Design for All

April 2009 Vol-4, No-4

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Chairman's Desk:



"Experientia Docet" in Latin and in English "Experience Teaches" inscribed everywhere in the campus of San Francisco State University. Even papers, documents are embossed with this motto of San Francisco state University. Does experience teache?

Experience comes to my mind as if it is a natural born technique of learning by living beings with trial and error. When knowledge was not institutionalized this method had been widespread and everyone was free to attempt to solve his problems in his own way and with his available resources. In due course of time if this technique suits everyone and can be implemented with the local resources that becomes design of universal practice. Cooking, bathing and covering of nudity by humans are almost similar all over the world. No one claims patent since it is almost a universal practice. Heating for cooking, a bathing in river or pond or with stored water and cloth or other means to cover the body may be different but purpose behind these acts are same throughout the world. Why do we think in universal manner? Are our experiences and

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conclusions similar which makes our thinking universal? Our long experiences in any respect become our knowledge. Are our experiences universal and so our teaching? Whatever may be our level of knowledge, we adhere to use of clothes. Mankind had learnt the art of agriculture over centuries. Its knowledge is being affected by experiences and what we see today and we wish to trace the history of present times we can go back to past but will achieve disjointed records of evolution and impossible to call it authentic, coherent and it is possible it might have happened as per our hypothesis. In majority of the world population whether people are illiterate or literate still practice this technique and I believe this is the best option to learn and acquire experiences known to mankind. Our designer community is not exception. How many people have institutional support for learning? Majority of the population do not enjoy the facility even for primary education. A few are privileged one and enjoy institutional support. Those who never visited schools but innovate for betterment of the society are in majority and their contribution of making our modern world are very large compared to those who have institutional education. I feel majority has miserably failed to encash their innovations or they are deprived in reaping the harvest or they are not money minded people and they feel it is god's gift for betterment of common people and simply a privileged one to whom God has chosen as an instrument. Harvests are reaped by our so-called elite class whose contribution to make this world better is negligible but commercially all successful. Common man experiences spread without any intuitional support and when number of various similar experiences

accumulates it turns in to knowledge. How our experiences have spread before our so called modern world when means and technology were no better what we are enjoying now, is still a subject of further exploration? Historians and others have no time to acknowledge the role of those who come and go all unnoticed and unsung.

I think one of the concepts of 'apprenticeship' had played some role in popularizing these ideas among the masses. This technique is nothing but based on 'man is born imitator and learns by copying.' When mother speaks and makes the child to learn. She expects the child should imitate her and she knows child will learn through imitating her and she keeps on repeating the same word because of resonance affects what child hears it will copy. Similarly almost all over the world devices used for agriculture are not much different in shape and material. How it has spread among the world community of agriculture is subject of further exploration. Is it not we are imitators and learn from others experiences by imitating? Why mankind had long back abandoned the art of hunting others animals for food? In my opinion hinterland people or gypsies were more responsible and worked as spreading medium. Indian gypsies were spread even far to Russia, Spain and many parts of the Europe. Much later trading community had picked up what gypsies were doing.

In music we are still following the Gharana (lineage) tradition of imparting the knowledge of music from one generation to another. In this method there are no prescribed and written rules of teaching when it passes from learned teacher to students. Teachers are trained under the past generation of learned teachers. They keep the basic structure of the music intact but individual teachers to teacher introduce variations. When one teacher's form of some brand is popular among the masses that teacher offshoots and it slowly gains the status of new Gharana. 'Should we train our designers under the learned teachers or should we continue to train them under the institutes for mass production?' I am not sure which method would produce the quality designers. We are a big society. Gharana system can serve for a small community where as our designers are required to meet the needs of millions we should be realistic in our approach.

Is this experience rational way of learning? Is it not subjective? Do we need institutes for teaching experiences? Of course yes, what are then roles of institutes in our present world? Are our institutes to groom individual talent or help in producing run of the mill professionals? Are our institutes helping in opening the mind's faculty of the individual or the purpose of the creation of institutes has some interior motives and these are working to fulfill the same? When we have many learned personalities in fields, it is in the hands of different institutes to declare their respective favorable persons par excellence and experts and each one is capable to outsmart another. 'Does our society need advice of experts or society can progress with the contribution of individual and slowly it spreads to masses as this practice was there since time immortal? Do we need institutionalized experienced or learned

persons at the helm of affairs of the society?' In my opinion good experiences are those that help in functioning better at operational level of the society.

A medal honors a solider posthumously and the same person is punished if he runs away from battlefield. It is the experience of the solider that comes handy to save his life, fights to win the battle and serves the interior purpose of that institute. Learned persons may help in innovation of the society at all levels and occasionally recognized by institute and in general it ignores their contributions. They also need experience that it comes to them only with good judgments and that follows after committing mistakes by bad judgments. Our judgments are always rational. We are led away by so many misconceptions traditions and conventions.

In my mind judgments are rarely rational and so is our knowledge. Individuals are working under so many stresses, strains, prejudices, denials and total lack of infrastructure. It is not simply their knowledge other facilities are negligible. Under the normal conditions he is to operate his prejudices mind, prevailing confusion, lack of proper knowledge and no resource availability etc. If I offer a person who is close to me, two glass bottles one is labeled with sugar and another with poison. Both are of the same size and color of their contents is white. I request him to add a teaspoon of sugar in his cup of tea. The moment person looks at the label with poison, some kind of fear grips him and refuses to take sugar from any of the offered bottle. It may be I am offering him sugar to best of my knowledge but his mind refuses to take risk and his knowledge is overshadowing my advice. My repetitive emphasis to him that by mistake labeling is wrong and both bottles are of sugar , he ignores my advice and acting in such a way that he is not mistrusting me and does not want to hurt my sentiments. He finishes the tea without sugar. He was under a great dilemma. No one wishes to under take that experience that may prove to be fatal and once in lifetime and in death is inevitable. Is unwarranted fear in us or knowledge governs our actions? In my opinion to be the best in the class of good designers he/ she should experience unwarranted fears because those will prove to be guiding force to enable good design. Knowledge may prove to him/ her problem solving tools but never takes them to that height for which they aspire. They should never feel confident in their design. They should always behave as innocent, ignorant as child while taking up new design assignments.

Darwin was not experienced but his simple observations about nature led him to selection and survival theory. Mendel was a priest and simply by observing from his kitchen garden about the history of peas developed the theory of Genetics. Although he did not know the physical basis for heredity, Mendel observed that organisms inherit traits in a discrete manner these basic units of inheritance are now called genes. Both were guided by their inherent direction and revolutionezed the thought process of mankind .Does our observation enhance the knowledge of an individual?Yes, I endorse this view . Reasoning is keen orservation which adds new dimensions to the previous findings and if we see what common people are unable to see and that makes observer special and more knowledgable. Experience as a general concept comprises some knowledge or skill or observation of some thing or saysome event gained through involvement in or exposure to some thing or event. The history of the word experience aligns it closely with the concept of experiment. Experiment relates to one time event. Experinces is knowledge and under spending obtained after many experiments.

I am narrating a case where I am aware and having knowledge that there are many public transport buses plying to my desired destination. The moment I wish to board the bus one of my student happens to be at bus stand advised me 'Sir, do't travel by this bus .It is not reliable , route is congested and you will reach late. There is another bus that is reliable and would take you via little longer route but you will reach there quickly'. I look toward him as I am honoring his experince and it is over shadowing my knowledge. While travelling in the bus suggested by him. I was thinking transport authorities might have taken note of some research experinces of others before the prepartion of time table and might have taken all points of variable and varified about all with trail run of the bus for that route. There published information in bus time table is knowedge for us, but regular traveling by that specific route with different buses made my student with knowledge of his own experince . 'Are we not to follow experince-knowledgeverification-reexperince-modification-update knowledge metodology in real life?'

