about them. But to really understand their feelings and for the new generation to acknowledge the importance of the disabled people, the daily life of them, the problems, the uncomfortable feeling of them, the young men and women who study about designing, creating and developing new technology will be the main power to propel the architect of Thailand. We must support them; teach them to care of design. Also make them to invent and develop the technology. Always make them know the importance of disabled people. So that**

the designers will make a new technology for disabled people, care about the quality of the disabled people life, develop carefully the standard of 'National office for empowerment of persons with disability. We are sophomore students from faculty of Architecture, King's Mongkut's Institute of Technology Ladkrabang (KMITL).

So, we were having an idea to try to be a person with disability in any set-up situation such as a person who used wheelchair by themselves and helped by their assistance, let people who has one-leg disabled use splint, also with people who has visual problems. The problem is to try to be a person with disability. There was the activity in our classroom that was time counting journey in the faculty. Our group has chosen to play as a person who used wheelchair by oneself and went from the 4th floor of a building to the 3rd floor of another one, also try to go to toilet and come back to the starting point, the total distance was 600 meters.

### ***Driving, More Ability***



***Figure 19 Miss Jeab is transferring from her wheelchair to her car and is able to drive by her own***

***Source: © Copyright 2013 by Antika Sawadsri***

**Ability of people with disability that we have never known was driving. We have never thought they can drive a car. But they did! It**

is incredible. For example, Jeab, a wheelchair guest speaker who can drive by herself. She told us it was a special car with hand gear and hand break modified for disabled people. This is her way to do. What's a surprise!

### ***Try as They Do***

One of us tried to be the disabled sitting in wheelchair and moved it herself. First change was she had to bring herself to another places with her hands. In a few minutes it's fun like playing new toys. After that it was not like what we have thought. When I had a chance to try to use the wheel chair by myself, I realized that it used a lot of the arms' strength which drain off my energy. It was tired and exhausted, my arms had gone stiff. Even the straightway wasted a lot of time, which made us know that what we used to think is wrong. We thought that to use the wheel chair is easy. So we have learnt many lesson of using wheel chair. Then we have to learn how to control the direction of the chair by knowing the moment to stop the one of wheels to be a momentum point. When we use the elevator in first building, we felt that it was extremely not comfortable because the door of the elevator is too narrow to pass through and the automatic door closed very fast.



***Figure 20 the challenge at the lift door which automatically close too fast***

***Source: © Copyright 2013 by Antika Sawadsri***

Our friends who did an experiment nearby have an accident because the door of this elevator. He needed to let another friend to stop such door and move himself into the elevator. This elevator does not have a mirror in it, which is the important thing. The disabled people much use it to estimate the distance in the elevator, so that they can move safely. This will make them feel more comfortable and easier to use the elevator. Another problem was the height of the buttons of the elevator. Its height is too high for the wheelchair users. They cannot reach the buttons so they have to ask other people to press the button for them. When we arrived at ground floor, we have to exit the elevator, which they have to move backward and go outside the building. Then we had to go to the gate behind the building because the front gate did not have a ramp for disabled people. But the ramp was too steep. Because people only used this ramp for deliver the heavy items into the building. Furthermore, to move downward the ramp, we must have 3-4 assistants.



**Figure 21** Another challenge at the entrance of the Architecture Building which the mocked wheelchair user feels unsafe when she was lifted downward by colleague because there is no accessible feature (e.g. a ramp) for wheelchair

**Source:** © Copyright 2013 by Antika Sawadsri

When we came out of the building, it also had many steps to pass thorough and the surface of the road was very rough. The road was paved by bricks which was not smooth. This made uncomfortable and difficulty to the wheelchair users. The passage between first building and the second building had many cars and motorcycle driving through all time. The disabled people must cross the road carefully and use their strength to move the wheel of wheel chair across the road, which must be hurry and fast. The experimenter nearly has an accident because the motorcycle drove pass by. If we didn't move fast enough the accident may occur. But in this situation, the driver did not slow down the speed. This showed us that he did not care and sympathize with the disabled people. He may think that he can drive pass through the disabled people. But we wondered whether he mined about disabled people's feeling.

When we arrived at the second building, there have a ramp and a stairs about 10 steps to pass through, so we have to go to another way. On another entrance, there was a ramp but it is also very steep and there are many motorbikes parked there, not only this, but there are many large recycle bin placed nearby. If the disabled people arrive here alone, he or she absolutely cannot pass the obstacle and make into the building. Because they can't move the object that blocks the way, they must find other people to help them. When we move the bin and the bikes away, we had to step up; we pushed wheel chair forward in a few meters and spent many times. When we came inside the building, we have to use the elevator to go the third floor and go to toilet. While we use the elevator , we have a problem , the elevator button was too high ,we cannot pressed it but when we reached the third floor, there don't have an accident like the first building because there have sensor at the door. When we

try to go to toilet in this building, the toilet was not designed for the disabled people at all. For instance, the entrance of the toilet is too narrow. The wheel chair cannot enter. The only way to access the toilet was to ask other people who passerby to help them. This situation showed us that the disabled people cannot make themselves to go to toilet independently. What will happen if they really need to go to toilet or washroom but there were no people pass there.

The conclusion of the problem was we are always stuck at a stair or a rough surface, similar to those obstacles that blocked along the walkway. We just try an experiment of using a wheel chair for just an hour and we felt that it was very hard, uncomfortable and not good. But the disabled people have to use them all their lives without having other choices. Right now we realized the importance of design for disability people.

### ***Four Excellent Senses***

For Mr.Thanee Rodparn who is blind was an interesting case study. He can use electronic devices easily such as smart phone, computer etc. He can communicate with his friends on online social network such as the Facebook with special application which read messages on the smart phones or computers and speak out loud in adjustable speed. He ought to speed up the reading sequence than people without impairments when he wants to complete the reading in short time. The application is good for blindness to create an opportunity for the blind to communicate with the others.

## ***House of Dreams***

The assignment we were given was how to design an interior spaces for the blind. Mr. Rodparn, nickname is Cat, is about 30 years old was our user. He told us about how he lives in the city. The first time, he got on the bus with the help from others but after that he must get on the bus by himself. He would ask the people nearby to help indicating the arriving bus number. Unfortunately, sometimes no one is there to help. When he was sitting on the bus, listening to what was going on outside, he could tell if the bus crossed a bridge or if it was near his home. By that we realize that the blind lives with their sensation and usualness. Therefore, accurate hearing is necessary to observe all things around.



***Figure 22 our group discussion and interview with Mr.Thanee Rodparn, the expert as visual impaired user***

***Source: © Copyright 2013 by Antika Sawadsri***

This house is comprised of five people which are Mr.Cat himself, his grandparents, his mother and his nephew. Therefore, the needs in this house seemed not so different from the others. He told us the blind was always careful for everything. We assumed he might want everyone thinks that he is similar to other people. The things he

wanted for the house is a good circulation, furniture which attached to the wall which easy for circulating.



Figure 23 The final proposal of design solution

We designed the dream house with the Natural Sense concept. The highlight was feelings from hearing, smelling and touching. There were large circulations and different floor materials for the blind to distinguish easily. We provided large windows for taking natural atmosphere outside in, feeling the breeze and natural smell. There are trees, flowers with sweet smell and small garden around the house. Moreover we located his dream house in a city, closed to the express train station which he wanted for convenience.



*Figure 24 Our group photo with the instructor of this class, Dr. Antika Sawadsri*

**This class let us know many people with different form of impairments and understand how they feel. Many people may think disability is their responsibility; in fact, they want to be as other people and try to help themselves first.**



*Figure 25 Mr. Krisana Lalai, a wheelchair-using TV host*

**Finally, Mr. Krisana Lalai, the wheelchair using TV host, once said that**

***"There is no disabled people, but there is only disabling environments."*** In this sense, it is the important topic of all designers to learn how to design for all and how to create the universally designed environments.

### **3| Lesson learned from the classroom**

The following two short notes are a reflection on the learning experiences and its effect on what the students thought about the given design concept: 'Universal Design'.

#### ***3.1 Are we equal?***

*Yada Ya-sothorn*

*Dhitinart Jongkiatjareon*

*Sirin Oonmanee*

*Bachelor of Architecture, KMITL*

#### ***Introduction***

***"Equality and freedom are not luxuries to lightly cast aside. Without them, order cannot long endure before approaching depths beyond imagining." - Alan Moore, V for Vendetta***

We all know that the calling for rights and equality took place long time ago. Nowadays, a lot of people are aware of this issue. It is not only about the calling for the rights of women but also for racism, disability and so on. A corny attitude is changing in a better way. A number of institutes place importance on equality. They formulate many policies, plans and visions based mainly on "human equality". We are going to focus on a field of design cycle because, besides the fact that it concerns directly with our study major, it is something that everyone can touch, access and use easily in daily life.

**What is Universal Design? Universal Design is a design approach that seeks to create environments, objects, and systems that can be used**

by as many people as possible. To this end, Universal Design is the process of embedding choice for all people in the things we design.

- *Choice involves flexibility, and multiple alternative means of use and/or interface.*
- *People included the full range of people regardless of age, ability, sex, economic status, etc.*
- *Things include spaces, products, information systems and any other things that humans manipulate or create.*  
([www.universaldesign.com](http://www.universaldesign.com))

This is a simple definition of UD which some people might already know. Some might at least see UD in every single day but they are unaware of it. One of the great ideal models is in Japan. There are many awesome designs such as U-shaped handrail, L-shaped handrail, comfortable level of sink and two levels of staircase rail, lavatory with sensor, and bus' seats.

**Mission I'm Possible** One day in the UD class, my teacher walked in with a lot of equipment such as crutches, blindfolds, wheelchairs etc. Everyone was interested. We got a new project to simulate as disabled people, and then go to the canteen to observe the problems in the built environment and present how to solve them properly. In fact, there were many problems occurring in the simulation. Here are some important problems that we found out.

- *There is no ramp for wheelchair users.*
- *There is not a mirror in the elevator. When a person in wheelchair wants to leave, he cannot see anything behind him, so he cannot make u-turn by his wheelchair.*

Besides that, there are many other problems which bring a question "Is that the best we can do?" A short trip designed for disabled

person to live in appropriate environment causes us to comprehend that in real life, without a supporter, an only 3 cm high step which we all can walk without trouble is a big trouble for wheelchair users. The best solution to that problem is "DESIGN". We need universal design and concordantly with the environment.

***How to solve the problems***

- ***As inshore the ramps ratio is 1:12 - Make all pathways smooth and safe***
- ***Install a mirror in the elevator***
- ***Provide adequate and useable ramps***

***Are we equal?***

Our project was finished here but there are still many places without universal design concept in the construction process. This leaves us the same question: 'Is it the best we can do?' The more there are people calling for their rights, the more we realize that the equality is not enough for everyone. Now, we know the problems and how to solve them. We promise when we become an interior architecture, we will not forget to use universal design in every project.



***Figure 26 Our group photo with the invited guest, Mr.Nate, the wheelchair users***

***Source: © Copyright 2013 by Antika Sawadsri***

### **3.2 Look closer to the Universal Design concept**

**Chalisa Waradee**

**Wannaleela Chusakul**

**Suthinee Saedsawan**

**Sopida Jitjamnornng**

**Bachelor of Architecture, KMITL**

Nowadays, universal design plays an important role in field of environmental design. The design concerns universal utilization; things can be used universally regardless of specific modification for a certain group of people.



**Figure 27** Our group photo with a proposed design solution for the invited wheelchair user

**Source:** © Copyright 2013 by Antika Sawadsri

#### ***How the knowledge from studying involved with universal design***

The knowledge of universal design obtained from studying is the concept about designing environment, buildings, and tools for being really used by everyone in the society. The contents having been

studied are media from the lecturers, people who are facing the problems, the experimentation, the field trip. All of the information must be analyzed and processed several steps before conclusion. For example, we started from thinking that how is the external appearance of those people and how is their lifestyle in order to know how well those people can react to those things, how to allow many groups of people, such as old people; the pregnant; sick people or children, to use those things equally. We, then, summarize the results from studying and present them in various forms, including large page, model, media, PowerPoint. We can clearly see that universal design plays an important role in our daily life. It is the duty of designer to create or initiate invention that can help everyone to be able to react to the external things all the time.

***Designing public area for everyone's access by concept of universal design***

In Thailand, there is an increase in alertness in designing public area to cover the need of every group of people; but that is only for a certain area. At the same time, it might be used in wrong purpose. Handicapped people still have limited access to those things and they cannot use them well enough. We may see that on the footpath which is also for wheelchair are not well done. There are still many obstacles. Buses still have nothing to support these people. Fortunately, at least BTS and MRT have elevators for them; but the lifts are too narrow, and there are elevators for only some stations.

From the problems we have seen, we can conclude that the handicapped in Thailand are not safe to go alone safely and conveniently. The design for all people is incomplete. This issue can make disabled people feel that they differ from other people and

they may have to pay more transportation fare than other people. These things inspire the concept of designing for public. Although it is the design for small place, it might be developed and applied in the future.

### ***Harmony of Difference***

Harmony of difference is a project designed to help people who use wheelchair around the area of Architect's faculty and pathway from study building 4th floor to reception at the dean office building as a case study.

The idea is to promote equal status between the disabled and normal people under the fact that even the disabled should be able to live normally just like others without feeling different, both physically and emotionally. The plan is to renovate the area with added function for disabled. This is a new difference that harmonizes with the existing environment for the purpose of maximizing functionality for everybody.

This project tries to solve problem of the building that not relate for disabilities people in faculty of Architecture.

In this idea it talks about equality between normal people and people with disabilities people. This idea will make disabilities people can survey well in this place.

Before we doing this project, we find the problem by setup disabilities people who using wheelchair. And we have seen the problem of using wheelchair.

**For example**

**1) *Surface roughness on thoroughfare***

**2) *The front of building does not have wheelchair entrance***

### ***Harmony of difference***

**The idea of doing this project is only experimental design. This project is just a small part of idea but maybe more comprehensive of public in the country.**

**In the future, whether it is inside or outside the building, the designers should aware of Universal Design concept. Nowadays in Thailand, there are many things that are not congenial for disabilities people. But in a real life everyone is important. We have to take into account more for the Universal Design.**

### **3.3 Realize of the Universal Design**

*Jitsupa Punyachai*

*Patama Ruttanastian*

*Petchusa Kuwattanasiri*

*Onanong Tantiseree*

*Bachelor of Architecture, KMITL*

As we know that there's a problem about people with disabilities in many countries including Thailand. They have to live unequally, no one realize how could they live especially how could they travel around in this riotous city, seems like they don't have an equal human right, like the disability are their false, but what is the truth?