A driver of an automobile is a mere 'driver' if he knows how to change the gear, accelertor, clutch and steer the wheel but an expert driver is that who has experinced and can anticipate what others are going to do and avoids accidents. Similarly an employer seeks a employee who should have requisite qualifications(knowledge) and working experince of a few years. I think this apporach of selection is good combination aming rest of knowledge with experince. Technical knowledge is inadequate if it is not supported by experinces

The concept of experience generally includes to know-how or procedural knowledge, rather than propositional say knowledge which is the prorogative of the academicians . Philosophers dub knowledge based on experience "empirical knowledge" or "a posteriori knowledge. I say Human knowledge is neither objective nor subjective. It's personal and participant- which places us at the centre of the universe. I further define the purpose of human knowledge- indeed , of human life itself- is not accuracy, and not even certainity; it is understanding. Every human being sees the world in his own way. That is in evitablity. We choose not only what and how we think but what and how we see. Knowledge is something personal. Experince is not exclusively personal.

Immanuel Kant contrasted experience with reason: "Nothing, indeed, can be more harmful or more unworthy of the philosopher, than the vulgar appeal to so-called experience. Such experience would never have existed at all, if at the proper time, those institutions had been established in accordance with ideas."

There have been moments in human history when certain beliefs were rejected and actions were undertaken .During my college days sometimes my classmate used to find toilet soap was missing and his hands were dirty that led him to inaction(Unlike the west we do not use tissue paper for cleaning rather we use water to wash) . People here do not feel like to touch anything because of their cultural upbringing and it made them paranoid and temprorialy disabled. They were mentally disabled as their minds were pre occupied with two things; our , hands are dirty and one constantly in search of soap and water to clean . Then I used to laugh at his behaviour and advised them ; 'Your belief will vanish as you begin to eat something You feel hands are dirty as long you have not eaten anything' I offered them eatable items and they refuse to take it. Their mind are refusing because they are under some kind of mental block. Once our actions are triggered and we overcome this I am sure no belief would lead them to inaction.

When I notice the scavengers are carrying loads of shits in baskets on their heads to dispose that off at near pits they are mentally tuned in carrying .Others around one seeing them may trigger vomitting. I have come across so many times that a scavanger is clearing the sewer and his entire body except his head under the sewage water. That genteleman does not feel doing any thing bad because his mind is tuned for such jobs. 'Is it not our closed mental state tuned to such a way that we refuse to even touch that indvidual engaged in a tough task?'. If any case, if he by mistakes touches us, we immediately go for bath as by touching we have become dirty. Such mental blocks leave parmanent imprints in the minds of humans and gradually gain the shape of so called culture. I always advise to our government that we waste lots of the potable water in majority cases to satisfy our mental blocks . We must change our life style thinking and save lots of water. Similarly I warn our budding designers while designing the product we use such materials and we feel our hands are full of foul smell of that material inspite of repeatedly washing our hands . In this case belief needs correction and right knowledge is very crucial. Our mental blocks. I forcefully say ' Smash mental blocks and feel altoghter a new world'

When group of students are engaged in project of designing some product, I quietly observe their arguments. They are accusing, counter charging one another and few are screaming as if they have lost everything by as if their project will never finish in time and teacher may fail them in this project. One friend complains to another 'you have misled, I was under the impression that your experience among us will lead us best' This forces me to think that accusing student was not rational and as his friend he was working intuitively. Intuition is often hitting right and that person was considered wiser among the group. By chance his intuition this time has gone wrong and he is facing the wrath of his fellow persons. 'Is intuition our knowledge and that inflict confidence in us to lead the rest?' What is experienced design? Experienced designers design over time with real and measurable consequences; time is their

medium. Every experienced designer is an experiencer; and experienceing through his or her reactions, turns a designer of experience in turn. "What are the fundamental skills of a designer?" " Elements of intution is there . And you can't teach intuition." In Design Form and Chaos, Intuition is a "flash of insight" which "cannot be willed or taught." It "works in believe intuition is mysterious, mysterious ways." н inexplicable and are not be taught. You either have it or you don't. This way of thinking puts at times design educators in a difficult position, yet it is so while evaluting the performance of designer 'should we judge him for his current performance or consider that his intituive stinct has guided him well and it may not work every time ? This is very difficult task for anyone to evaluate such parameters. Currently we follow 'hope by hope' concept and how far it is correct and justified would be known in future.. Human mind has to work and discover many fields which are lying locked up. We have rudimentaly ideas regarding intuition and creatvities. Their details are to be explored.

What is the relation between knowledge and action? According to one standard picture, there is none. Rational action is a matter of maximizing expected utility, where expected utility is a function of utility and subjective credence. It is subjective degrees of belief that matters for rational actions, not knowledge. A woman is expert in swimming but suffering with deep water phobia walking along the beach and hears the desperate voice of drowning child for help. She knows her capability and can save the life of the child but phobia in her creates panic and she shouts in panic but never dares to plunge to save the child. Is it not knowledge working for her inaction? Many human thoughts are some time more than a performed reaction.

Contrast to this example I noticed that an extremely beautiful young foreign woman came to India from her country to pursue her carrier and was attending my classes. Each male student around was interested in her but she was reserved in her approach and that did not allow anyone to extend his or her friendship. After few months I found she was behaving with a young boy from her own country in a peculiar a manner. It was not suiting to my mindset and upbringing. I notice that he was nowhere close to her personality and match for her. I murmured 'If this boy would have been in her country and approached her for even friendship I can definitely imagine either she would have slapped him or ignore him or complained to the authority for his behavior. Here she is aware that he is the only boy from her country and that makes her to act in intimate way. Is knowledge of her for scarcity of male of her country or culture of her bounds her to action of friendship? Is she fulfilling larger goal of her community by surrendering herself to a man that is nowhere to match her? Is designer's work in similar fashion and design with what are available to him to meet the larger desired goal? In totality point of view, he is doing perfect and nice job but he is betraying his professional ethics. Modern designers are working with the notions of what, when and why. They are in this impression that it would make them experienced designers. They use what when and why in such a way that becomes mystery for them and their knowledge never influences any of their actions. Sometime culture or perception or need of the hour decides how to act in given situation.

I am personally thankful to Mr. Phil Evan who never disheartens us to complete this prestigious project of special issue. In some occasion man feels dejected but he was so kind that he replied to our each letters with utmost patience.

Prof Ricardo Gomes and our association are from the days of beginning of our Newsletter. Our Newsletter was just making its presence and Prof Gomes made his all possible efforts to make us successful in our noble cause. He has earlier contributed articles, case study and lots of valuable information in our past issues and shared information with our readers. He commands special respect in their hearts. In this issue he has meticulously poured his heart in each word of this special issue.

We express our deep gratitude to the authors who once again have provided very valuable articles filled with organized design latest developments. It is their dedication to their design areas that makes our Newsletter valuable to readers. In this special issue, the other authors and the guest editor Prof Gomes look historically and around at the current sense to consider a few of the ways in which Prof Gomes has affected our concept of Newsletter. I hope that these articles constitutes a representative array of the many ways in which Prof Gomes and his colleagues work have influenced universal Design@sfsu and influencing design. The contributors of this special issue are trying to find a path between the historic reality they come from and the universal realities, where they have arrived a bit late.

Information regarding worldwide newsletter can be found at www.designforall.in . We are discovering design all with the light of a matchstick.

Everything is design, death to Design.

With regards

Dr Sunil Bhatia Design For All Institute of India www.designforall.in dr_subha@yahoo.com Tel 91-11-27853470®

IMPORTANT ANNOUNCMENT:

We are releasing a video film of approximately 45 minutes on concept of Universal/ Design For All/ Inclusive Design on 1st May 2009(probable date) and speakers are

Prof Peter Zec of Red Dot, Germany, Prof Jim Sandhu, Uk Mr Mike Brucks , ICDRI Prof Lalit Das, India Mr John Saleman of Univesal Design Consultant Inc, USA Mr Pete Kercher, Ambassdor EIDD (2nd volume) Prof Ricard Duncan, USA, (2nd Volume) Ms Onny Eiklong, Norweign Design Council



Those who are interseted in free DVD kindly write to us or you can download from our given announced web link.

Forthcoming issues of Newsletter of Design For All Institute of India

1.

We are celebrating the birth anniversary of Late Prof Ronald L. Mace of North Carolina state university who was responsible of popularizing the concept of Universal Design in United States of America. It is nice tribute from our newsletter that we should publish work of students of North Carolina State University Universal Design Centre.

I requested Prof Sharon Joines to be Guest editor of that



special issue and she has accepted our invitation. This special issue is coming out in the month of June 2009.

Those who wish to share their thoughts, ideas or experiences of Prof Ran Mace kindly submit the contribution before 10th May 2009 to:

Sharon Joines, PhD Assistant Professor of Industrial Design Research in Ergonomics and Design Laboratory, Director Center for Universal Design College of Design, Box 7701 200 Brooks Hall North Carolina State University Raleigh, NC 27695-7701 FAX: 919-515-7330 E-Mail: Sharon_Joines@ncsu.edu



3.

Berlin Berlin For 40 years, the International Design Centre Berlin as an incorporated society has been a companion to designers and entrepreneurs. It offers great advantages to companies, design-experts and all persons, who are interested in design. The structure of its members constitutes a manifold design-oriented platform in favour of the exchange of ideas and professional networking. The IDZ is a competence centre, a consulting office and an intermediary for design in Berlin



This is great occasion that we have invited this esteem organization for publish a special issue with us and they have agreed to contribute the July 2009 Vol-4, No-7 issue and the Guest Editor will be International Design Center Berlin Deputy Chairman of the Board,

Professor Birgit Weller.

4.

Our one of the forthcoming issue of year 2009 newsletter has the theme "INNOVATION IS HOPE" This theme is suggested to us by our guest editor of that special issue who has accepted our invitation to be Guest Editor of this special issue and

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agreed to invite the different contributors from his organization and will write editorial for that issue. He is yet to announce the month of 2009 for this special issue on special theme.

Prof. George Teodorescu, Head of tesign design consultancy, director of IIID (International Institute of Integral design), ICSID (International Council of Societies of Industrial Design) board member.

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Content of forthcoming issue of May 2009 Vol-4, No-5

1 Designing to Live: The Value of Inclusive + Universal Design, Ricardo Gomes

2 Water and Play: A Rainwater Harvesting and Playground Design for a Community Center in Haiti, J. Rabanal, L. Magpiong and C. Bloome

3. Lifespan Furnishings: Before and After, Editorial, Ricardo Gomes

4 Wheelchair Riders in Control, WWI's Model of Technology Transfer by Peter Pfaelzer, Ph.D. and Marc Krizack, J.D. Whirlwind Wheelchair International, SFSU

5 It's Not About Wheelchairs, By Marc Krizack, Whirlwind Wheelchair International, SFSU

6 "Accessibility and Universal Design," Dr. Kevin Kelly, Coordinator, on-line Teaching and Learning, Academic Technology, SFSU



From the Editors Desk

Someone said

"Education makes people easy to lead, but difficult to drive; easy to govern, but impossible to enslave."

Universal Design at the San Francisco State University became institutionalized with a class action lawsuit by disabled students and faculty. It resulted in an agreement to make the campus more accessible. In December 2008 I was in San Francisco and took the opportunity to visit San Francisco State University, Department of Design and Industry. Prof Ricardo Gomes was very kind to walk me around and show me many of their implementations to make the campus more accessible. I also attended the presentations of an entire class on design research. I was particularly impressed by the immense empathy and care with which the jury was responding to the student presentations. The students came from diverse cultural backgrounds and reflected diverse attitudes. The jury was making every effort to get into the shoes of each student and helping them to see a little beyond. I said to myself, Universal Design has taken root at the level of feelings and attitudes at the Department of Art and Industry. There is only one way now. The way forward!

We take great pleasure in bringing to you the April 2009 issue of the Design for All Institute of India Newsletter put together by Prof Ricardo Gomes and his colleagues and students. The issue is a wee bit late but he has done a marvelous job in documenting the Universal Design initiative at the San Francisco State University. The result is a 12MB file, too big for your newsletter. The layout and editing was perfect as a book. It was most suited for a printed copy. We decided to break up their contribution into two issues, this month and the next month. We also decided that we will also publish through this forum their entire work as they had submitted it. This will be an extremely useful compendium, free from other distractions like topical news, for researchers and design educationists.

In this April 2009, Vol 4, No. 4 we bring you the introductory note by Prof Ricardo Gomes and the first two chapters of the book Universal Design @ San Francisco State University. There are eight papers. The first three are concerned with landscape design and how the same was designed at SFU, to facilitate accessibility. There are the sliding seating systems that give way to wheel chairs. Then there are the wind chimes and sound web, an audible sound based landmark wayfinding system.

The next group of papers talks of design curriculum at SFU and a student project aimed at exploring Universal Design in elementary education curriculum and education.

Landscape design and curriculum design are the two ends of Universal design in a university system. SFU has made a commendable effort in initiating and sharing this initiative.

In the next issue we bring you more that has been happening at SFU.

Happy reading and keep contributing. Let's keep the wheels of care rolling.

Lalit Kumar Das

IIT Delhi

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Content of Newsletter of April 2009 Vol-4, No-4

UNIVERSAL DESIGN @ SAN FRANCISCO STATE UNIVERSITY

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"Accessible Landscapes: Landscapes For All," Designing for	
Inclusion,	
Phil Evans/Brian Donnelly, SFSU :	?

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Creating a Sustainable Universal Design

Course Module 2: Universal Product Design- Discovery the	
Market Need,	
Brian Donnelly, Design Consultant, Former Associate Professor	-,
DAI, SFSU :	7

H2 AID, Student Universal Design Project, Tom Etheridge,
SFSU/Brunel University,
International Houseware Manufacturers Association Award
<i>Recipient</i> :

Other regular features



Ricardo Gomes

Professor and Chair of the Department of Design and Industry (DAI) at San Francisco State University. Ricardo Gomes is Director of the Design Center for Global Needs in the DAI Department, a non-profit international research and development center dedicated to promoting responsive design solutions to local, regional and global issues such as: inclusive/universal design, health care, the aging, community development and sustainability

Editorial Forward Universal Design @ San Francisco State University: *Ricardo Gomes*

Universal design is the design of all products and environments to be usable by people of all ages and abilities, to the greatest extent possible. (Mace, 1991)

Significance



In June 2001, San Francisco State University settled a classaction lawsuit by disabled students and faculty, agreeing to make the campus more accessible. SFSU has stated that the settlement reaffirmed the university's long-standing commitment to serving the needs of students and faculty members with disabilities and a long-term program of improving accessibility.

The wide range of people coming to San Francisco State University in differing capacities necessitates a strong commitment to improved access and flexibility. This commitment will shape the way the University serves its students and delivers its academic programs; the access to resources it provides its employees; and the efforts it makes to meet the needs of the community by providing educational and other services to a wide audience.

(SFSU Strategic Plan)

Overview

The history, development and evolution of Universal Design at San Francisco State University (SFSU) and within the Design and Industry (DAI) department has demonstrated the crossdisciplinary applications, and exchanges of the various services and resources at SFSU. This cooperative "universal" exchange has complimented the consonant academic and applied community outreach and service learning goals by such university sources as: the Accessible Landscapes: Designing for Inclusion Project; the Institute On Disabilities; The Disability Program and Resource Center; the Center for Teaching and Faculty Development: Universal Design for Learning Program; the Academic Technology: Accessible Technology Program; the Gerontology Program; The Rehabilitation Engineering Program; the Whirlwind Wheelchair International; and the Design Center for Global Needs.

The principles, policies, influences and applications of Universal Design have spanned the physical, cognitive, social, and economic realms within the universities from the built environment to academic policies and practice relevant to accessible technology, curriculum development, , policies from the built-environment to the pedagogical learning experiences. An integrated approach to universal design, - a.k.a."Good Design," in our department, has promoted an integrated academic environment. An interdisciplinary environment that has combined the expertise and methodology of disability advocates, and design professionals in the San Francisco Bay Area, along with educators, and students at the university. These mutual interests have promoted advancing the holistic principles and applications of universal design in the built and cognitive learning environments at SF State.

"...Essentially, Universal Design in architecture is about incorporating accessibility into the initial blueprint, thus eliminating the need for costly retrofits and ungainly, inefficient add-ons. Universal Design for Learning applies these same concepts to the field of education, asking faculty to rethink how they deliver their courses, engage students, and assess student performance in order to make learning accessible to all."