The reality is that many of them are so talented. Unfortunately, they hardly have an opportunity to present their abilities to public because of this misunderstanding. Have you ever wonder the power of these people?

From the following topic, this is what we actually got from the UD class. We realize that everybody is equal. We mean really "everyone". Disability is just one of many characteristics that an individual might possess, Universal Design can solve problem, in order to make disability becomes ability and UD also create unison language which is simple use and easy to understand.

#### ***Universal Design in study: Dream house Project***

***We have had a chance to design a house project which has an existing user, Mr.Nareuporn Aimchom (Cerebral Palsy)***

As we know that cerebral palsy (CP) is a group of disorders that can involve brain and nervous system functions, such as movement,

learning, hearing, seeing, and thinking. Cerebral palsy is caused by injuries or abnormalities of the brain. From the following symptoms of CP, it is necessary to use wheelchair in order to improve independence in daily activity. Mr.Nareuporn came to our class and gave us an interview and here are some important additional user information

- *use wheelchair but still can do things by himself in daily activity (without attendant)*
- *lives with single family*
- *Boccia player (Boccia is a precision ball sport contested by athlete with Cerebral Palsy)*
- *use car and taxi as main transportation*
- *can use computer, surf the net, etc.*
- *Budget 1,000,000 THB.*

#### ***User Requirements***



***Figure 28 Our group is presenting the proposed design solution to Mr.Nate, the invited home user***

***Source: © Copyright 2013 by Antika Sawadsri***

**Our user needs a nature touch house that makes him feel fresh and relax, requires space indoor for practicing Boccia. He also needs a house that he can do everything himself, can stay alone without**

worries. He needs a house located in a town so that he could travel around easily. We have one week for this house-design project to brainstorm the design process and create the design solution.

### ***A DREAM HOME PROJECT: HARMONY HAUS***

We use “harmony” as a concept. Universal Design attitude shows that we design for all, we live together. There is no different between normal or not normal and this reminds us to think about harmony in mankind, in other way, we used harmony which comes from yin-yang philosophy to plan and design the house.

The house plan is shaped in circle, this is for connecting space. Make circulation flows in loop; connect function to function with no wall if necessary. We create nature touch by body, eye and ear perception that every single area has a view of nature, such as tempered glass wall connect interior and exterior space, skylight garden in the house and a little pool beside the house to give essential sound. Materials are wood and stone in earth tone color scheme.

We’ve had a great experience from this UD class, got an idea what would people with disability think, how their views of life are. It’s just something that we couldn’t get in textbooks and absolutely, all of these things make us realize in equality of human much more than the past. We are architect students that will be architects someday.

We pretty sure that in the future we would create design works that well-designed for everyone.

## 4| Rethinking a meaning of 'Universal Design'

**Nidhikarn Hiran-ananrit**

***Ployrarin Wongchareon***

***Pitchaporn Saengtawechairak***

***Yosawat Bootna***

***Bachelor of Architecture, KMITL***

"Universal Design" is the word that could be heard frequently in the field of design environments and objects for elderly people and bodily challenged or people who have difficulty in entering, accessing the building or facilities or any environments built in their community. Universal Design, for those people, can be the design of objects, environments or places to be universally and equally be used by every human being in any status from any part of society without having to redesign or make specially change. In Thai, 'Universal' would mean the design for all people.



***Figure 29 Our group is presenting the proposed design solution that responds to the requirement of the wheelchair user, Mr. Preeda***

***Source: © Copyright 2013 by Antika Sawadsri***

The thought of 'design for all people' is a way of designing environments, places and objects to be equally and widely accessible/usable to everyone, regardless of what their genders are,

or whether they use their legs to move around or have to stay on wheels, whether they can see or not, whether they are adult or youth and whether could read or not. This kind of design is meant to create the way of designing that is efficient and valuable to everyone, by its basic question of "*how can we really design to fit for everyone*", even if they are sick, pregnant, dwarf, young kid, disabled, blind, mute, deaf or having any other challenges. It is one of the way that social could do something to take care of them and enable them to flourish their life independently.

At present, the 'design for all people' draws somewhat good afford of interest from society but it has not yet been developed in the way that 'all' kind of people can really use. We set hypothesis and tested it as we pretend to be blind or having to use a wheelchair which took us to see the real 'challenge'. Even though it might not be the same but we have found out something. It could take a blind person an hour to get to toilet but only for fifteen minutes for non-visual-impaired person to do so. If a blind person using an elevator they face a real difficulty in finding the buttons since most of them does not have any signs that can be understood by using their fingertip or hands.



**Figure 30** During the disability simulation, our group mocked as a visual impaired user

**Source:** © Copyright 2013 by Antika Sawadsri

**Our group mocked the experience of the one who losses visual. Then I was the volunteer who had to pretend to be blind by put something that it's dim and use a cane help to walk and the other hand to touch everything in reach. The starting point is our school building on the fourth floor with a colleague observed my movement. We chose to walk down by stairs instead of use a lift because at that moment there was crowded around the lift. First step downward the stair case with no visual, I felt like that everything was louder than usual because at that moment I only left one ability, hearing. When I walk on stair, my legs must be touch firmly than usually. Rim of stair make me realize the size of the steps. When finish at first floor while I walk outside from school building. I felt hot of sun heat and I heard sound of cars, sound of people was crossing the street. In such area, there were a lot of bicycles and motorcycles stop by. So that I realized that I was outside of school building. The uneven pavement materials such as small concrete blocks did not designed to meet the movement of blind people. Furthermore, the car that parked on the walk way blocked me and lift a narrow way to go. This can cause risk to the blind that uses a wooden stick for navigate as it can swing to hit the car. The fall and damage will occur. When I want to across the street I was helped by friends. On the other side of the road, there are many uneven pavements, grass and small tree that reduced the ability to walk and I have to pay more attention while walking. Then I walked to the entrance on the left-hand side of the building. Again, the footpath was paved with uneven concrete. When I continued walking for fifteen meters I found a stair. At that spot was quite unsafe because one side of the walkway, which was lifted up 50-55 centimeters, doesn't have handrails and it adjacent**

to the green space. This is dangerous as the blind can fall out down the walkway.

So who is responsible for the design or construction of the building that will take into account to make the safety of the disabled users. When got inside the building, I learned that the elevator is on the right side of the building. Once inside the elevator, I felt relieved. Then the next task I have to use the toilet. I asked for help for the direction, and then I go to the bathroom on the left. It is clear. And next to the wall is a nice product for a jar of urine. In contrast, a bathroom and two rooms, I try to get into the bathroom feel cramped and uncomfortable rock. The danger is obvious. It is the material used toilet paper rolls. There is a sharp stainless steel which should be modified to use safely. I came out of the bathroom, it opened an eye out. Make sense out plan. And gain a better understanding of the visually impaired people. And learn from everyday life that it is difficult and need to be patient. From what I can observe and touch. The training included development of eye, ear, nose, a touch more than usual. A group of us were trying to put out the study and those who have impaired vision. So Rob is.

From which we have done such things. We know that the observer design in society more generally. And we have found that the design of the current account, it is the most universal design, or design to the public as well. To be used in the next activity was found in the design to the public. One factor that is very important in everyday life. There is an obvious example, locations that are under construction. It can cause an accident at any time, such as a material object fell. The dress of the people who work in it should have a good protection. Warning signs that can be used easily understood. These devices cover the neck extended the line to

protect our people dedicated to a pole or the extent to which it can be flexible and adaptable in order to protect the rights of people. But this concept is hardly found in our country. We should be very attentive. Or even the location. We have access to in a daily basis. The downside is that it also includes buildings within the university. We hardly care about their safety as it should be. Not designed to handle the problems that can occur with disabilities. Whether it is a walk in the corridor in front of the surface is very rough. If a person who uses a wheelchair, it would cause problems.

We had a chance to talk about information needs of the various disabilities. Both the vision impaired and deaf people. What are some of the problems encountered with the design environment? We talk and have someone try to design a 'dream home' for wheelchair user. From which we have discussed with them. They said the problems faced at present, and that they were not able to live a normal life, or comfortable like normal people. For example, they need a slope and cannot use the stairs, struggle with rough pavement as well. For the blind, the Braille system is required to communicate something. If there is none of these things, they found difficulty to perform in everyday life. We have learned that this will benefit many people. We know this because when does a design based on the principles of Universal Design, we find a solution the problem properly.

The Center for Universal Design at North Carolina State University expounds the following principles 1) Equitable use: We work with everyone in society equally without discrimination and discrimination, such as the installation of a phone booth. 2) Flexibility in use: Works for left-handed players. And right or up

and down to adjust the height according to the height of the user. 3) **Simple and intuitive:** For example, there is a simple explanation for all kinds of people regardless of their knowledge level reading. 4) **Perceptible information:** The information is easy enough to use. 5) **Tolerance for error:** Has a system to prevent dangerous if used wrong. And do not damage easily. 6) **Low physical effort:** Saving energy easy and requires no effort. 7) **Size and space for approach and use:** use it in practice. By design, we think for the people at large. Be physically active elderly people.

## **5| Study of the effect of university environment on wheelchair-using students**

*Krittiya Piya-aroon*

*Master of Arts (Interior Design Management), Bangkok University*

### ***Introduction***

**Bangkok University has a vision to facilitate students with disability to live as normal students. Thus, the university has established a program for disable students. However the current environment in the university does not fully support disables. Therefore, the improvement of the environment must be done to facilitate disable students. The objective of this research is to examine the university environment that affects students requiring wheelchair in order to suggest guidelines for the improvement. This research focuses on students requiring wheelchair, with and without assistants. Data collection included observation, interview, survey, questionnaire and test. The results indicated that the multi-level passage, floor material, position of control button, door, furniture, position of information board, and parking lot were factors that affected students requiring wheelchair.**

**The Rehabilitation of disabled Persons Act (Rehabilitation of disabled Persons Act B.E. 2534) was first enacted in 1991, which becomes effective only disabled persons. This act was amended several times concerning disabled person's life in current society especially in content of building environmental that all of building has to provide facilities, services, accessibility supports and building requirement for people with disabilities as well as elder in**

accordance with Ministerial Regulations on Facilities within the Buildings for the Elderly and Persons with Disabilities B.E. 2548 (2005) by Ministry of Interior. In particular public building is a meeting place for integration society and class. Environment should be designed to meet the needs of people with physical disabilities integrates normal people.

Bangkok University concerns on rights, duties and equality of persons with disabilities in society as well as well-being to receive consistent education to develop their potential can live and productively in society. Although shared use of facility in the Bangkok University between students with disabilities and student have been occurring, there are some problems due to some buildings have built before the Regulations B.E. 2548 was enacted that be the cause of old and unable to facilitates to students with disabilities.

Study on environment and needs of facility of students with disabilities understood current situation and how to deal with problems conform to needs of this group student to be used as guide in the development of facilitate services, accessibility and providing various types of education in accordance with their needs and levels initiate social equality and eliminating of social discrimination. These promotions have effect to persons with disabilities can fully participate in social activities and productively for nation's development.

### ***Research Objectives***

- 1. To observe the existing physical condition, which effect to usability of students requiring a wheelchair***

**2. To clarify needs of environment and facilities of students requiring wheelchair**

**3. Suggested guidelines to improve environmental conditions support students requiring wheelchair**

***Conceptual review***

As for the research objectives, researcher had studied theory and concepts, which derived from secondary sources such as documentary, reports and previous studies to helpful guide for research progress that are divided in 5 sections following as: First is basic concept of disabled persons in Thailand, design concept in facilities management for disabled people, restriction ability of persons requiring wheelchair, concepts of environmental and facilities management for persons requiring wheelchair as well as study on Post Occupancy Evaluation (POE) method.

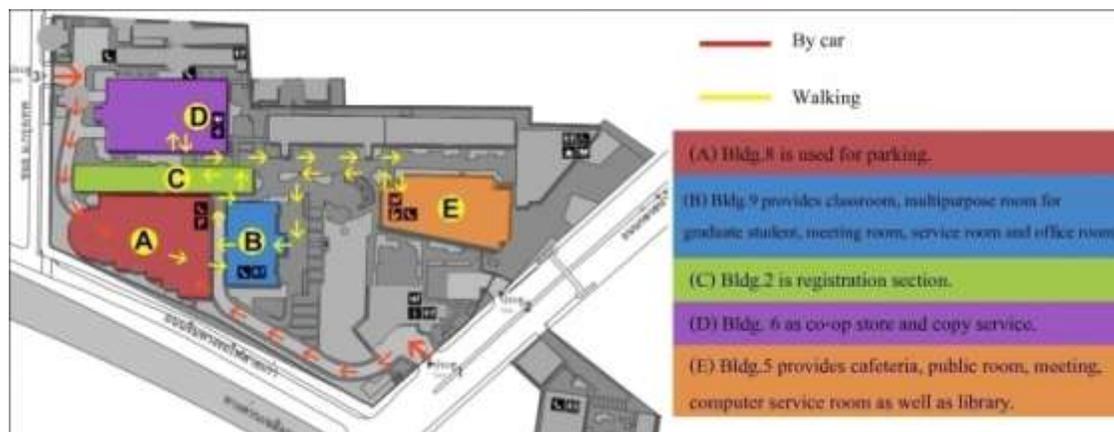
### ***Population and Samplings***

This section selected respondents for investigation by using sampling technique, and was divided in 3 groups. The first group was the student requiring wheelchair with assistant who is a caregiver of students requiring wheelchair in 2 persons from each other. The second group is students requiring wheelchair without assistants 2 persons. The last group is non-disabled students who attend regular classes with disabled students 25 persons.

### ***Research Process***

Stage1. Activities were studied, areas used and behaviour of students requiring wheelchair 1 person and non-disabled graduate students 25 persons within Bangkok university, Kluay Nam Thai

campus, including activities and behaviour modeling were examined in the process of Post Occupancy Evaluation (POE) by divided into 5 area following as; (A) Bldg.8 is used for parking. (B) Bldg.9 provides classroom, multipurpose room for graduate student, meeting room, service room and office room. (C) Bldg.2 is registration section. (D) Bldg. 6 as co-op store and copy service. (E) Bldg.5 provides cafeteria, public room, meeting, computer service room as well as library.



*Figure 31 shows passages, activities & behavior modeling of graduate student Stage 2. Internal environment of building were investigated to understand current condition and constraints of the area to improvement.*

**Stage 3.** This process attempted to evaluate the area used, activities and behaviour on activities setting of students requiring wheelchair 1 person and non-disabled graduate students 25 persons by using Post Occupancy Evaluation method (POE).

**Stage 4.** Last process aims to analyze evaluation results of physical environment to clarify what are the opportunities and constraints of the environment that effect to usage of students requiring wheelchair.