"[Here at SF State] UDL is built on solid foundations: brain research on how we learn, a commitment to social justice, and time-proven, best pedagogical practices."

- Dr. Pamela Vaughn is Associate Dean for Faculty Development and Director of the Center for Teaching and Faculty Development at San Francisco State University

Universal Design in the Design and Industry (DAI) department at SFSU:

The integrated approach of universal design principles into the curriculum development in DAI has been consistent with the mission of the department. This mission has been to promote an interdisciplinary educational program. An inclusive program that provides, to an ethnically diverse and multicultural student population, an opportunity to develop an individualized course of study in the areas of product design, graphic design /visual communications, manufacturing, and technology education. The department advocates a design program that is both inclusive and responsive in its representation of community-based needs, and services, as well as, the mainstream professional business and manufacturing sector needs.

The integrated approach to universal design in the DAI department is very holistic. It addresses the physical, as well as the social parameters of universal design. Its approach is both quantitative and qualitative. It is as interdisciplinary as it is inclusive. It is an approach that is socially and ethnically

diverse, in its attempt addresses barriers of economic disparity, gender bias, or racial and cultural difference in mainstream society.

Since 1991, in conjunction with the Design Center for Global Needs, universal design has steadily



become an integral and pervasive element within the undergraduate and graduate degree programs in the Department of Design and Industry. Professors teaching in the area of product design and development received a seed grant from the Universal Design Education Project to develop strategies for teaching lifespan issues to future designers - the students in DAI department and the university community at large.

The ACCESIBLE LANDSCAPES Project:

The ACCESIBLE LANDSCAPES Project was conceived in 1990 by Phil Evans, Director of the SFSU Campus, Buildings, Grounds and Facilities, as a logical extension of the excellent work in park and playground access by the firm of Moore Iacofano Goltsman, Inc. Their program was published in 1987 under the title "Play For All." Seed money was provided by the National Endowment for the Arts, under the Design Arts Program. Throughout the project we have had the expert assistance of Moore Iacofano Goltsman, Inc., Berkeley, California. Administrative and design costs were borne by San Francisco State University, primarily through the Department of Design and Industry, led by former Associate Professor, Brian Donnelly. The Departments of Disabled Student Services and the Campus Disability Coordinator provided guidance.

The objectives and principles of this inclusive design project was to design a more accessible landscape on campus that would facilitate accessible improvements to the built environment in meeting the diverse needs of a wide range of people.

The Process

The interdisciplinary and collaborative ACCESIBLE LANDSCAPES Project involved a series of participatory design focus group sessions, as well as scheduled design development sessions, with people who have experience with disability and accessibility issues. This collaborative experiential design process consisted of continual engagement with the same, as well as, different groups with evolving concepts for new furniture and other features which address the need to make the urban landscaped environment more user-friendly for all of us.

The results of the Accessible Landscapes Project have produced a booklet and several environmental design installations which have exemplified inclusive and accessible design solutions which will be featured in the proceeding chapters of this special newsletter. These preliminary solutions and prototypes



have stimulated discussion and further innovation throughout the professional community. The Project has helped create a new vocabulary of inclusion and a new standard for design of accessible, inclusive landscapes, to promote the development of user-friendly public landscapes throughout the world.

The Design Center for Global Needs and Universal Design

The Design Center for Global Needs was established in 1992 and co-founded by the DAI faculty members Brian Donnelly, James Bebee and Ricardo Gomes. Since its inception, the Design Center for Global Needs has been dedicated to the research and development of design solutions around such issues as accessibility, the elderly, healthcare, community development and disaster relief.

The Design Center for Global Needs in the Department of Design & Industry at SFSU sees a tremendous opportunity to make a profound impact on the issues of diversity in design education and its relative environment. An environment that constitutes, and needs to be more responsive, to the social, cultural and physical needs of the underrepresented, the disabled, and the disenfranchised. There is a need to expand and enhance the representation, awareness and the traditional focus of design education. A responsive awareness that goes beyond the esoteric values of the conventional marketplace to engage the needs of the expanding non-traditional markets of emerging economies . Economies that must exist and evolve, on the local, or international level, within the context of sustainable development.

Co-founder Donnelly had initiated several design projects on the SFSU campus, including a recycling container system with the Plant Operations; a fiber optic light guide for the visually impaired; a residential and a public seating system for the elderly.

Universal Design Symposium and Workshop

In an effort to promote design practices that recognize the capacities and needs of diverse individuals, the Department of Design and Industry (DAI), in conjunction with the Design Center for Global Needs (DCGN), conducted a special Universal Design Symposium in October of 1996. Promoting an interdisciplinary approach to design issues, the symposium featured seminars, and presentations by advocates from diverse user populations and design professionals, highlighted by an intensive 3-day student design workshop and final presentation.

This event featured some of the leading universal designers, disability-user advocates and policy makers such as: John Saleman, Universal Designers & Consultants; Molly Story, from



the Center for Universal Design at North Carolina State University; Abir Mullick from the IDEA at State University of New York (SUNY), Buffalo; Susan Goltsman, principle, Moore, Iacafano & Goltsman; Barry Atwood, president of Accessible Environments; Ralf Hotchkiss, Director of the Whirlwind Wheelchair International (WWI); Dr. Paul Longmore, SFSU, Disability Rights Historian and Policy Maker; and Dr. Mario Marino from the Center for Industrial Design Research at the University of Buenos Aires, Argentina

The symposium also featured the debut of a presentation, by John Saleman, of selected works from the Images of Excellence in Universal Design Project, a juried competition sponsored by the National Endowment for the Arts and the National Building Museum. The symposium was made possible in part by a grant from the Adaptive Environments Center (now the Institute for Human-Centered Design) in Boston as part of the Center's Universal Design Education Project.

The Symposium also gave us the opportunity to have the University President Robert Corrigan, give the opening address in recognition of significance and support of Universal Design at SF State. The symposium was highlighted by awarding Ralf Hotchkiss with a "UD" Award in recognition of all the beneficial contribution and work he has done in promoting social equity and well being through universal design, accessibility and Whirlwind Wheelchair independent living through the International projects and community service learning experiences.

The Workshop participants greatly benefited from the international leadership and user-centered research expertise of Dr. Mario Marino, from the Center of Industrial Design Research (CIDI) at the University of Buenos Aires in Argentina, who facilitated the workshop sessions.

What was one of the most significant aspect of the universal design conference at SFSU was that it was the first universal design symposium and conference on the west coast of the United States. Up to this time most of the universal design initiatives were being conducted either at the Center for Universal Design at North Carolina State University at Adaptive Environments in Boston, at the IDEA Center at SUNY, Buffalo New York or at the Trace Center in Wisconsin. Consequently, we were very pleased to be able establish such a presence by hosting such a pivotal event for the UD community in the San Francisco Bay Area.

Today, Universal Design at SF State is represented in many diverse and interdisciplinary areas throughout the university faculty, curriculum, administration, facilities and grounds. The university has made and delivered on its commitment to sustaining accessible, flexible and diverse Universal Design learning and built environment.

To this affect, the university has embarked upon and implemented programs in facilitating free, open and equitable access to the physical, technological and learning environment. The special "Universal Design @ SFSU" issue highlights the longstanding, as well as most recent interdisciplinary efforts and accomplishments at SFSU, such as:

• "Landscapes For All," Designing for Inclusion (Phil Evans)

- The Design Center for Global Needs (DCGN) Universal
 Design Education Initiatives
- Universal Design (UD) Curriculum Initiatives in the Design and Industry (DAI) department
- Coordination and Participation in the Designing for the 21st Century International Student Design Competition, Rio de Janiero, Brazil, Dec. 2004
- Hosting of the "Universal Design Symposium & Workshop" at San Francisco State University (SFSU), October 1996
- SFSU Institute on Disability (Prof. Paul Longmore)
- Rehabilitation Engineering Program (Prof. Ray Grott)
- Special Education Program, Prof. Sandi Rosen and Dr. Alise Palliard
- Universal Design and Aging in Place, Gerontology Program, (Prof. Darlene Yee and Dr. Anabel Pelham) Exploration of Concepts of building and retrofitting facilities for aging in place, as will the use of design elements to create healing environments to improve the quality of life for residents..
- Disability Program and Resource Center, Web Accessibility Standards and ACCESS Website initiatives (Gene Chelberg, Geoff Brown, Nicole Bohn)
- Academic Technology, On-Line Learning and Accessible Technology Initiatives (Dr. Maggie Beers and Kevin Kelly)
- Center for Teaching and Faculty Development (CTFD), Universal Design for Learning Initiatives and Faculty Associates Program
This long-awaited special issue on "Universal Design @ SFSU" at the gracious bequest of the Dr. Sunil Bhatia of the "Design for All Institute of India" features a historical retrospect, state and vision of Universal Design at San Francisco State University dating from 1991 to today. It is a great honor and privilege to coordinate and edit the vast range of accomplishments and contributions that are reflected in the selected writings, articles and projects that are enclosed in the proceeding chapters in this special "monument" of Newsletter dedicated to "Universal Design @ SF State!"

Prof Ricardo Gomes, Director Industry & Design San Francisco State University.

Accessible Landscapes: Designing for Inclusion

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America's public landscapes have traditionally been designed based on criteria appropriate to only the non-disabled population. As regulations have begun to dictate the need for access, we have seen a proliferation of ramps, railings, and other improvements. Unfortunately, some of these new obtrusive features in access have been or otherwise dysfunctional in terms of the overall use and enjoyment of the site. Despite federal and state legislation, most persons with disabilities still have limited access to the pleasures of public landscapes.



The Accessible Landscapes Project was conceived in 1990 as a logical extension of the excellent work in park and playground access by the firm of Moore, Iacofano & Goltsman, Inc. Their program was published in 1987 under the title "Play

for All."

The Accessible Landscapes Project is San Francisco State University's award winning program committed to bringing inclusiveness to the campus landscape. Through efforts by students, faculty, facilities, and administration, inclusiveness and accessibility standards have been raised throughout the campus. Without the help of the Engineering Design Center (EDC), Design and Industry department (DAI), Grounds Department and the Disability Programs and Resource Center (DPRC) this project would not be possible.

We believe it is possible and practical to design more accessible landscapes, and that access improvements can meet the needs of a wide range of people. The Accessible Landscapes Project is dedicated to these principles.

The Goals of the Accessible Landscapes Project and this book are to stimulate discussion and further innovation throughout the professional community, to help create a new vocabulary of inclusion and a new standard for design of accessible, inclusive landscapes, to promote the development of user-friendly public landscapes throughout the world.





Click photos to enlarge

The Universal Seating Design Studio is part of San Francisco State University's ongoing process to maintain a sustainable and accessible campus. Located on the Fine Arts Patio are the 'Open Bench' and 'My Table 2'projects that recognize the need to create outdoor furniture that is accessible and usable for all users. The seating studio is accessible via ramp, stairs, and elevator and each seating space features adjustable benches and tables to maximize utility and comfort.

The Open Bench is an answer to the constraints of traditional fixed benches. This bench is user-friendly and accessible for all. The bench is safe, practical, combines design and comfort in a truly versatile, inclusive, and accessible outdoor bench.

Features:

- Elevated floral landscape for communal centerpiece.
- Fully integrated accessibility
- Dynamic and versatile for comfortable seating
- Bench seats slide horizontally in either direction
- Bench seats become stationary while seating
- Friction brake controls the slide
- Vandal resistant surface, virtually no maintenance



а





Multiple configurations

• Table and bench material is 100% recycled plastic lumber



My Table 2 is designed to be easily adjustable using an electrical motor powered by solar energy. By allowing users to adjust the height of the table the designers have made it possible for wheelchair access from all sides. Features:

Fully integrated accessibility

- Solar powered electric motor
- Dynamic and versatile for comfortable seating
- Capable of lifting up to 500 lbs.
- Safety switches prevent the table from moving downward when pressed
- 100% Recycled plastic table top
- Vandal resistant surface, with little to no maintenance



Sound Web

The SFSU 'Sound-Web' is a pioneering universal design based audible wayfinding project, currently being spun throughout the San Francisco State University campus. The Sound-Web utilizes a series of solar-powered electronic playback devices to steadily emit a pulse of uniquely discernable sounds. These pleasing tones are sensitively projected from sculptural enclosures strategically placed throughout the campus landscape, acting as both a pleasing environmental entity and as an informative fixed audible point of reference.

To facilitate improved wayfinding, the Sound-Web distinguishes between four fundamental types of campus landmark. These local geographic components are the schools major pathway intersections, the access to student support facilities such as the library and health services, as well as the

campuses main entrance points and arterial public transportation stops.



A Sound-Web audible landmark unit catches morning sunlight while marking the entrance to the campus from 19th Ave.

Audible Landmark

Careful attention was given to the selection of sound for each style of campus landmark. As in the original pilot program, the sound of wind-chimes are used to mark major pathway intersections; their 'ding' and 'dong' tones may help provide a mental association to the walkways random interweaving pattern of travel. Likewise, the structured and rhythmic beat of a percussion section fittingly marks the access to selected student support facilities. At the entrances to the campus, visitors are welcomed with the friendly call of a non-native bird, and while awaiting public transportation, the chirp of a country cricket may now keep you company.

The Sound-Web project currently consists of seven audible features, and continues to grow with a number of additional installations in progress.





A map showing current Sound-Web installations on the SFSU campus.

Aluminum Enclosure

To make each installation a simple one, a team of SFSU students designed and fabricated a sculptural enclosure to house each landmarks electronic components in one easy-to-

install unit. Each enclosure is made from a frame of aluminum angle stock surrounded by a tight skin of bent aluminum sheet, and capped at 45 degrees with a solar-panel. A cement base is then poured, providing the unit with a secure weighted foundation for easy installation in planted areas.



A cut-away view of the sculptural aluminum enclosure.



Daring House and Daring Street

Take a 360 degree tour of a Sound-Web feature

Electronics

When it came to designing and producing the heartbeat of the Sound-Web, students and staff from the San Francisco State University school of Engineering successfully developed a lowmaintenance, solar-powered electronic playback device. The teams current design consists of a chain of five core components: A 5-watt solar-panel, an all-weather speaker, a printed circuit-board with a connected rechargeable battery pack, and a watertight electrical gang-box. This series is capable of emitting a pulse of recorded sound in all types of weather; it is easy to produce and requires little to no on-site maintenance.

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1 2 3 4	4	Tysonic SunWow Fechnologies Poly-Plantin Cristol	OEN 5 Watt salar-sand PRP-13 weather-proof speaker	5.375" × 31.875" × 1.375" 4.51 × 475" × 2.25"	REAL REAL REAL REAL REAL



A layout of the five main electrical components which combined creates the heartbeat of the Sound-Web.



The circuit board and controls.



Campus Pathway Access Program

SF State's Campus Pathway Access Program is an ongoing project to render all campus pathways fully accessible and graciously inclusive. We have succeeded in virtually eliminating staircases as an element of outdoor public circulation. The campus maintains an up to date map that provides detailed information on accessible routes, restrooms, and parking throughout the campus. The campus also maintains an <u>online</u> <u>construction access alert program</u> which advises on any disruptions or detours necessary during campus improvement work.

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Credits: Brian Donnelly (former Associate Professor) Robert Natata Susan Goltsman, MIG Prof. Ricardo Gomes Michael Day Kevin La Jasper Kirsch Josh Williams D. Springer; Laura LoForti ; Lisa Rau and Nan Broadbent, Staff Writers (SF State News), Editor, Ricardo Gomes

(Excerpted Articles from Contributing Writers, D. Springer (SF State News, January 23, 2006); <u>Laura LoForti</u> (Golden Gate X-Press, SFSU, February 13, 2006); Lisa Rau with <u>Nan Broadbent</u>, Staff Writers (SF State News, May 28, 2008), Editor, Ricardo Gomes)

In 2004, a partially blind San Francisco State University (SFSU) student, Toshiro Yamamoto, found the answer to facilitating his problem of navigating the campus pathways and building locations through the use of conventional wind chimes. The initial implementation of wind chimes placed strategically through the campus pathway intersections, became a 'guiding light' to Yamamoto

Yamamoto was walking with his white cane from 19th Avenue to his house on 31st Avenue. As he was counting each crossing he got distracted, lost his count and ended up lost. The sound of familiar wind chimes in the neighborhood helped him find his way home.