## ***Conclusion***

Study results will be explained in 3 parts according to 3 issues of the research objectives by initial observation. In this summary, researcher only concluded the results of part one objective, while part two and part three are in the process of data collecting. According to observation in the first objective found 7 issues or physical conditions which effect to usability of students requiring wheelchair in Bangkok University, following as:

### **1) Multi-level passage**

Environmental conditions in front of building in the university almost obstruct students' accessibility that require wheelchair due to Multi-level passage that lack of ramp and also has not standard for gradient of ramps in back of building. In the result of Post Occupancy Evaluation (POE) found that students requiring wheelchair without assistant, unable to help themselves through this condition (Multi-level passage), need help from other persons as well as student requiring wheelchair with assistant.



*Figure 32 Restriction movement of disabled student on multi-level passage (or Effect of multi-level passage)*

### **2) Floor material**

Post Occupancy Evaluation (POE) found that flooring material is not suitable for disabled student usage such as slip and reflective floor

tiles in ramp, using carpet for a floor-cover in elevator and front of elevator that effect to students requiring wheelchair movement as to turn around.



*Figure 33 Floor pavement material in the study areas*

### **3) Position of control button**

In general, students requiring wheelchair has restriction of ability to reach out a thing difficulty than non-disabled students; therefore they cannot reach the control button outside elevator, which is installed 130 centimeters high from ground level and 145 centimeters highest position of control button from ground level.

### **4) Door**

Casement door is an obstacle for use of the disabled students who require wheelchair that depend on weight of the door and handle.



*Figure 34 the existing condition of the door in the study areas is audit by the wheelchair user*

## 5) Furniture

Furniture in area are not suitable or discommode for students requiring wheelchair use especially; 1) Store counters that are located in each place of registration section, co-op store, copy shop and refreshment stall in Graduate School Cafeteria as well as small café in student service room. 2) Lecture tables. 3) Computer tables in computer room and student service room.



*Figure 35 Observation and evaluation the existing furniture in the study areas by the wheelchair users*

## 6) Position of information board

In consequence of students requiring wheelchair has restriction in visibility unlike non-disabled students, they cannot notice those signs because of information boards or signboards position in area is almost mounted upper 190 centimeters high from ground level.



*Figure 36 Information boards in the area of observation*

## **7) Parking lot**

**Behavior of persons requiring wheelchair always uses greater space for movement when getting on and out of the car.**

**After the result according to the first research objective, indicated that what are the environmental factors that effect to usage of student requiring wheelchair in Bangkok University, Kluay-Nam-Thai campus. These data collected will be used for guideline to set-up questionnaire survey and experiment to clarify needs of environment suitability and facilities for disabled students who require wheelchair in accordance with second research objective in next progress. In the last objective, all of the results will be concluded and suggested guidelines for environmental improvement within Bangkok University, Kluay-Nam-Thai campus that leads equality service for students requiring wheelchair.**



***Krittiya Piya-aroon***

***Master of Arts (Interior Design Management), Bangkok University***

## **6| Voice Synthesis of Thai Language in Smart Phone Making a Better Quality of Life for the Blind People**

*Nongnoot Kaewsanoi*

*Master of Architecture, KMITL*

### ***Introduction***

Being a Universal Design student, the writer would like to introduce the smart phone that could speak so that it could be the eyes for the blind people. Although there are the operating system that could support the blind now, there is only one smart phone company who has serves on the accepted quality on the voice synthesis in Thailand. The mentioned system is Voice Over. The system is very convenient to use with both complex and completed systems. Although the price is very expensive, the people are agreed to pay for it, because it will make their life better and happier. However, in the near future, the Thai blind people will have more options, because there will be more operating systems on the voice synthesis arisen in Thailand such as Vaja from NECTEC that is under the Android operating system, Blackberry Screen Reader from Blackberry, 3RD Party Software from Symbian, etc. And there will also be other operating systems of voice synthesis that will be designed for encourage a better quality of life.

Nowadays, technology is daily developed in order to encourage the quality of life. The blind people also get the benefit from technology development. We all know that the medical technology is very important for making a better quality of life for the blinds with good medical devices. The writer considered this study when she was

studying a Universal Design that taught by the special blind expert. She taught about the design that should consider mainly on the users. The writer has got a lot of knowledge and information for Master Pom. However, the inspiration in studying on the smart phone is that she saw the demonstration in using the smart phone that was so fantastic that her blind Master could use the smart phone not different from the ordinary people. Moreover, the blind Master also uses the email and surfs the internet fluently. And he also is interested in the technology.

### ***Look closer to 'Smart Phone'***

Nowadays, there are too many people who do not know the smart phone. Being the important assistant, the smart phone is the mobile phone that has a well - rounded multi functions. On the first age, there was only the function of calling and receiving. But now, it is liked the computer that we could bring it with us to anywhere. Moreover, we could connect the smart phone to any application that it serves. In addition, the user could set up the additional program for supporting the multi entertainment functions. And the form would be up to the platform of its own and operating system.

### **The operating system on the smart phone**

There are many operating systems from various companies. There will be some well-known companies that the writer is going to discuss and there will also be some companies that never appear on the market before. In the smart phone market, there has been rating in the year 2009 (2553) as shown on figure 1.

**Symbian**

**BlackBerry OS**

**Android**

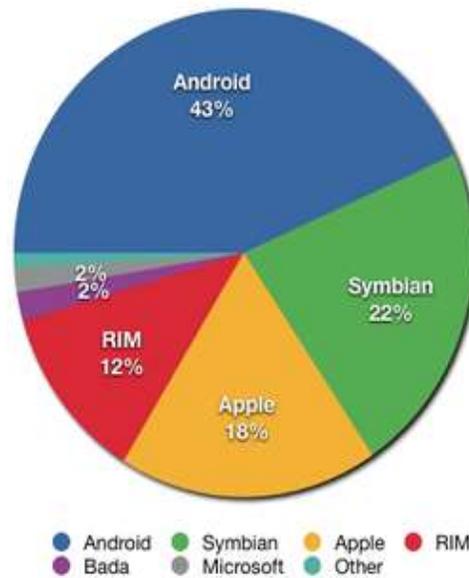
**iOS**

**Window Mobile**

**Bada**

**webOS**

**MeeGo**



**Figure 37 Rating of operating systems of smart phone.**

From figure1, there are lots of operating systems from various companies that have increasingly developed the fundamental program for the blind people. Although it is about business, the hidden profit of the development is that the blind people could also get benefit on these. However, the writer is very appreciated with the idea that designs for every people. What the writer is presenting is the operation system that is very popular for the users that is the software of voice synthesis.

**Table1 Presenting the list of operating system of voice synthesis and producer**

<b>Name</b>	<b>Producer</b>	<b>Strengths</b>	<b>Weaknesses</b>
<b>Voice Over</b>	<b>Apple</b>	<ul style="list-style-type: none"> <li>-available in Thai language</li> <li>-easy to use</li> <li>-function accessing is very convenient</li> <li>-selling on a special price for the blind</li> </ul>	<ul style="list-style-type: none"> <li>-expensive</li> </ul>
<b>Talk Back</b>	<b>Android</b>	<ul style="list-style-type: none"> <li>-supporting for the blind users</li> </ul>	<ul style="list-style-type: none"> <li>-Not available in Thai language</li> </ul>
<b>Shene Reader</b>	<b>Android</b>	<ul style="list-style-type: none"> <li>-supporting for the blind users</li> </ul>	<ul style="list-style-type: none"> <li>-Not available in Thai language</li> </ul>
<b>Vaja</b>	<b>NECTEC</b>	<ul style="list-style-type: none"> <li>-supporting for the blind users</li> <li>-easy to use</li> <li>-function accessing is very convenient</li> <li>-available in Thai language</li> </ul>	<ul style="list-style-type: none"> <li>-It's on experimental</li> </ul>
<b>3RD Party software</b>	<b>Symbian</b>	<ul style="list-style-type: none"> <li>-supporting for the blind users</li> </ul>	<ul style="list-style-type: none"> <li>-Not available in Thai language</li> </ul>
<b>RIM</b>	<b>Black Berry</b>	<ul style="list-style-type: none"> <li>-supporting for the blind users</li> </ul>	<ul style="list-style-type: none"> <li>-Not available in Thai language</li> </ul>

### **Thai Text-to-text Synthesis Technology**

Newly reforming on the basic of the digital information could be interested and colored in service by applying the technology that supports the communication naturally between the users and the effective computer systems. As the users could access the data from reading text, adapting the message to be the sound and then

listening the information, it is liked the communicative device that can speak. The researched team from NETEC has designed the architectural infrastructure of the voice synthesis of Thai language speaking system by dividing working system into three sections including text analysis, prosody analysis, and speech synthesis.

Text analysis is developed from the section that uses for communicating with the users. It detected the Thai text, English text, numbers, and symbols for analyzing the correct reading method together with adapting reading method to be the symbol of phoneme for voice creating. Moreover, there will be the data analysis on the other linguistics that might be hidden in the text such as function of words. There would be used in the process of voice synthesis. The process data is as following;

Tokenization is to check and sort out the type of the text that comes in.

Word segmentation is to cut the text to be the word before analyzing.

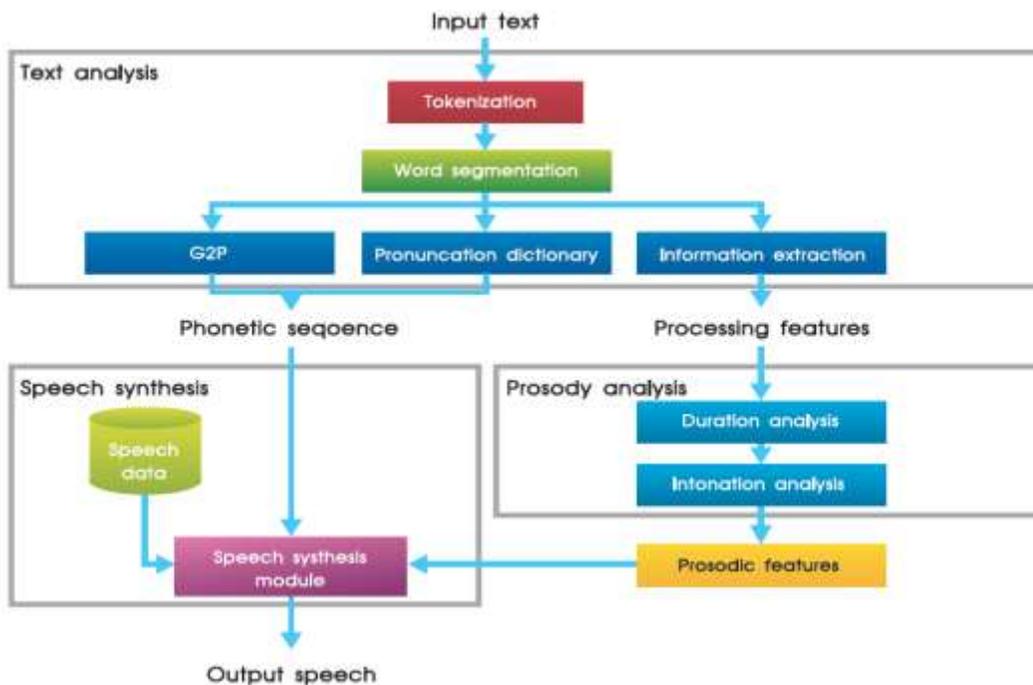
Grapheme-to phoneme conversion: G2P is to analyze the method of reading aloud of the text, numbers, and the symbols, then adapting to be the symbol set of the phoneme.

Pre-defined pronunciation dictionary is to adapt the letter set to be the symbol of phoneme by searching from the reading dictionary that is well prepared. And these letter sets would be text, numbers, and symbols that the G2P could not analyze or specific reading.

Other data analysis is to analyze the data that is needed linguistically and others that are in the text for using in processing data.

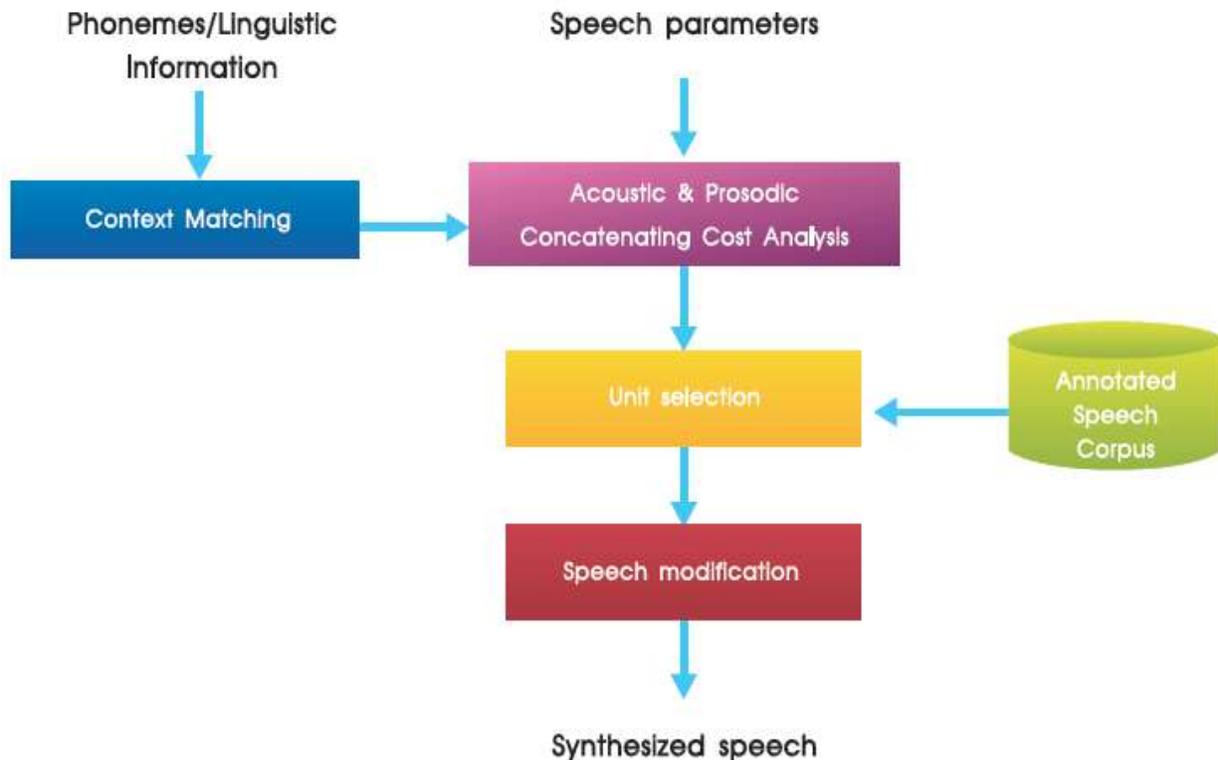
Timing and rhyming analysis is a developing of process data and search for the timing and rhyming that would be synthesized. For example, defining the range of sound (long or short) and the tone of sound (high or low) in order to make the created sound closely to the natural one.