Chronicle / Paul Chinn

Yamamoto related this home experience to similar situations when he was on the university campus. He stated that if a visually-impaired person gets lost they can ask people (where they are), but sometimes nobody is around, especially at nighttime, or weekends. In this situation, if there were wind chimes placed strategically on campus, these audio cues could be very helpful, as well as a comforting ambient sound.

This motivational experience prompted Yamamoto to contact sources in the <u>Disability Programs and Resource Center</u> (DPRC), which led to the collaborative creative and resourceful exploration with Phil Evans, manager of campus grounds; Geoff Brown, a coordinator of the <u>DPRC</u>; and Ricardo Gomes, Chair and professor of the <u>Design and Industry</u> department. This is not the first time SFSU has explored offering audible clues to visually impaired persons. In 1990, Evans collaborated

with design and industry faculty members Brian Donnelly and Robert Natata on a study funded by the National Endowment for the Arts. project, entitled "Accessible The Landscapes, Designing for Inclusion," explored such multipurpose campus enhancements as talking maps and furniture that accommodate wheelchair would users. Not long after, design and industry students constructed two

accessible

examples

of



outdoor The wind chimes near the J. Paul Leonard Library

study tables on the Fine Arts building patio. The project also spawned a book and an <u>accessible landscapes Web site</u>, which are routinely consulted by designers worldwide.

The initial Wind Chime pilot program consisted of wind chimes hung from a light pole near the library and other strategic resource and service centers on campus, where students who are blind, have other disabling impairments, or any other campus pedestrian may find it beneficial and/or resourceful to have these wayfinding audio cues. Wind chimes were strategically placed near entrances and pathway intersections adjacent to the Student Center as a reminder of an approaching steep, wide staircase leading down into a building is nearby. More sets were hung near other buildings on campus such as the Humanities and Student Services buildings. Geoff Brown, stated that our legislation requires to make things accessible, for example with the room number in braille, or the yellow tape on steps for low vision students, but it doesn't say anything on auditory inputs. Phil Evans believed from the outset that the wind chimes would, "... provide a multi-dimensional experience for everyone."

While the chimes were an easy and logical innovation to implement, the pilot program had revealed а few environmental problems of its own. The problem with efficiency and reliability of wind chimes is often the wind, either too much, or not enough. It is an element that is only as predictable, as Mother nature wants to be. Sometimes the wind chimes are easily damaged and their strings get tangled into silencing knots, requiring a frustrating and constant need for maintenance.

The weight and design of the test chimes did not guarantee regular ringing in campus winds, and the sounds of each set were too similar for users to make a distinction about which represented. location thev Consequently, Phil Evans approached the engineering and product design students at SF State and asked them to develop a more controlled, reliable and efficient concept of a wind chime. This interdisciplinary design collaborative venture between students and professors in the Engineering and Design and Industry departments, emulated the applied hands-on learning experiences that are executed in the real world research development environment.

Design and Industry students together with students from the Engineering department collaborated to develop a more effective solar-powered, audible device with variable audio cues. The "Sound Web" is a series of wind chimes that provide visually impaired people with audible cues, helping them navigate the campus. This successful collaborative problemsolving venture launched the development of the "Sound Web Audio Wayfinding System at San Francisco State University."

Former Design and Industry department Product Design major, Mike Day, who was one of the principle design coordinators for the project, in conjunction with other Phil Evans, Director of Campus Buildings, Grounds and Facilities Services, utilized the "Sound Web" project as his senior degree thesis project. "Inclusiveness is a hallmark of a mature and forward-looking institution and certainly of the pre-eminent urban university," said Phil Evans, director of campus grounds. "It takes effort, creativity and determination to develop a new idea well, and we have succeeded thanks to the many individuals who have contributed energy and thought to this goal."



A Sound Web audible landmark unit marks the entrance to campus from 19th Avenue. Photo credit: Mike Day

The "Sound Web" project draws on student contributions in all aspects, including initial brainstorming, conceptual design, construction modeling, project management, publications, outreach and focus groups. Senior DAI Product Design major, Josh Williams, who has worked with many of his classmates on the Accessible Landscapes Project, takes pride in his work maintaining the Sound Web on campus. "People enjoy them as cultural objects," said Williams, who has worked with the project since 2006. "The intention was to have them also be enjoyable to see. It's for way-finding, but this brings it to a whole other level. I find that rewarding."

The collaboration between staff, faculty and students includes the Department of Special Education, the Disability Programs and Resource Center, the Department of Design & Industry, the School of Engineering and the Universal Seating Design Studio, a program which formulates new ideas each year. The various ongoing projects also employ new sustainable technologies: solar power, recycled plastic lumber and other special means of enhancing environmental stewardship.

The University's Accessible Landscapes Project has received a national award from the <u>American Physical Plant</u> <u>Administrator's Association</u> (APPA) for its multifaceted commitment to the accessibility of SF State's campus. The <u>APPA's Effective and Innovative Practices Award</u> recognized the project for enhancing the inclusive campus. The award includes a \$4,000 grant and special recognition in APPA's Facilities Manager magazine, and is part of the organization's mission to elevate the value and recognition of facilities in education.

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D. Springer; Laura LoForti ; Lisa Rau and Nan Broadbent, Staff Writers (SF State News), Editor, Ricardo Gomes

Creating a Sustainable Universal Design Curriculum Methodology

Ricardo Gomes

Since 1990, Universal Design (UD) has steadily become an increasingly integral and pervasive element within the mainstream built environment, consumer products industry, and overall marketplace. Concurrently, further design research, education, and dissemination of these wide-ranging principles have emerged to become synonymous with good design ethics, social responsibility, and design methodology in the undergraduate and graduate degree programs in the DAI department. These ethics and values have continued to expand, as well as evolve, with the diverse infusion and directives of disability advocates, educators, design professionals and students interested in advancing the principles of universal design principles in the built environment.

Since the seven principals of UD was introduced in 1991, there has been little evolution of these foundation principles beyond its homogenous and "clinical" approach to facilitating a wider range of users physical needs and abilities. There is a need to enhance these principles to address the significance of aesthetic appeal, emotional impact, as well as social and cultural relevance of design to the end user and overall environment. A successful and well-designed universal product, or environment should accommodate the multiple senses of touch, smell, taste, visual emotion, as well as enhancing ones user/environmental experience. In addition, the fundamental principles of universal design are still very much limited to a conventional Western concept of usability, which largely represents a contemporary, urban and industrialized perspective to the pragmatic world of accessible/barrier-free design.

The investigation and preliminary presentation presented at the Universal Design 2002 Conference in Yokohama, Japan, looked at expanding the focus of Universal Design to be more "inclusive" and holistic in respect to issues of developing products and environments that better appeal, as well as

facilitate users of various ages, abilities, cultures, and economies of scale.

Universal Design Assessment Paradigm

In the Fall of 1995, through the Design Center for Global Needs at SFSU, Dr. James Bebee developed an assessment instrument for Universal Design concepts.¹ This evaluation instrument looked at expanding and enhancing the core principles of



universal design to address concerns of socioeconomic, cultural aspects, along with considerations for aesthetic, function, production, and market factors.

¹ 1 Bebee, James. 1995. *Universal Design Assessment Paradigm*. San Francisco, CA: Design and Industry Department, San Francisco State University

In the utilization of the revised universal design assessment paradigm, a number of factors, or filters were applied to the core seven principles of universal design. An equity filter expanded the equitable-use principle of universal design to take into account specific concerns and considerations relative to culture, race, gender, age, and physical status. The use of such social factors acknowledges that the foundation and traditional criteria for the creation of universal design principles stems from the values of a largely industrialized-Western society, economy, and infrastructure. Consideration and utilization of such equity filters, within the core context of universal design principles, will facilitate bridging the global path of dissemination and implementation of universal design principles in a holistic, comprehensive, and inclusive manner between diverse cultures and societies.