Voice synthesis is to create the speaking voice from the data from timing and rhyming. The researched team has developed the voice synthesis by using the two technologies that are the Unit Selection Speech Synthesis which created a high sound quality unlimited in computer symbol resourcing and HMM – based Speech Synthesis which supported for the small device that has a limit in memory, but still maintains a high natural sound.



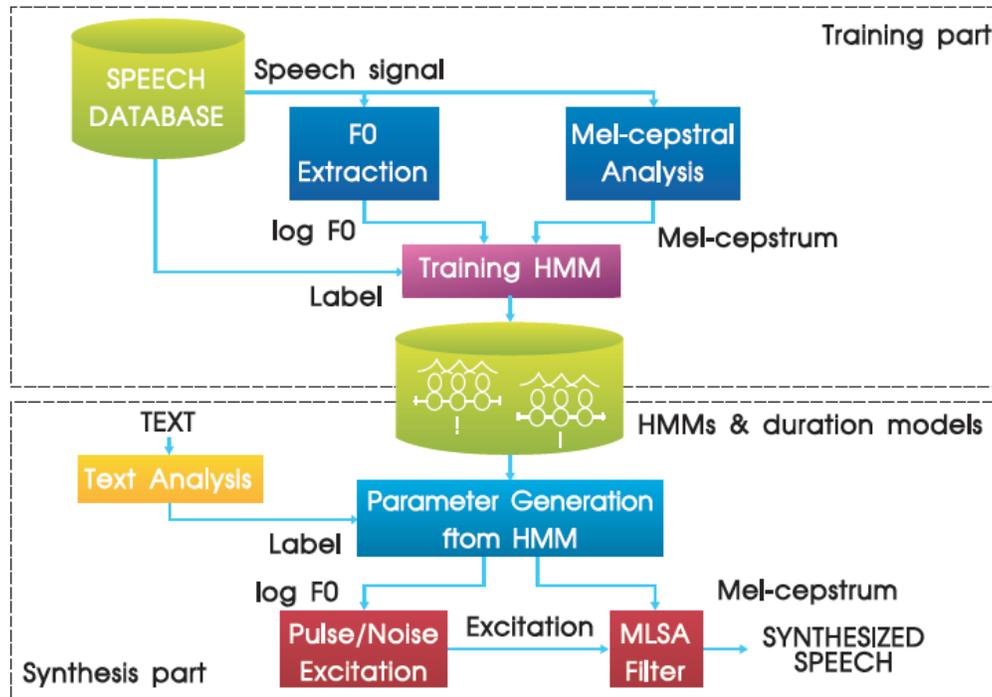
The Unit Selection Speech Synthesis as shown at picture 2 is a process in selecting the sound that has a suitable context to the target text, by analyzing the continuing rate of joint. By using the qualification of timing the frequency of sound in analyzing, there will

get the voice synthesis that has a small joint, but has a best quality in connection.



*Figure 39 Structure of the Unit election speech synthesis.*

Discussing on the HMM – based Speech Synthesis as shown in Picture 4, it is the voice synthesis that takes the model of statistics memory through the Hidden Markov model (HMM) in retrieving the voice back. It is the style of Trainable Speech Synthesis System. As it could be taught the characteristic of the original voice, and also copied by collecting the original voice through parameter statistics instead of collecting all original voice, the advantage is that it could create a new voice synthesis rapidly and the system is also small. The trends in developing this principle are to create memory in statistics of the voice with the statistics model (HMMs) and to synthesize the voice back from the well-known model that was memorized.



**Figure 40 Structure of the HMM-based speech synthesis.**

The technology of voice synthesis from the text is the important technology that could support to access the data on the digital world. And in the past, the said technology had been applied for developing the Screen Reader program that is supported the handicap or the people who has physical problems in using the computer effectively. The program would read the text appearing on the screen for adapting to be the voice in order that the blind could work via the computer and access all data by listening to the supported program naturally. This technology could be applied variously in order to create new services, especially supporting on the automatic data services, educational project that could lead to Computer-aided language learning (CALL), together with other communication such as Speech – to – Speech translation, etc.

### ***Understanding in the voice synthesis in Thai language***

**Voice synthesis in Thai language is the technology that could create any voices. It will operate together with Language Processing Technology that would release the Text-to-Speech Synthesis Technology: TTS which could applied using with the Thai text. The high quality of voice synthesis software could synthesize all Thai words because there is the reading analyses even the word that disappears on the dictionary. And there will add up the proper words and define word independently. The software could adapt the word following the user's needs. For example, the company that is interested in the adapting voice program named Nuance Voice Control Co., Ltd. This company has developed the voice synthesis program. The company has developed the translated program to be the voice. And recently, the company still develops the feedback program between the user and the device. Normally, Nuance Voice Control is the company that designs the fundamental operating system for the telephoned companies. In developing this adapting text to the voice, West said that he will never stop developing these programs if these still be the importance for all human being.**

### ***Benefits of Text-to-Speech Synthesis Technology: TTS***

**TTS could take the technology of voice synthesis adapting the huge of electronic news and always change and adapt. For example, it is the news reporting that must encourage the reader receiving the update news as fast as possible. TTS could spread the news through the fundamental networks that they have already had such as telephone, mobile phone, and internet. And the sound broadcast such as the basic method that could access all networks without using the additional devices, the receiver could access the news**

without stopping the activity they are dealing, especially, in case that the receiver is not on the risky event. For example, while the user is driving, TTS could be applied with the other devices; the user could send the information via fax, and then the receiver could access the data via mobile phone. And there is also the option for the handicap such as the reading program for the blind or the speaking device for the dumb man.

Nowadays, the software of voice synthesis in Thai language has been commercially. And it also had developed the original program applying for email checking by adapting the email data to be a sound reading around through the mobile phone. That is very convenient for the user. Moreover, there still has developed the model program for web browser that has appearing on the web together with reporting the working status through voices that is very helpful for the blind people.

### ***Conclusion***

This article is written based on the opinion of the student who would like to be a part in supporting those technology developments that serve for the blind people. That is because if we could develop the technology that could support these unable people, every people could have a better quality of life. For example, the fundamental operating system of Smart Phone that the writer had studied would be a paper that encourages the producers to develop more on their own potentialities. That is because all these operating systems would be very helpful in developing the quality of life of the blind. It could help them in contacting, recording the people, emailing, sending & receiving the message, banking, reading online book, playing game, taking photo, writing only block, writing daily book,

sharing pictures, and doing thing as same as the ordinary people. The writer highly hopes that this article would be useful more or less for the blind people. And she also fully hopes that she would be a medium in pushing the owners of each operating system to develop more about the operating systems that encourage and support for the blind people. Then they could have a better life.

Finally, the writer greatly thank you Dr.Issavara Sirirungreang or Master Pom as a person who uses the smart phone and a person who inspires me to write this article. From talking to Master Pom via email, the writer feels that we are similar in term of spending life with the technology. Although our physical are different, I realize that "the people would not blind if the technology does not blind".

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***<http://th.wikipedia.org>***

## **7 | When the wheelchair user continues to work**

*Dhira Roonglertsri*

*Master of Architecture (Interior Architecture), KMITL*

**We are all human beings who have the possibility to use a wheelchair at all the times. Some people have an innate need to use a wheelchair. Some people need to use it because of accident, rehabilitation, illness or old age, including rehabilitation after surgery, which is the term of use as well. Unfortunately, some people may need to use continuously throughout their lifetime because of accident.**

**Whatever happens life has to go on no matter they use a wheelchair since the birth or from any accident. In the human life must have money to exchange thing whatever people in wheelchair or not. The financial support for people in wheelchair, they can get from the labor welfare fund (Social Security disability payments), which cost less than 20,000 Baht, in case of it is necessary to use artificial arms and legs, it can get the Financial Aid Restoration, and from state (500 Baht per month) for people living with disabilities, which is not enough for subsistence living. If they can do the job or business, so they can access the term and conditions of the Revenue Department, then turn back to be the tax payers by the state similar as non-disabled people, so the state did not lose on budget for this. However the wheelchair person considered to be one of special category, which there is a certain condition more common in living space.**

## **Welfare**

**Social Security: Disability benefits from the Social Security Office obtain the following two cases.**

- ***Disability from illness or work related injury. (Workmen's compensation fund).***
- ***Disability from illness or non- work related injury. (Social Security Fund)***
- ***In case of work-related disability. The workers' compensation medical costs has all that 60% of salary***

**If one is unable to work due to illness and workers' compensation all that 60% of salary. In case of being disability not more than 15 years, workers' compensation costs 60% of salary not lower than 2,000 Baht and not exceeding 12,000 Baht per month.**

- ***In case of Non-work Related Disability: insured person has paid contributions at least 3 months within 15 months.***
- ***Compensation for loss of earnings, you will receive 50% of salary per month for life.***
- ***Actual and necessary medical expenses must be paid not exceeding 2,000 baht per month.***

**In the case of equipment and medical supplies as follows: Prosthetic devices and Medical Treatment Equipment on the list. For the right to social security who has become disabled person can be disbursed, both one-time payment and monthly payment, which may be paid in addition to salary and medical expenses.**

- ***People with a severe disability and cannot work also be able to claim the allowance 500 baht per month.***

- ***Disabled people without access to basic care support and homeless have the right to request and receive assistance from the Department of Public Welfare.***

Contact at The Provincial Public Welfare Office. In addition, people with disabilities have the right to borrow money for the Self Employed from The Physically Handicapped Rehabilitation Fund. Office of The Physically Handicapped Rehabilitation Commission, Public Welfare Department or The Provincial Public Welfare Office, not exceed 20,000 Baht for person without interest and installment payment within 5 years period.

### ***Disability Allowance Payments;***

Seniors who have qualified for the disability premium will be receive 500 Baht for month by Resolution of the Council of Ministers.

Disability premiums will be paid in cash or transfer to a bank account on behalf of an eligible requester or authorized persons by Municipality/ Sub-district Administration Organization before 10th of every month.

Termination of a disability premiums benefits payments;

- ***Dead***
- ***Ineligible person, such as a person who does not have a Thai nationality. Resident non-domiciled in the municipality. Not a handicap or disability. Not registered/ does not apply to receive Disability Allowance from Municipality and holding welfare or other benefits from the state, State enterprise or local governments. For the foregoing, it can be seen that The State revenue paid to the disabled, it's not enough to live. People with Disability also need to earn money for additional***

*revenue to provide adequate to everyday life, which the work of the disabled persons varies according to the type and those skill of persons with disabilities.*

In this article that mentioned in a people in wheelchairs who have Paralysis of the legs in an accident (Working Age only) because of a wheelchair person in this age can adapted and have the potential to work more than congenital disability and other ages (Learning through work experience as a normal person before), understanding colleagues, and self-assessment better than a wheelchair user in the other ages.

This article in courtesy by Mr.Preeda to give information "*How much a person in wheelchair needs more than an ordinary person?*"

This article aims to provide the reader with a better understanding of the various contexts of a people in wheelchair, and then a case study analysis. In order to obtain an accuracy, the authors conducted an interviews with Mr.Preeda Limnontakul and get permission to use the article that Mr.Preeda wrote in these articles without cutting out the original one.

### ***Case study***

Mr.Preeda Limnontakul, the case study who is bounded in his wheelchair for almost 15 years. He has a disability according to a car accident. The following story was told by the case study.

"I may be lucky in a way that has a more severe level of disability than me, and I have a disability at the age of 29 years, which has experience in the field of work more than anyone. *Throughout the period of disability was found and get to know a many story related to the disability and interest to the disabled person, so I would like*

***to share all the experience in common with all other persons with disabilities, who have the potential to help those of us who are disabled person to demonstrate the capacity and willingness of the disabled person to the various establishments to get to know and understand that we can work just only our understanding of the nature and characteristics of disability”.***

**Currently, Mr.Preeda Limnontakul,one of the project management team of PWD Outsource Management Co., Ltd. the company was founded by disabled people for disabled people, as an intermediary for the establishment. The job relates with management and implementation of an efficient tool to suit the characteristics of disability.**



***Figure 41 Mr.Preeda who has normally pursued his working life in wheelchair and on bed since the car accident over ten years ago***

***“After graduation I had worked with the company for nine years of the working life. Appear to be impatient, but in fact, it is because of I want to seek a job in ideological and has deep thoughts that is not a waste of time with anyone. I always think that I have very little time, so I do not want to waste my time in vain I could answer the question in my mind immediately, this is it”*** said Mr.Preeda.

***“I have been working for long period of time in some places because I had something to learn a lot but it was just two years and one***

***month, in the shortest time was three months. Often, there is a sudden and unexpected happens from time to time. So, apart from the ideological pursuit, most of the reasons for the resignation are often supplemented by external factors as well."***

***"So much to say to this about the workplace because I have no time like I have mentioned above that I quitted a job quite often. At first I do not understand myself, but now I think I knew."***

***"Because afterwards, I have worked in the last 10 months at Berli Jucker and then I had an accident, car overturned due to opiates in November 28, 2001, there were broken bone and pressed on the spinal cord in the area between C6 and C7 and 36 hours after surgery, medical opinion that was definitely have a permanent disability. After that, the doctor has certified that I became a "Disabled Person."***

***"Looking at an issue about using IT (Information Technology) in the workplace to adapt to the rapid deformation by any causes, if you follow my blog, it was already clear, I must admit, that I was born with the Internet. But I want to clarify the issue of the cause of the rapid acceptance of my disability, just one day."***



**Figure 42 The TV media is interviewing Mr.Preeda at his home**

***"From the entire team is aware of the importance of this issue. So, talking about my philosophy, which I have for a long time, it's a habit for me to adapt to the surrounded environment. Accept what happened, and every time I take it, I will not regret. I assume that it can be useful. It is worthwhile. Do not blame anybody, I do myself, did not sleep. Therefore, it is an accident I don't want to waste a time with it as it was. I have a disability, this is the truth, cannot fix it, so we have to look forward to. By combining with the experience of life for 29 years, so it gives me plenty of time to start a new life."***

***"And with that I will not rely on anything, made me always ready to be changed, especially working. Since I was a child, I would not play like the other children, and I think something strange, different from others, since I was young. I did not mean that I have clever than them, but I mean I only think something different."***

***"I have to accept that 'think difference' sometimes it is good, sometimes it is not always good. On the other hand, it was always wrong, but that is an experience. Often, I have to be in the mood as 'isolated', 'fight alone', and 'tiring', we knew what we do and keep telling myself to work with the action to show the effort. It is beneficial to everyone who looking at me."***

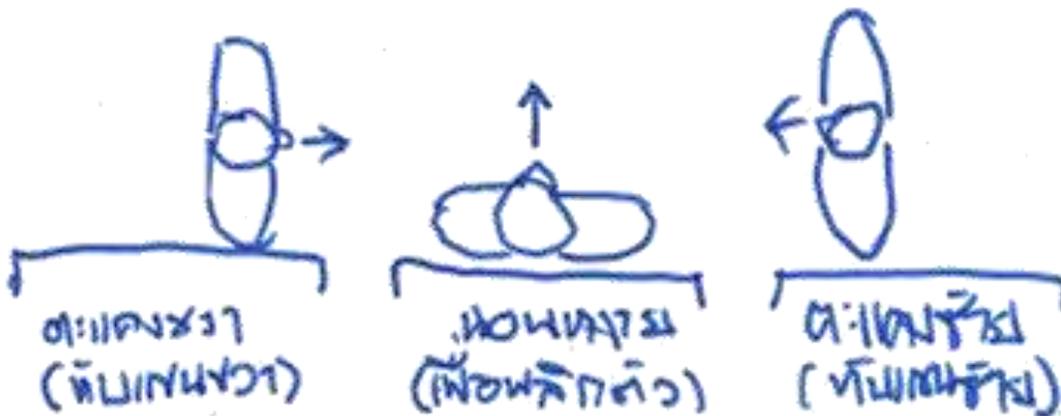
## **Working**

**Mr.Preeda needs to work 24 hours a day on his bed, do personal activities (working, sleeping, defecating, eating, rubbing the body and physical therapy), because if worked for a long time it will have back pain. Therefore, it couldn't function 100 percent like non-disabled people and can cause pressure ulcers. The treatment is not easy (the capillary pressure should not take more than half an hour)**

and may cause the 'joint lock', which some people may have to sit in that position forever. This is an importance that why many people in wheelchair need to work on the bed. Mr.Preeda adjusted a bed himself into the work.

### **Story on the bed**

***"This time I would like to explain in detail the steps involved to the bed, which is another tool that I was particularly familiar to that I have almost 24 hours on it. When I was in the hospital, all are sleeping on the bed with the remote control. But when I go back home, I use rotating bed, because it saves money".***



**Figure 43 a turning position step by step on bed by facing up**

**Source: Mr.Preeda's drawings**

***"Typically, patients have to sleep on one's side, left or right is the same that is disabled or unconscious. The doctor suggested to a sleep in this way by switch or change positions every two hours, if there is a pressure ulcer at bottom. Do not sleep by turning face up too long. Note that, if you sleep on the right side, often align on the right side of the bed and if you sleep on left side, often align on the left side of the bed as well".***



Figure 44 Another way to turn the body on bed by facing down

Source: Mr.Preeda's drawings

**"When I sleep on right side, I have to align to the left side of the bed to the middle of the bed. When I sleep on left side, I have to put the pillow to the center of the bed and lie prone upon a pillow. This helps the flipping pillows because I have a rather large wound on my bottom. The doctor did not want any pressure to the wound. I will explain that, what's on the bed, how I place layers, what is the function of each part and How to cover bed sheet."**

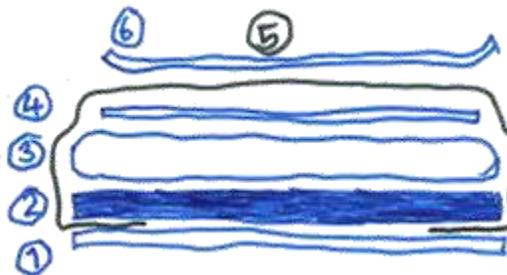


Figure 45 shows the different layers of elements used to soften the pressure between the body and the bed

Source: drawings by Mr.Preeda

From the picture above, it can be described the components as following;

- ① a bed floor
- ② a solid pad, such as coconut-fiber mattress .
- ③ an air bed for weight being pressed down on the bed.
- ④ a plastic sheet is intended for excretion or wet from wipe a body.

⑤ a bed-sheet, which is changed in every 2 day

⑥ the fabric used for moving the patient by capturing all four corners and lift together.

**"However, after the development of applications, I cut the plastic ④ and the fabric ⑥ because after the assistant has been trained more in care practice, make clean not sloppy and I did not purge clutter. So, it does not require. Another important thing is not described in ⑥ is called 'tablet' also known as the blue pad. Pads are not to mess up. It's practical".**

**"A plastic sheet is heated, and does not have good ventilation. It should be removed. The final is fabric. Another trick to take care of my leg is to hold the leg in its original condition as possible."**

### **'Working bed' of disabled people**

**"Usually, I am on my bed almost every day, except for going to see the doctor or seminar. I often have legs flexed, I must bring wooden board to cross my legs keep me from flexing. Then rounded up and bounce to the top of the wooden board to make it as a working desk. This is another way. You can keep your keyboard, mobile phone or remote control. It is quite similar to the built-in drawers."**



**Figure 46 a wooden board that Mr.Preeda uses as body support and a working desk which has a tissue paper box in between to keep the board stay still**

The picture above shows the wooden boards inserted into the middle stainless rack of the bed. Then a tissue box is placed on top to keep the board stay still, not moving.



*Figure 47 another side of the bed that a tissue paper box is placed in between to keep the board stay still*

*"Then I brought a wooden board size of 30 x 120 cm. and placed on top of the stainless rack. The reason for use these two sheets because of their standards. Easy to put up and take care of it. Including storage, when used in a long time, the boards are often slide and dropped. Probably is because of the vibration of the motored-air bed. I modified to an additional 15 cm and placed in a slide side. Take another wood against under the wooden boards. I also put a clear plastic sheet placed on the wooden boards again to avoid the soiling."*



*Figure 48 shows the wooden boards that function as a table placed on the top of stainless steel. The desk is place on the bed.*

***"The I brought the computer, fax, mobile phone, TV, small plugs, water bottle, remote control etc, and put them on the desk to start working in each day."***



***Figure 49 shows the placement of equipment - supplies - tools to use on the desk, The keyboard was placed on the wooden boards.***

***"Nothing else for now, just shows a picture to make it easier for other patients with disabilities to work on the bed. It may be beneficial to patients or their relatives too."***

### ***Why "on bed"***

**From an interview with Mr.Preeda, the author has learnt that people in wheelchair have a necessity to work on the bed with the followings symptoms;**

- Pressure Sores***
- Back pain after sitting for a long time***
- Joint lock***

**Those are the worst symptoms of the danger for wheelchair users.**

### ***How to prevent pressure sores***

***"I always observe the patient's skin if it has redness or not. If your skin turns red, it means it started a bedsore. How to prevent***

***pressure sores? You should turn the body and change positions frequently, use air bed or soft cushions to reduce the pressure. Always keep the skin clean and dry.”***



***Figure 50 shows the air bed or soft cushions to help reducing the pressure and prevent pressure sores.***

### ***Back pain after long sitting***

**Back pain is a major problem that is often found. Many professionals and anyone can have this disease just because when you take body to the wrong position. Back pain can have many forms but we will discuss about back pain caused by spinal nerve compression.**

**Back pain, caused by spinal nerve compression, is usually found in the middle-aged people who have to carry heavy things for long time, or who had an accident at the back. Symptoms may be gradual, some bent and lifting heavy objects. Lumbar disc herniation is moving out the nerve. Then, sudden pain that is another cause.**

### ***Joint lock***

**This symptom is caused by sitting on the wheelchair for a long time, the muscle locked. Some are permanent and cannot stretch back. Often the case with people who use power wheelchairs and lack of movement or lifting the body. In order to have a lower body**

movement or stretching, periodically do a simple stretch or physical therapy by oneself. In case of Mr.Preeda choose to travel with a normal wheelchair to prevent his joint lock.

### ***Suggestions***

There are suggestions from firsthand experiences, Mr.Preeda. The author considers that the work of persons with disabilities who use wheelchairs should taken into account on the bed issue because the conditions in existence life, safety and prevent damage that can occur. From the behavior of disabled person who use a wheelchair. So, it can be defined in the space of work of the disabled people who use a wheelchair (space requirements) to the following case study. The author would proposed the design solution for the bed for wheelchair user that have learnt from Mr.Preeda's firsthand experiences as in the following picture.



***Figure 51 shows a proposed design solution for the work space of the hospital bed***

***For further reading:***

***<http://www.sso.go.th/wprp/kalasin/content.jsp?id=6131&cat=1455&lang=th>***

***<http://preedaroom.blogspot.com/>***

***<http://www.goldenyears.co.th/knowledge.php?content=bedsore>***

***<http://www.snature.net/health-care/have-a-backache.html>***

***[http://www.uthailocal.go.th/govdoc\\_detail.php?id=460](http://www.uthailocal.go.th/govdoc_detail.php?id=460)***

***[http://www.nongmueng.go.th/?sys=news\\_view&neid=15](http://www.nongmueng.go.th/?sys=news_view&neid=15)***

***<http://www.goodcaremedical.com/>***

## **8| Universal Design classroom and the changing perspective**

*Peerayut Pothisutha*

*Master of Architecture (Interior Architecture), KMITL*

### ***Introduction***

**This section focuses on a learning experience in the course of Universal Design for master degree students, Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang, (KMITL) Bangkok, a learning process that focuses on the understanding of the differences and diversity of people in society. This leads to the study development of design or architectural design for everyone. The whole process can create new perspectives to understand the concept of Universal Design.**

**The original idea of the things that matter to people with disabilities is superfluous, unnecessarily for now or have to wait for the appropriate time, that is extremely opposed to the concept of Universal Design. Once the idea has been refined within the learning process, what the changes made to the perspective of the original idea. What's going on with the future of designing and learning as well. And what happens to the meaning of the word 'Design for All'.**

**Most of learning process in the Faculty of Architecture, especially in the context of Thailand has usually been done in the form of educational planning, provision or standards that have been defined previously. The process is held that the right information and those resources can be used to study or to the design immediately. It was until the 'Universal Design' or 'Design for All' play a role in this country, which must be considered far behind many other countries.**

**That means they have created textbook or other information concerning the Universal Design. And for learning Universal Design in Thailand was still learn by the texts until the present.**

**Although Universal Design is not something new and there are already many resources and standards for the design, in conceptual terms, provision or practices. However, with a variety of different contexts these standards may not be used in all cases.**

**According to the mere theoretical study, although it may be a good starter of Universal Design, to understand the diversity of the design users will be a key element to make the design is Universal Design at its best, the architectural design, both exterior and interior in particular.**

### ***At the beginning of the UD classroom***

**At the beginning, the architectural study classes, most of the teaching was focused on 'normal' people as a main group who are able to use the standardized data in the design process. That data were created by using the information from a large group of 'normal' people in society. There are some classes that paid attention on the Universal Design concept, such as in the case of design for disabled people as restroom, ramp for ease of wheelchair users, or the parking. The entire design process seems to be in accordance with law or by prior knowledge that has been passed down as a guide.**

**This article presents a procedure to learn in another form of architecture students. In Universal Design class, Master's Degree, King Mongkut's Institute of Technology Ladkrabang. Taught by Dr. Antika Sawadsri, and presented with the personal opinions of author himself.**

## ***Learn from the learning process***

### **Part I : Theory, Inquiry and Case study**

The learning process begins with the study of the origin, theory, and case studies. For students to understand the origin of the idea 'Universal Design' and know the present status of this idea.

### **Part II : Participatory approach / User involvement**

The importance of Universal Design class offered in this article is on this second part. The part that teach us an understanding of the diversity of the relevant ideas and the diversity of human as architectural users. By a simulation study in a way that allows students to have experience as a disabled person as a wheelchair user. (or in some case as a blind person). And then try to use buildings and facilities in both inside and outside the campus.

This simulation makes me recognize and understand a number of difficulties in using the existing facilities for wheelchair users. Even though, some of those are designed to accommodate a wheelchair user, they still cannot be operated easily or may create even more obstacles. It is like adding more disability to the people with disabilities.



***Figure 52 In an access simulation, I mocked as a wheelchair user***



**Figure 53 shows the different types of physical barriers are encountered in the campus**

In this second part, in addition to the above scenarios, with the learning from a group of lecturer, the mutual exchange of experience in this class. A variety of the lecturers' expertise and their experience help to fulfill understanding of the first part. There were many guest lecturers in this Universal Design class who are using a wheelchair, blind, and have experience in designing for the disabled, or those in related research. And combined with the experiences of the teaching and learning from my classmates. In this section, students achieved a more understanding in many cases of people with different needs that cannot be simulated because of the time limitations. This kind of lecture helps me to see the various perspectives and ideas about different people in our society. That is

why we need to learn through the idea of Universal Design, which is designed to meet a diversity of people in the society.

### ***Reflection after the class***

From my both training mainly in architectural-design field and practicing experiences, it can be enough to see that the most of the architectures have been designed by and for normal people, and are always so. Using standard or portion size was specified for a normal person. May have increased the facilities for the disabled on reasonable, on regulations, or on budget. In some cases, it cannot be accessed.

After study in the Universal Design class, I have learnt that, in fact, the diversity of society is not merely referred to normal people or people with disabilities. It also contains with people of several groups as followings.

Physical state	• disabled people pregnant
Disability	• deaf blind movementimpaired
Religion	• Buddhism Christianity Hinduism Islam Sikhism Brahman Zen
Financial condition	• rich medium poor
Gender	• male female transsexual homosexual bisexual
Body scale	• everage fat thin tall short
Age	• infant child teens workingages aged
Education	• high moderate low
Body expression	• hyperventilate down-syndrome

***Figure 54 shows the possible ranges of diversity in the society***

The above table represents the differences as a normal condition of human being in the society. It is divided into main groups on the left, and the details of each on the right. Those differences are often directly affecting the design of the built environments. But that is not all of the diversity of human societies, there is anything else that need deeper understandings, such as Ethnicity, Cultural, Beliefs, Social status, Mentality, and so on.

The learning process in the class started from perception of the origins idea of Universal Design, case study, and experiences exchange from the guest lecturers. Through an experiment as a wheelchair user myself, it is an important step for make understanding easier toward the disabled people's life, especially on how they move. Although only as a temporal act as a wheelchair user, this makes me see a lot of obstacles caused from the architectural design or the built environment. All of this creates a new clearer perspective.

### ***A change of perspective***

Today's Architectural or environmental design and designs pay full attention to this issue. There are still many parts that create a barrier to the needs in daily life of disabled people. This can be interpreted that it is a key obstacle to the Universal Design concept in a way it slow down the development and implementation of this idea.