In addition to aesthetic and functional, the universal design assessment instrument has included, production and market filters to add the pragmatic component necessary for a realistic and feasible chance of product realization and success. There are those well meaning universal design fundamentalists who may perceive the inclusion of these additional factors may complicate, and possible intimidate, or alienate potential conformers. However, without the practical consideration for the flexibility and enhancement of the core universal design principles in respect to socioeconomic, cultural factors, along with the concerns for aesthetic, function, production, and market factors, there is a limited hope of designing sustainable and responsible products for a diverse global society.

Universal Design Research & Development Curriculum Methodology

One of the key success in universal design was to also develop a clear instructor curriculum methodology in this respect we look at a number of concepts for universal design a number of curricula structures both nationally and internationally thru looking at design professional organizations or design firms such as IDEO, as well as studios in Argentina and Brazil. The universal design that we outline looks at areas of the basis of interest in projects in which we are concerned not only with the design issues , but also issues of health, legal policies, economic standing and social values. In this regards we have developed a universal design curricula for a fifteen weeks semester that constituted,

- 1. EIGHT (8) modules of DESIGN emphasis for eight weeks of design emphasis;
- 2. TWO (2) modules of two weeks of HEALTH areas;
- 3. ONE (1)module or one week of LEGAL issues and policies;
- 4. ONE (1) module or one week that goes with ECONOMIC concerns in terms of affordability of design;
- THREE (3) modules that also looks at the SOCIAL areas of design in terms of aging transitions, independent living lifestyles and the social environment.

San Francisco State University





Chart Concept: Centro de Estudios de Diseno Universal, Estudio S+F, Buenos Aires, Argentina.

In all these modular areas we conducted a lot of community and professional outreach which were executed thru the principle design research methodologies of understanding, observation, user center design, evaluation refinement, finally implementation.

 In regards to the DESIGN areas we were looking at domestic and personal environments, looking at existing product profile.
We conducted consultation with Ralph



Hotchkiss in the world one wheelchair, so he could better give us understanding about handle utensils and

appliances, as well as analyzing and conducting other comparative research.

In regards to the HEALTH area we were looking at



issues of gerontology, mature market places, dependence and selfefficiency, stereotypes and assumptions, and other parameter and

criteria that help to frame an inclusive environment. We would conduct workshops with various retirement communities in the San Francisco Bay Area, and we would consult with these users and the environmental spaces at the outset of the design stage, so we can establish a clear understanding of what the problems may be.

• In regards to the SOCIAL areas we are looking at optimizing independent living and life style, grow and flexibility in the domestic environment, universal design as a social phenomena, as well as linking into generational benefits. In our efforts to gain a better understanding of independent life style and flexible environments, we would consult with Gene Chelberg, Director of the



SFSU Disability Program and Resource Center Director in regards to some of the concerns, services, and resources that they provide to their constituency. We were very interested in knowing how design can be more cognizant of those resources and services.

 In regards to the LEGAL areas we are looking at dismantling discrimination by design, social policies,



and the quality of life, the overall benefits of the disability rights regulation and policies for all. In this respect we consulted with Dr. Paul Longmore, the Director of the Institute on

Disability at SFSU, who has written a book call "Why I Burn My Book" and other essays on disability. I believe it is very important that students have a sense of the legal nature of design,

and the environment, and how they can be more responsive in having design meet those needs.



In regards to the ECONOMIC area, we are looking at the benefits of an inclusive approach to identifying target markets. In this respect we seek to emphasize that marketing be affordable and feasible benefit of the universal design. We also seek to quantify the valueadded appeal, desire and usability of universal design. In this respect we trying to optimize product development and management, particularly in regards to concern of lifecycle design factors and assessment. So, in this regard, economics addresses not only affordability; not only appeal and desire; but also addresses the feasibility of the sustainable nature of a product.

Another curricular model that we utilize at SFSU illustrates how students address design methodology and processes in the implementation of universal design curricula development, is having to have a clear understanding of the environment, in this case,





(1) UNDERSTANDING is the first and primary stage that we look at to finding the problem, understanding the problem thru discovery. We want to compel students to be removed out of their comfort zone. We want them to go there, to go beyond their studio, their work place, their home, their computer ... where design is applied and where it can be most beneficial. In this regard we look at trying to orientate the students to universal design principles and methodology. We have them look at existing products and environments to profile them and analyze them. We have them conduct literature reviews, compare market research. We look at content analysis as well as assimilation analysis, we also have them begin to conduct interviews in focus groups.

- (2) OBSERVATION is the second stage that we have them look up after they established their clear understanding of the problem. Observation can be done in a variety of manners and approaches such as:
 - interview focus
 - artifacts reviews
 - looking at the existing market
 - looking at the user profile
 - site observation
 - user observation
 - media documentation
 - interview
 - shadowing



There are number of different ways and methods that we can engage our students in prompting them to explore problems and research that is outside of their comfort zone and sphere of influence. The areas that we really like to touch on, which again universal design learning principles are address and expression representation, engagement done thru participation and documentation. Once the students have been able to collect and gather all this information thru the compilation of developing а clear understanding and observation of the subject matter, they them need to analyze and interpret that data.

(3) INTERPRETING is the third stage which will be translating the research data, realizing they are not the experts and they need to be very narrative and interpretative and in their own words understand the situation. So developing their basis of interest for the project, their project proposal, comparative design researching examples, inspiration, branding strategy, how again they are going to frame or package this concept in terms of the interpretation, the validation of the problem.

This can be done also in developing character profiles, user profiles, and also to establish what would be the key features or specifications or selling points of their design.

(4) VISUALIZING/REALIZING

Once they have established all of these areas, then at that time can



they begin to start to visualize, to realize their design idea, their design approach through conceptualization and solution development. This is where the exploration begins from the visual idealization in modeling. Visual brainstorming, initial design sketches, establishing a design guide and frame work for their design, looking at potential life cycle assessments in regards to material considerations, further development of their concepts in establishing a clear design direction but at the same time always addressing user participation and this regard this is what we've also have students reach out to design professionals. In this case we've worked with Susan Goltsman, and who has been very kind over the years to assist the DAI department and being very cognizant of where the design profession is going with these areas.

(5) EVALUATING & REFINING is that testing and



refining process of design that is paramount. The whole design problem solving process must the engage in testing and refinement of

design solutions. So this can be done through simulations, role playing, testing with various groups so they can try to discover problems that they could not forsee. So this process involves engaging potential users or placing the project in the particular environment which could be developed.

(6) **IMPLEMENTATION** is the final stage in area number six would be the implementation stage: the tangible solution.

In regards to the projects that students have developed as these result of universal design curriculum and methodology, its allowed us to produce some



very comprehensive, responsible, and inclusive projects. This again is highly due to the collaborative participatory outreach that is an integral component of all design processes. We have had our students not only work with various elderly communities but also dealing with persons with different abilities and disabilities to gain a higher sensitivity and awareness of the diverse needs of a wide range of users.

In summarizing the benefits of universal designs and sustainable design, one looks at principles of how you can establish the inclusive premise for a good design. Over 30 years ago, the artist Richard Hamilton wrote a book entitled "Popular Culture and Personal Responsibility", in which he defines ideal culture as one in which awareness of its condition is universal. Good design can be achieved by focusing the efforts of the designers to develop products in environments that will be more inclusive as oppose to preferential and enhancing and facilitating the areas of urban community development.

Three Levels of Sustainable Universal Design Curriculum Development

General Education/Introductory-Level Design Course

DAI 300: Design Process is an introduction to creativity and the design process. The course follows progressive steps to develop and enhance the student's knowledge and ability in executing the design skills necessary to analyze, visualize, and conceptualize the design development process. In this course, the students engaged in a "user-environmentally friendly packaging design seminar/workshop." The Packaging Design Seminar/Workshops exemplify how we have been able to promote a cooperative and integrated approach to curriculum development.

User-Environmentally Friendly Packaging Design Seminar/Workshop

The DCGN, in conjunction with the Institute on Disabilities at San Francisco State University, conducted a special program for design and packaging professionals that was structured to heighten the general awareness of many of the problems associated with opening today's packaged consumer products. Whether able-handed or not, everyone can relate at least one "trying experience" he, or she has had while attempting to open a particular package.