The causation of the physical struggles can be caused by many elements. Whether it is design concepts, designs to make only legitimate, designs that do not understand the actual use of the disabled, or may be the misused from the design purposes. With

**just single element from all of it can create the great barriers in the disabled lives, which can be easily solved by thoroughly understanding the Universal Design concept.**

**In my opinion, a change of perspective toward the architectural design should come from integrating an understanding of the Universal Design concept, and understanding the needs of different users at the various stages in the learning process in the Universal Design classroom.**

**From my appreciation to the good-designed architecture, it becomes to seeking for the obstacles or using barriers, which caused from my experiment. So far my note on experiences in this article can be seen quite negative in the way it mainly focuses on the physical obstacle as a key barriers of disabled people. However, it is still important to carefully implement the universal design guideline so that it can response to all people's needs. To make the design gives maximum efficiency. Through the use of all people groups equally.**

### ***Concluding thoughts***

**All learning process in Universal Design class has changed my views to rethink the architectural design, especially in the access simulation method.**

**My personal experiences have been as an able-body person who can use the majority of built environments without any physical barriers. In contrast to those people with disabilities, a trivial barrier can create greater problem such as a step less than five cm. or a little crack on pathway, can exclude some people from using a building. To a certain extent, this can be seen as adding more disability to people with impairments. If the designs can solve such a problem,**

those disabled might not have a feeling of disability anymore. And with my new way of thinking, it makes me start seeking for any obstacles when using buildings or the environments, in order to taken into account in the next design project.

Even though, I would have little power to change the society's concepts or perspective. But what this article is to offer, architectural perspective that can change through a learning process in Universal Design class, in Interior-Architectural Design Department, at the KMITL.

I sincerely hope that if the architectural-taught institutes try to apply this learning process, this can help to create a new vision and well understanding of the Universal Design concept. For the development of architectural working to be the completely 'Design for All'. And can be social development in another way.

***About the author:***

***Peerayut is currently a freelance Architect and a master degree student in the School of Interior-Architectural Design at KMITL Thailand. He was trained in the field of Landscape design, and has had experience in architectural project management.***

## **BOOK RECEIVED:**

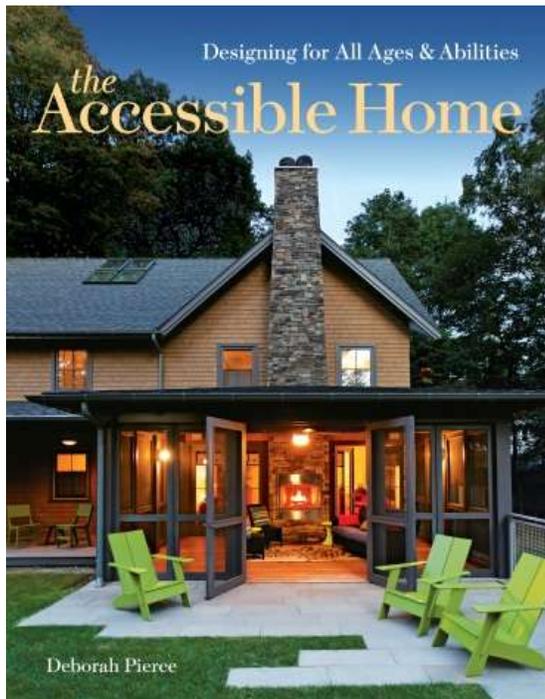
**Press Contact:**

**Linda Stephen, IWPR Group**

**[linda@iwprgroup.com](mailto:linda@iwprgroup.com)**

**402-483-0747**

**The Accessible Home: Designing for All Ages & Abilities**  
***New Book by Architect Deborah Pierce***



**Newton, Connecticut (October 23, 2012) – The Taunton Press is pleased to announce the publication of *The Accessible Home: Designing for all Ages and Abilities*, by Deborah Pierce. Foreword by Michael Graves, FAIA.**

**This first-of-a-kind home design book addresses the needs of families, couples, and visitors looking for an accessible home that is both beautiful and functional. The Accessible Home shows how ordinary people with extraordinary challenges can partner with architects, designers, and their own families to create homes that restore capabilities, independence and the grace of daily living.**

**The book is also a tool for the more than 80 million Baby Boomers to age in place in their current homes and lead a lifestyle with**

independence, comfort, and safety for decades. A recent survey by AARP revealed that 84 percent of Boomers would like to stay in their current homes during retirement, but only 16 percent have taken any steps to adapt their homes accordingly.

Author Deborah Pierce is one of our nation's foremost experts on universal design. As an architect for the past three decades, she has been focusing on how a home serves the activities of daily living. As a result, the projects in this book convey the power of universal design – useable by everyone.

Michael Graves, FAIA, says, "Deborah Pierce tackles the small problems along with the large in her quest to make wonderful places where people with disabilities can live comfortably and safely."

Homeowners, architects, designers, remodelers and builders will find ideas, inspiration and courage to create homes that are unique to each household's requirements and at the same time, attractive to broad segments of the population. She shows us that "accessible" can be beautiful and functional, light and airy, low-maintenance, safe and comfortable, and that universal design today is a far cry from the grab-bars and ramps of yore.

*The Accessible Home* features 25 new and remodel projects and 225 photos from across North America to show readers how to create a home that serves its owners for years to come.

**Title:** *The Accessible Home: Designing for All Ages & Abilities*

**Publish date:** October 23, 2012

**Publisher:** The Taunton Press

**ISBN-13:** 978-1-60085-491-0

**Price:** \$27.95

**Pages:** 224

**Photos:** 225

**Drawings:** 30

**Cover:** Paperback

**Trim Size:** 8 ½ x 10 7/8 inches

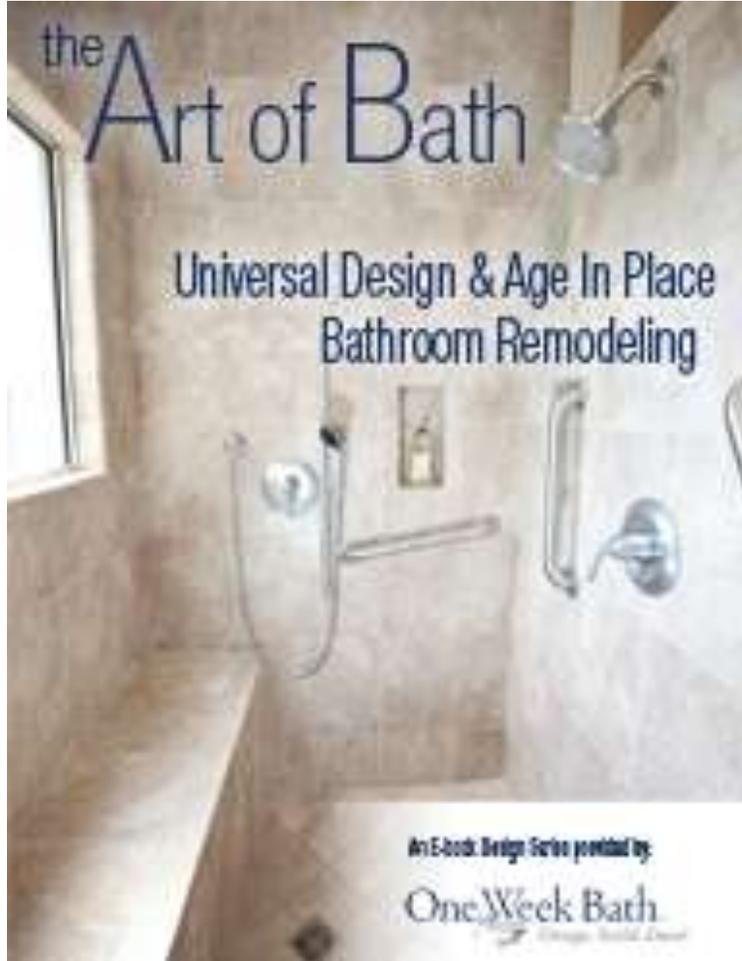
**Taunton Product:** 071400

**Web site:** <http://www.taunton.com>

**About the author:** Deborah Pierce, AIA, is principal of [Pierce Lamb Architects](#) in Newton, Mass. and lectures across the country on the topics of architecture, accessibility and universal design.

2.

**New E-Book on Universal Design Bathroom Remodeling Provides a Blueprint for Artful Style and Accessibility**



## APPEAL:



### The Disability Experience: State of the Arts, Scholarship and Research

#### A Call for Papers

Set aside the dates and submit an abstract! The Students for Disability Advocacy, a newly formed student group at the University of Pittsburgh whose mission is to advocate for students with disabilities, will be holding a conference **October 31st and November 1st, 2013 at the University of Pittsburgh William Pitt Union** entitled **The Disability Experience: State of the Arts in Research, Scholarship and the Arts**. The purpose of the conference is to highlight the arts, scholarship and research concerning the disability experience. The conference will focus on panel presentations by students with faculty respondents. A variety of submissions will be accepted from students with and without disabilities at the University of Pittsburgh and around the country. Panel presentations will draw from a variety of disciplines including: Assistive Technology across disability, Health & Wellness (disparities), Employment, Policy and Law, the Arts, Education, History, Philosophy, and English. A faculty-student round-table discussion is the final event of the conference with discourse concerning relationships between faculty and students with disabilities. Limited scholarships for travel may be available and food will be available free at the conference.

#### Purpose and objectives of the conference:

The aim of this first ever disability studies conference at the University of Pittsburgh is to bring together a wide spectrum of faculty, students, and other individuals – especially those from the University and its communities – whose interests capture the experience of disability and who wish to advance disability-related fields and further their integration into the curricula and in community life. The conference will:

- Invite students to present their field-specific disability-related work from across the curricula of science, the arts and the humanities to an interdisciplinary audience
- Promote discourse across disability-related fields in order to integrate disability studies into the curricula
- Provide networking opportunities by encouraging and enabling attendees to establish connections with individuals of varying fields
- Create dialogue between students and faculty about issues and experiences students with disabilities have and to identify mechanisms for resolution of problems.

#### Submissions:

Abstract submissions should be no more than 500 words and up to three keywords for the paper. Submissions must include 1) your name, contact information and discipline, 2) title of your presentation and 3) the panel (e.g. Assistive Technology, Health & Wellness, Employment, Policy and Law, Education, History, Philosophy, or English and the Arts) in which you would like to be included. There will be three accepted abstracts for each panel. Papers will be shared with other panelists in mid-September and power points will be due two weeks before the conference. The authors will be asked to make a 15 minute presentation with 5 minutes for Q and A. If you want to display art or show a film, provide a description as well as space and other requirements.

Please submit abstracts by **July 1st** to Jonathan Duvall at [src-disability@pitt.edu](mailto:src-disability@pitt.edu). Authors of accepted abstracts will be notified by August 15, 2013. Direct any questions or inquiries to Jonathan Duvall at [src-disability@pitt.edu](mailto:src-disability@pitt.edu). Please feel free to share this announcement with anyone who might be interested in participating.

This conference is supported by University of Pittsburgh, Students for Disability Advocacy and other organizations.

## **NEWS:**

1.

### **Common Entrance Examination for Design (CEED) on Dec 1**

The Common Entrance Examination for Design (CEED), the all India examination conducted by the Indian Institute of Technology Bombay (IIT Bombay), on behalf of the Ministry of Human Resources Development, Government of India for admission to the Masters and PhD Programmes in Design at Indian Institutes of Technologies and Indian Institute of Science, will be held from 9 am to 12 noon on 1st December 2013 (Sunday) at Bengaluru, Chennai, Delhi, Guwahati, Hyderabad, Kanpur, Kolkata, Mumbai and Thiruvananthapuram. CEED aims at assessing the aptitude for design, involving visual perception ability, drawing skills, logical reasoning, creativity, and communication skills.

CEED 2014 will be conducted in two parts, A and B and will not have any break. Both parts are compulsory for all candidates. Part A will start at 9 am and will end at 10 am. Part B will be conducted from 10 am to 12 noon. However, Part A will be a screening test, which will be conducted by an online computerized programme. Part B will be evaluated only in respect of those candidates who secure minimum cut-off marks in Part A. This short-listing will take place only at the evaluation stage. Moreover, the score obtained in Part B alone will be used for preparing the merit list and qualified list for CEED 2014.

The question paper will be in English. There is no specific text book or guide book recommended for preparation. Candidates should bring pencils, sketch pens, poster colours, and other drawing materials for the examination. Drawing sheets need not be brought.

The Postgraduate programmes in Design (M.Des) to which admissions will be based on CEED 2014, include the following.

Master of Design Programmes offered at (i) IISc Bangalore (Product Design and Engineering -GATE qualified candidates will also be considered for admission) (ii) IIT Bombay (Industrial Design, Visual Communication, Animation, Interaction Design, Mobility and Vehicle Design) (iii) IIT Delhi (Industrial Design (iv) IIT Guwahati (Design) (v) IIT Kanpur (Industrial Design-GATE qualified candidates will also be considered for admission)

**Ph.D Programmes in Design are offered at IISc Bangalore and IIT Bombay. Applicant must have completed or should complete any one of the following by July 2014.**

**(i) Bachelor's Degree in Engineering / Architecture / Design/ Interior Design or equivalent (4 years duration after 10+2)**

**(ii) Professional Diploma in Design (NID/CEPT or equivalent of 4 years duration after 10+2)**

**(iii) B.F.A. (4 year professional programme, after 10+2)**

**(iv) G.D. Art (5 year programme after 10th) with one year post qualification, professional experience**

**(v) Master's Degree in Arts / Science / Computer Applications (2 year programme after 10+2+3)**

**Those with 3-year Bachelor's Degree are not eligible. There is no age limit. A person can appear for CEED any number of times. Application has to be submitted online at [www.gate.iitb.ac.in/ceed2014](http://www.gate.iitb.ac.in/ceed2014) between 5th August and 31st August, 2013.**

**Application fee is Rs. 2000/- for men of General and OBC categories and Rs. 1000/- for SC/ST categories, Physically Disabled (PD) and all women applicants. SC/ST/OBC/PD category applicants have to produce valid certificates issued by appropriate authorities in the format given in Annexure A of the CEED 2014 Brochure, that can be downloaded from <http://www.gate.iitb.ac.in/ceed2014/ceed2014-brochure.pdf>**

**Instructions for filling the online application are available in the website and Brochure. The applicant has to upload their photograph, signature and other documents. An eligible candidate will have to upload copy of the documents as specified in the website.**

**If the qualifying year (academic eligibility) is 2013 or before, copy of the Degree Certificate / Provisional Certificate / Course Completion Certificate has to be uploaded. If the qualifying year is 2014, before July 2014, any pre-final year mark sheet or Certificate from the Principal (Certificate for CEED 2014) will be required. For category proof, required to qualify for a reduced fee, where applicable, OBC-**

**NC/ SC/ ST Certificates issued by competent authorities as listed in the Brochure has to be obtained.**

**Formats of all certificates are available at [www.gate.iitb.ac.in/ceed2014/download.html](http://www.gate.iitb.ac.in/ceed2014/download.html)**

**In order to avail concession under PD category, applicant should attach a proper PD certificate obtained recently as per the guidelines in the Brochure. Applicants are not required to submit paper copies of the form or any other documents. Admit card for the examination can be downloaded from the website, from 1st November 2013 (Friday).**

**On the day of the examination, candidates should reach the examination center at least one hour (at 8 am) before the scheduled commencement of the examination at 9 am, for recording biometric information (thumb impression and photograph) before appearing for the examination. The photograph captured on the day of the examination will also be printed on the score card.**

**Results will be declared after 10 am on 3rd January, 2014 (Friday). Results will be mailed only to those candidates who qualify in Part A and Part B. For other candidates, the results will be displayed at [www.gate.iitb.ac.in/ceed2014](http://www.gate.iitb.ac.in/ceed2014).**

**The Score Card is valid for a period of two years from the date of declaration of the results. Duplicate score cards are not issued normally. However, a candidate who needs a duplicate card for a valid reason should send an application to Chairman GATE, IIT Bombay, enclosing a Crossed Demand Draft for Rs. 300/- drawn in favor of 'IIT Bombay', payable at Mumbai.**

**The CEED Score Card will include the photograph submitted and also a photograph that will be taken at the time of the examination. A candidate qualifying in CEED has to apply to interested institutes for admission and also full fill other requirements such as tests and interviews of the respective institutions for admission.**

**Announcement in this regard will be will be made separately by different institutes. Applicants must visit the web sites of individual institutes for applying for their Programmes. The criteria for Post Graduate admission and award of scholarship/ assistance vary from institute to institute. Reservation for various categories will be as per Government of India rules applicable at the time**

of admission. A limited number of assistantships, based on merit, are available to CEED qualified students, to pursue the programmes.

2.

## **Quadrangle Architects shortlisted for Universal Design Award**

Quadrangle Architects' own studio on King Street in Toronto has been shortlisted for the 2013 International Association for Universal Design Awards. The awards ceremony will be hosted in Yokohama, Japan this fall.

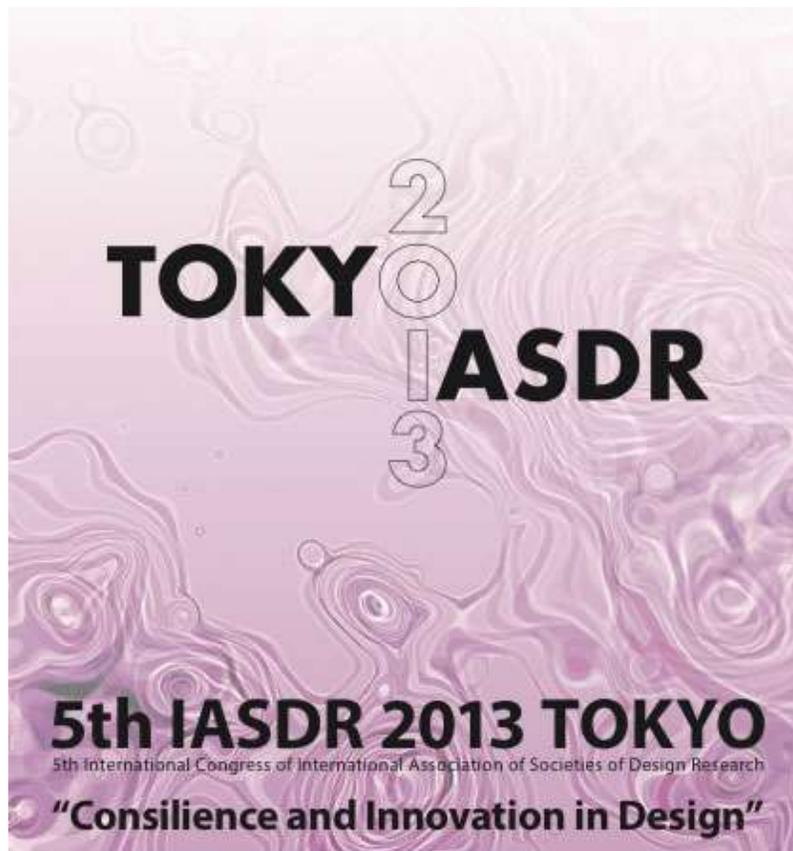
Designed to demonstrate Quadrangle's expertise in accessible and sustainable design, the 17,000-square-foot office goes well beyond current codes to ensure universal comfort and wellness. It has become a leading example of how design quality need not be compromised with inclusive design – the bold interiors are fresh and contemporary while integrating personally customizable furnishings and lighting. Materials subtly aid with wayfinding and generous spacing offers good access to persons with mobility devices, service animals or attendants. Universal design has dramatically and positively improved the studio's health and corporate culture.

Quadrangle is known for breathing new life into former industrial buildings, creating innovative office environments, and for helping clients to live in healthier, easily accessible spaces. Since September 2012, the firm has inhabited this new location, which transforms the seventh floor of a former Postmodern data centre in Toronto's King West neighbourhood. The entire studio is open-concept and everyone works from open workstations. Meeting rooms are glazed with views in, out and through the studio, ensuring continuous access to natural light. Windows surround the perimeter of the studio, providing sweeping views of Toronto's skyline.

According to Quadrangle's Managing Principal Susan Ruptash, "This project grew out of our desire to 'walk the talk' and demonstrate to our clients that custom-designed spaces are both comfortable, purposeful and beautiful. We are very excited to receive this international recognition and hope that it will prompt more people to become aware of how accessibility can be seamlessly integrated into their spaces."

## Program & Events:

1.



2.



3.



products, news, business  
2013 IDEA open for  
entries

28 November 2012 by Kate Jones  
The 2013 International Design Excellence Awards is  
open for entries.

[home](#) / [2012](#) / [november](#) / 2013 IDEA open for entries

The Industrial Designers Society of America (IDSA) are calling for entries for their annual  
International Design Excellence Awards® (IDEA) competition for 2013.

4.



## International Istanbul Initiative on Ageing 4-6 October 2013

The International Federation on Ageing and Turyak Seniors Council Association cordially invites you to **submit abstracts for oral presentations** at the International Istanbul Initiative on Ageing. All abstracts will be reviewed by the Program Committee and assigned to the

appropriate concurrent session for oral presentations. Abstracts from around the world are welcomed to share best practices to the regions of the Middle East, Northern Africa, Eastern Europe, and surrounding countries of Turkey. Abstracts must relate to one of the 13 sub-themes identified.

Abstract submissions are entirely separate from full paper submissions, and will therefore *not* be eligible for financial prizes or publications. For more information about Full Papers visit [www.ifa-fiv.org](http://www.ifa-fiv.org).

**Deadline: May 31, 2013 at 5pm EST**

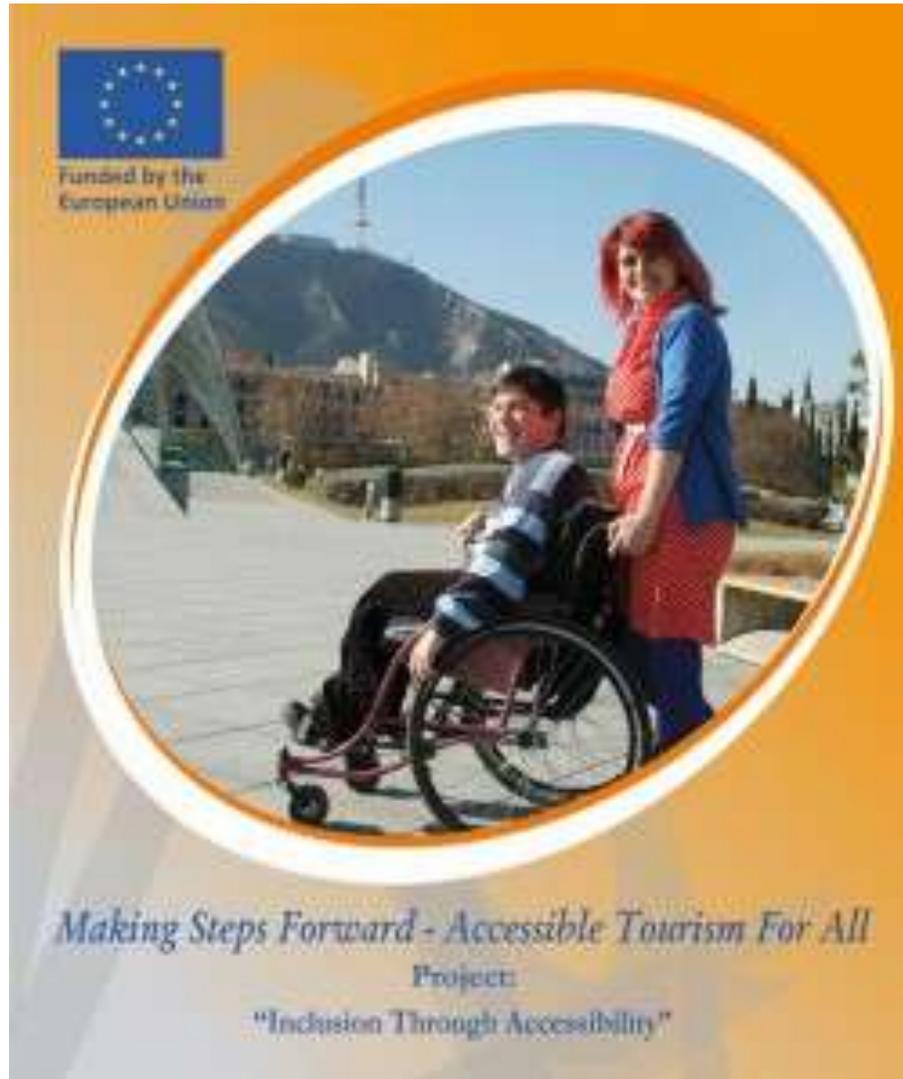
5.



6.



7.



8.

**Applications can be submitted on-line until 10 September 2013 (midnight Brussels time) in English, French or German via <http://ec.europa.eu/justice/access-city>.**

**For more information, visit <http://ec.europa.eu/justice/access-city>**



9.

### TIEMS Berlin Conference 2013



on

#### *Public Alerting and Social Media during Crisis and Disasters*

30<sup>th</sup> October - 1<sup>st</sup> November 2013

#### TIEMS Berlin Conference Links and Details

[\*Invitation and Call for Papers, Posters and Exhibitors\*](#)

[\*Venue, Hotels and Conference Fees\*](#)

[\*Submissions and Exhibitors by 1<sup>st</sup> May 2013\*](#)  
*(Authors from 14 countries have submitted)*

Deadline for submission of a paper or poster abstract is *30<sup>th</sup> May 2013*.

Submission at: [\*Berlin Easy Chair\*](#)

10.



## **ESCAP-SASAKAWA AWARD** FOR DISABILITY-INCLUSIVE BUSINESS IN ASIA AND THE PACIFIC

**Nominations opened 20 May 2013 and will be accepted until 19 August 2013.**

**11.**

**Hong Kong Young Design Talent Award 2013 - Call for Application HK\$500,000 Award grant for supporting elites to undergo overseas work attachment**

Organised by Hong Kong Design Centre (HKDC), “Hong Kong Young Design Talent Award” (HKYDTA) has started calling for application on 1 May. HKYDTA aims to support young design practitioners and design graduates to undergo overseas work attachment in renowned design companies for half to one year and contribute to Hong Kong’s design and creative industries afterward. HKYDTA awardees may receive a grant of HK\$500,000 including sponsorship of daily expenses and valuable chances of overseas work attachment in renowned design companies such as Muji(Japan), Ecco Design(United States) and 3XN(Denmark).

HKYDTA aims to cultivate up-and-coming design talents with sponsorship granted for them to undergo overseas work attachment. They will contribute to the development of Hong Kong’s design and creative industries by returning to Hong Kong immediately upon completion of overseas work attachment and working for not less than 2 consecutive years for a Hong Kong business. Also, they will become the ambassadors of HKYDTA and share their overseas experience with the organisers or sponsors. Organised since 2005, more than 400 applications were received. More than 40 awardees were given grants to continue their professional pursuits overseas.

There are 4 grand awards in HKYDTA 2013: “CreateSmart Young Design Talent Award” will sponsor 2 design practitioners in maximum with a grant of HK\$500,000 each. “CreateSmart Young Design Talent Special Award” will sponsor 2 design practitioners or design graduates in maximum with a grant of HK\$250,000 each. “PolyU School of Design Young Design Talent Award” will sponsor a design graduate with a grant of HK\$250,000. “HKDI Young Design Talent Award” will sponsor a design graduate with a grant of HK\$250,000. Besides, HKYDT Special Mention Award is introduced to reward excellent applicants.

Candidates will be assessed by a panel of expert judges based on several criteria such as their possible future contributions to the development of design and innovation in Hong Kong, effectiveness of communication, quality of portfolio and plans for using the Award’s grant. The deadline for online application of HKYDTA will be 31<sup>st</sup> July 2013 and deadline for submission of supporting document by post will be 15<sup>th</sup> August 2013. For more information of HKYDTA, please visit [www.ydta.hk](http://www.ydta.hk) .

**Overview of awardees’ designated overseas design companies**

Category	Company Name	Country
Apparel and Accessory Design	HENRIK VIBSKOV STUDIO	Denmark
Communication Design	Base Design	Belgium
Communication Design	Studio Dumbar	Belgium
Environmental Design	JDS Architects	Belgium
Environmental Design	Grant Associates	United Kingdom
Environmental Design	3XN	Denmark
Multi-disciplinary	ROSAN BOSCH	Denmark
Multi-disciplinary	ISKOS-BERLIN Design	Denmark
Multi-disciplinary	Fabrique	The Netherlands
Product and Industrial Design	Phoenix Design GmbH + Co KG	Germany
Product and Industrial Design	Nosigner	Japan
Product and Industrial Design	MUJI / Ryohin Keikaku Co Ltd	Japan
Product and Industrial Design	Takram Design	Japan
Product and Industrial Design	Tamawa Design Studio	Belgium
Product and Industrial Design	ECCO Design Inc	United States

\* More design companies may be added to the list, please periodically visit <http://www.ydta.hk/2013/pages/en/categories/worldwide.php> to review the latest information.

**Showcase of 2012 Awardees' works**

**“CreateSmart Young Design Talent Award”**: Au Yeung Wai-hon, Hamlet, Kwok Yum-tsung, Calvin



*Work from Au Yeung Wai-hon, Hamlet*



*Work from Kwok Yum-tsung, Calvin*

**“CreateSmart Young Design Talent Special Award”**: Chan Wing-kei, Quai, Lau Wein-sie, Fiona



*Work from Chan Wing-kei, Quai*



*Work from Lau Wein-sie, Fiona*

**“PolyU School of Design Young Design Talent Educational Award”** (renamed as “PolyU School of Design Young Design Talent Award” this year): Chow Ka-wa, Key



*Work From Chow Ka-wa, Key*

**“HKDI Young Design Talent Educational Award”** (renamed as “HKDI Young Design Talent Award” this year): Lam Wai-keung, Sonic



*Work From Lam Wai-keung, Sonic*

**About Hong Kong Young Design Talent Award (HKYDTA):**

Hong Kong Young Design Talent Award (HKYDTA), organised by the Hong Kong Design Centre (HKDC), aims to support and cultivate up-and-coming designers with sponsorships granted for them to undergo overseas work attachment in renowned design companies to unleash their potential.

The awardees are entitled to undergo overseas work attachment for at least 6 to 9 months, which allows them to elevate their versatility and professional knowledge.

All awardees will contribute to the development of Hong Kong's design and creative industries by returning to Hong Kong after completion of their overseas work attachment. They will become ambassadors of HKYDTA to share their overseas experience.

**About Hong Kong Design Centre:**

Design for Society is the major undertaking of Hong Kong Design Centre (HKDC). HKDC is a non-profit organisation and a strategic partner of the HKSAR Government in developing Hong Kong as an international design hub in Asia. Since 2002, HKDC has been on a public mission to (i) champion strategic and wider use of design for creating business value and community benefits; (ii) promote and celebrate design excellence; and (iii) educate the professions and the community to be resourceful champions for sustained developments through design and innovation.

This press release was distributed by **DT Communications Asia Pacific** on behalf of **Hong Kong Design Centre**. For any enquiries, please contact:

**DT Communications Asia Pacific**

**12.**

CALL FOR ENTRIES

**POSTER DESIGN COMPETITION**

You are invited to design poster for ICSID interdesign 2014 workshop Contest Theme:

# Humanizing the Metropolis

**Background**

Under the theme Humanizing the Metropolis, the Interdesign workshop aims to design solutions to address critical service issues in the metropolis. The goal is to enable the city to become self-reliant on its resources, as well as increase its citizen's sense of pride.

“In the context of emerging economies, Mumbai presents numerous opportunities for a dialogue about infrastructure, housing, sanitation, mobility, education and health care to name but a few. It demonstrated the challenges of this densely populated city and a desire to work towards the betterment of its communities through an inclusive process. In selecting their proposal, we hope to help

the city bring forward a substantial level of affordable solutions to address some of these critical issues.”

The competition calls for poster that expresses the interdependence of city's services, its resources and the people.

**Awards**

First winner Rs. 100,000. (One lakh) with citation)

Second winner Rs.50,000. (Fifty Thousand with citation)

**Grand Jury**

The member of the Grand Jury panel comprise of leading designer, thinkers and communication experts. People who love Mumbai.

**Participation Eligibility**

Entry to the contest is open to all Professional designers, design students living in India

Participation is open to teams and individual submissions.

Submitted designs must be original and not currently in publications.

Submit the design with a brief write-up of around 150 words.

**Specifications**

Dimension of the final poster: 420mm X 600mm only in portrait format

Resolution: 300dpi

File type: JPEG or PDF

Colour mode; CMYK

**Your Contact Information**

Name, Postal Address, E-mail, Telephone no. Cell No

**Last date of Submission of your entries**

Friday June 21, 2013, 4pm.

If you have any queries, pl. do not hesitate to contact us:

Sudhakar Nadkarni

[nadkarni36@yahoo.com](mailto:nadkarni36@yahoo.com)

or Anand James Dev

[anand.dev@welingkar.org](mailto:anand.dev@welingkar.org)

**Send Entries to:**

ICSID Interdesign 2014

Business design

weschool,Matunga,

Mumbai-400 019

13.



**DESTINATIONS FOR ALL World Summit that is set to take place in Montréal from October 19 to 22, 2014.**

14.



**More for Less - Design in an Age of Austerity , Dublin, Ireland , 7 - 9 November 2013 , Call for papers extended till June 21, 2013!**

**Cumulus  
conference  
Aveiro ,Aveiro,  
Porto, Portugal ,8 -  
10 May 2014**

**More information  
to follow soon!**



15.



16.



## ‘Typography and Culture’

<http://www.typoday.in/>

Typography Day will be organized for the seventh time on 28th Feb, 1st, 2nd March 2014 at the

Symbiosis Institute of Design, Pune in collaboration with the Industrial Design Centre (IDC), Indian Institute of Technology Bombay (IIT Bombay) with support from India Design Association (InDeAs) and Aksharaya.

**17.**



**18.**



'Expo CD'

3 Day Workshop:

'Communication Design for IT and Media Professionals'

**29th - 31st August 2013 from 9.30am - 5.30 pm**

**at IDC, IIT Bombay**

<http://www.idc.iitb.ac.in/events/expo-cd-2013.html>

19.

**12th Global Conference on Ageing  
10-13 June, 2014  
Hyderabad, India  
"Health, Security, and Community"**



 **12<sup>th</sup> GLOBAL  
CONFERENCE  
ON AGEING**

<http://ifa2014.in/>

**IFA**  
INTERNATIONAL FEDERATION FOR AGEING  
1961 - 2014

**Calling For Abstracts, Papers, Workshops,  
and Symposiums!**

## **Job Openings:**

**1.**

**Ernst& Young is now hiring UX Managers, UX Architects, UX Designers, Mobile UX Designers and Engineering Graduates with extreme creative skills for openings at it's state of the art Innovation centre @ Kinfra Film& Video Park, Trivandrum, Kerala.**

**Graduates or Post graduates in Industrial/ Interface / Information/ Interaction/ New media/ Visual communication design and Human Computer Interaction preferred.**

**Please apply with your detailed portfolio & resume to [satheesh.nair@xe04.ey.com](mailto:satheesh.nair@xe04.ey.com) or [piyush.gopi@xe04.ey.com](mailto:piyush.gopi@xe04.ey.com).**

**2.**

**Dr.Art+Design is looking to hire an Exhibition Designer**

**Expectations from the Exhibition Designer**

- . Exceptional ability to think conceptually**
- . An eye for timeless art pieces and beautiful and functional design work.**
- . Ability to handle multiple projects simultaneously and meet deadlines consistently Has a good sense of space, art, functionality of design.**
- . He/she must enjoy the process of idea generation and appreciate the brilliance possible from collaborative work.**
- . Coordinating with the execution team to oversee the execution to meet timelines**
- . Manage and coordinate all communications to and from consultants.**
- . Previous work with design and/or art consultation is not a must but will be preferred.**
- . Need someone with a can do attitude and who will go the extra mile**

**to ensure great work, someone passionate and creative**

**You will work on projects in hospitality, healthcare, retail and real estate**

**Company Website: [www.drartanddesign.com](http://www.drartanddesign.com)**

**Please email resumes and portfolios to [info@drartanddesign.com](mailto:info@drartanddesign.com) with**

**"Exhibition Designer" as the subject**

**3.**

**At Flipkart, we are excited to be designing the compelling touch-points and interactive experiences that keep shoppers happily engaged and coming back for more.**

**Changing consumer landscapes, and Flipkart's own leadership of the eCommerce field in India, brings new opportunities for the design team: multiple platforms, mobile consumption, mash-ups or socialisation. Each area of discovering, engaging with, and buying something online brings interesting challenges for the design experience.**

**This is an opportunity to contribute to- and grow with- India's leading eCommerce brand.**

### **Responsibilities**

**As a Visual Designer, you will use brand attributes as well as an understanding of the overall interface structure to develop visual frameworks that includes typography, colour palettes, and visual style. We look to you to emphasise the organisational (spatial relationship) aspects of design and the way in which visual cues and affordances communicate behaviour to users.**

**You will be working closely with product managers, and other interaction designers and visual designers as you collaboratively evolve product requirements into compelling visual experiences.**

**You should be a self-starter, and be able to realistically plan and estimate your work and that of other members in the team in relation to project and roadmap requirements. We expect that you know what Design Process is, and are able to apply it to your work.**

**Your experience as a designer, complemented by knowledge of the Visual Design domain, and skills with graphic design and communication tools, should allow you to produce and communicate cool stuff from the word Go.**

### **Qualifications**

**We are looking for 4-6 years' experience for the Visual Designer role.**

**You will have strong design and communication skills, with an ability to rationalise and articulate your design thinking. We think a formal educational qualification in the design or human-computer interaction field is important, though it's not the end of the world if you don't have one.**

**Add to this self-confidence, dynamism and a belief in challenging yourself.**

Stir in a passion for collaborative problem solving and team work, and you are well on your way to creating engaging, world-class experiences.

We expect you to come with some experience designing for the web, mobile, or enterprise applications domains. You must be familiar with vector and image editing tools. If you are familiar with code, that's a bonus!

The duration of the contract would be 4-6 months.

If you are interested, please send your CV and portfolio to [maryn@flipkart.com](mailto:maryn@flipkart.com)

4.

#### **UX Designer/Interaction Designer**

##### **Job Requirement**

- 2 - 5 years of industry experience in UX, Design or related disciplines with an impressive portfolio
- Professional Bachelors in Experimental Psychology, Cognitive Psychology, Human Factors, Human Computer Interaction, Industrial Design, Communication Design or any other related discipline with a solid foundation in research-based design using both quantitative and qualitative methods
- Expertise with design tools like Axure, Visio, Balsamiq, Photoshop.
- Good communication and interpersonal skills.

##### **Job Description**

##### **Expertise Category**

##### **Description**

##### **Core UX Expertise**

- Have knowledge in creating wireframes and Process flows
- Have good knowledge of User Centered Design Methodologies
- Capable to come up with and communicate ideas easily
- Needs to have a firm grasp over IA concepts and be comfortable with IA artifacts like wire-framing, navigation flow diagrams, etc.
- Needs to have excellent analytical as well as creative skills, and needs to be in tune with the latest trends in the domain of Interaction Design.
- Ability to handle multi-device interactions.
- Should have the ability to work in a multi-disciplinary team and interface with clients to gather requirements, etc.

##### **Domain Expertise**

Hands-on experience in application designing at least one of the following:

- **Media, e-Commerce, Communications, Medical Devices, Enterprise and Other domains**

#### **UX Project Facilitation**

- **Liaisons between clients, UX, Visual Design and development teams to facilitate design and development activities**

**Please share your latest CV with Portfolio**

**Please send your latest CV with Portfolio to [swapnil.arora@globallogic.com](mailto:swapnil.arora@globallogic.com)**

**5.**

**School of Design, GD Goenka University needs a Communication Design Faculty**

#### **The Role**

**School of Design at GD Goenka University on Sohna Road, Gurgaon will be starting off this year with degree courses in communication, fashion, interior and product design. The courses are being offered in collaboration with Politecnico di Milano of Italy. A group of full-time faculty have joined to anchor each of the specialization. There is a need for a full time faculty in Communication Design.**

#### **Qualifications**

**We are looking for a minimum of 4-6 years' experience of which some time should have been spent in teaching. A formal educational qualification in the field, from a reputed institute is a must. You will have strong academic inclination, strong design and communication skills, with an ability to articulate and guide.**

**If you are interested, please send your CV and portfolio to [deanoffice.design@gdgoenka.ac.in](mailto:deanoffice.design@gdgoenka.ac.in)**

**6.**

#### **Job Description:**

**The Director of User Experience is responsible for synthesising customer needs into useful, usable and desirable product experiences and interfaces. You are expected to provide a variety of methods and problem-solving tools to create user-centred product solutions for both long-term and short-term initiatives. This role will need to lead as well as collaborate across teams to define the end-to-end user experience for hCentive's extensive online web-based technology platform. If you thrive in an entrepreneurial environment and long to work on products that truly transform people's lives on a global scale. Get in touch. This position is located in our Noida office. We are open to relocation for the right candidate.**

#### **Responsibilities:**

- **Build a world-class user experience, interaction design and user research team inspired to tackle transformative design challenges on a truly global scale.**

- Define best practices and create interaction pattern libraries and tools to share knowledge across teams and businesses
- Facilitate brainstorming and working sessions with cross-disciplinary teams. Manage and appropriately involve key stakeholders for buy-in and sign-off design milestones. Collaborate. Collaborate. And collaborate again.
- Leverage leadership skills and domain expertise to be a passionate visionary for fantastic customer learning experiences inside and outside the company.
- Work in partnership with product management, marketing and the development team to identify, plan and facilitate formal and guerrilla user research, usability testing and other feedback mechanisms as appropriate. Provide appropriate quantitative and qualitative assessments of customer needs and market opportunities, including direct involvement of product users with the development team.
- Define and document user experience requirements for hCentive's online web-based products. Employ a range of human-centred design processes and tools such as mental models, personas, use scenarios, prototypes, site maps, wireframes, task flows, and puppet shows (just seeing if you're paying attention)  
 . Collaborate closely with product management to define user stories and integrate these tools into an agile development process.
- Serve as a customer advocate in development efforts and the broader organization. Create relevant communications to engage cross-functional teams towards promoting design thinking and a customer-centric culture.
- Monitor competitive and complimentary product experiences and trends. Document best practices and identify opportunities to deliver innovative and immersive learning, sharing and habit forming experiences.
- Work in partnership with product management, marketing and the development team to ship exemplary products. On time.

**Desired Skills & Experience:**

- A charismatic leader who combines a user-centred mind set with wicked creativity
- 10 or more years of experience leading a design team and developing interactive products as an Experience designer, Information architect, or Interaction designer
- Demonstrated experience designing for multiple platforms, including mobile, and the various functions of a consumer web experience
- Experience with multiple user research methods such as contextual inquiry, surveys, usability testing, and card sorting

- **Demonstrate and model deep understanding of the value of other disciplines and their interaction with design/ user experience**
- **Excellent written and oral skills to communicate clearly and negotiate effectively with a broad range of internal and external stakeholders.**
- **Exceptional information presentation. You may not think of yourself as a graphic designer, but you know how to use a grid and quality typography makes you a bit giddy.**
- **An advanced degree or significant training in a related field, such as human-computer interaction, user research, design planning, library science, graphic design, or industrial design is preferred**
- **Experience working across locations and time zones**
- **A keen interest in educational technology, design for motivation, and international research**

**Talent Acquisition Team @ hCentive!**

**+91 9899 644 678**



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**Forthcoming Events and Programs:**  
[Editor@designforall.in](mailto:Editor@designforall.in)

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