Ellen Leiber, president of Access Abilities, facilitated the focus of the seminar and workshop with a critical look at the userfriendliness of present day consumer packaging. The seminar focus was structured to address the concepts of Universal Design, as well as the rapidly growing size of the "not-so-ablehanded" market within the American consumer base.

The seminar consisted of a diverse and interdisciplinary panel of design and packaging professionals and student participants. Each panelist represented one of the major areas of concern in developing creative and appealing packaging concepts that safely and



securely protected the packaged contents in an environmentally and user-friendly context. Representing the graphic, commercial, and marketing criteria was Fabienne David, senior designer from Primo Angeli Design. Representing the preservation, structural, as well as shipping and handling criteria, was Dr. Jorge Marcondes, coordinator of the Packaging Engineering Program at San Jose State University, and, finally, representing the consumers' concerns for the ease of access to adequately opening and closing packaged products and containers was Ellen Leiber.

The workshop provided students with a more "experiential experience." To personalize the difficulties in question, Ms. Lieber led the students in a variety of simulation experiential exercises in which they attempted to open an array of consumer packaging items, while wearing devices that limit their hand motor skills and upper-extremity motion.

Package Design Focus

The focus of the packaging design project was to alleviate and facilitate the sometimes difficult task of opening consumer packages, while consequently addressing the environmental concerns for developing more ecologically responsive packaging. The objectives of this assignment were to heighten the awareness of many of the problems associated with opening today's consumer packaging. Students were also were asked to address in their solutions, the problems associated with the disposal of excessive packaging.

Intermediate/Upper-Level Course

In the intermediate/upper-level course, DAI 400: Product Design 2, taught out of the Design and Industry (DAI) department at San Francisco State University (SFSU), students have focused on the applications of products and environments that address the principles of universal design. These inclusive design considerations look at issues of accessibility, diversity, and sustainability in product design, development and implementation.

The course objective is to develop a comprehensive understanding of the principles of universal and inclusive design within the context, guidelines, and objectives of responsible design. Students are required to develop two projects over the course of the semester that vary from houseware utensils and appliances; kitchen and bathroom faucet fixtures; and universal wireless communication devices. Before developing their projects, students are required to conduct an evaluation of a selected existing product utilizing the universal design assessment paradigm form.

Following this analytical assessment, students must conduct an existing product profile documentation in order to establish the merits and potential for improvement of the product in respect universal design principles, target market, product material and production sustainability; and product-development management.

The course format places greater emphasis on user-based design instead of object based design methodologies. The coursework is divided into three equal and parallel layers which concentrate on the three basic aspects of product design²:

Process: The knowledge, techniques, and skills designers employ in the product development process. (product line management system)

² Anders, Robert, IDSA, and Fechtner, Daniel, MD. 1992. Design for Physical Independence Program, Industrial Design Curriculum Development: "Universal Design." Brooklyn, NY: Pratt Institute, Department of Industrial Design, School of Art and Design.
People: The development of knowledge, insights, and sensitivity, about the users of our products, our final clients. (universal design)

Product Feasibility of product concept in respect to its manufacturing design efficacy in ease-of-assembly, as well as, overall assessment of the product life cycle's environmental impact.

Students also participated in collaborative focus groups, such as with the Center for Elders and Youth in the Arts (CEYA) in conjunction with the BridgePoint Retirement Community and the Goldman Institute on Aging/On-Lok Senior Health Center. These sessions have greatly facilitated the universal design handheld kitchen housewares/utensils product research and development for the students. The seniors, the CEYA, BridgePoint and On-Lok staff evaluated and suggested how the students could better develop and market their product design houseware utensils. The senior's feedback and comments were critical to enhancing the student's understanding of the needs of elderly users with limited hand dexterity. This communityservice learning experience greatly enhanced the student's ability to develop a responsible awareness to the value and significance of end-user research and interaction in the product development process.



The course has included consultation, visiting lectures and critiques by internationally recognized designers in the field of design for the aging and disabled, such as Patricia Moore, president of Guynes Design; and Ralf Hotchkiss, Whirlwind Wheelchair International. The resultant projects in this course have received outstanding praise and recognition from national and international experts in the field of design for persons with disabilities.

Student projects generated in this course, have been submitted to national and international design competitions, such as: The Industrial Designers Society of America (IDSA)/Motorola Universal Access Wireless Communication Device Student Design Competition; the National Houseware

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Manufacturers Association Student Design Competition; the Handitec International Design Competition for Persons with Disabilities in Paris, France.

In 1997, the NHMA awarded another student for his patented design "Scnife" kitchen utensil concept. universal The IDSA/Motorola Universal Access Wireless Communication Device jury awarded two of our students, Ming-Wei Cheung and Joanna Lee, for their Universal Solar Cellular Phone concept. This resourceful and responsible product was featured in the Motorola Booth at the 2001 Consumer Electronic Show in Las Vegas, Nevada. In 2004, Mortar & Pistle; In 2002, universal designed, one-handed vegetable/fruit peeler. In January 2009, the National Housewares Manufacturers Association (NHMA) Student Design Competition awarded one of our students, Tom Ethridge, an Honorable Mention Award for his "H2 AID," Water Temperature Indicator for Stroke Patients.

Student UD Product Concepts

Vegetable Peeler, 2002 IHMA Award (Adolph "Johnny" Venida)



Stationary vegetable peeler, designed for a manual, onehanded use. One may say, well why may one want to have a one-handed peeler? How many one-handed users are out there? Well the situation that we look at in addressing such a need is that when one looks carefully at one-handed use, there are many situations when we have only one use of one hand. For example, a mother that may be holding an infant while on the phone and having to reach for something, people are constantly multi-tasking and being able to do something with one hand, or with a limited range of movement or grips, facilitates a wide range of users. Someone who has small hands, large hands, maybe arthritic hands, or low strength hands, these are all considerations that span age, generation, user ability, gender, race, and culture. So in this study, we had our student developing this one-handed user by going to a retirement community.

In this case it was the OnLok retirement community, in which we engaged a number of users, and he gained a great understanding of the function and use of the project, and was able to make significant improvements on the product as a result of his interface in outreach and feedback from the older users. We went through a series of workshops where he would come back for constant improvement and refinement and also not only from the functional sense but also in what may be appealing in terms of shape and form for the users.

Hot Food Containers, 2002 (Arvind Gupta)

Facilitating food delivery services for or elderly, disabled, low income users, similar to a "Meals On Wheels" service



"Faucet Friend", 2002 IDEA/BusinessWeek Award (Charles Floyd)

"Faucet Friend," developed by Charles Floyd. A simple, adaptable water temperature indicator device for kitchen and bath faucets. It has a chromatic coating device, which changes color with temperature, to indicate whether the water temperature is hot, or cold which can be beneficial to all users, particularly children, or elderly users.





Lotus Laundry Sorter, 2002 (Tuyet Tran)

Stationary and transporting laundry bag that can be used by all users, but particularly for wheelchair users.



"El Kettle," 2003 (Dan Xiong) Another project was called El Kettle which was essentially a design of a kettle, a tea kettle, water kettle, and one took into account many concerns for safety and terms of in the stove having hot water, being able to transfer that from the water faucet to the

container to the stove to the glass or cup in which you may be pouring. So there were a lot of dynamics that one



thinks about in using a tea kettle not just about heating the element but also about pouring it and being concerned about safety and efficiency and ease of use.

Mortar and Pistil, 2004, IHMA Award (Aya Osada-

Rosada and Laura Urguiaga) Another product was a design award for a Mortar and Pistil for cooking preparation that couldn't facilitate a number of different types of grips and hand sizes as well as the quantity and amount one may want to work with. This is a project that was done by two students Aya Osada-Rosada and Laura Urquiaga and thev produced a fantastic project that won an International Houseware



Manufacturer's Design Award, so we are very happy with that project.

Graduate-Level Course and Creative Work/Thesis Projects

In the graduate-level course, DAI 800: Graduate Design Seminar in Industrial Design Practices, as well as in the graduate students' Creative Work/Thesis Projects, students have focused on advancing inclusive approaches to universal design principles and applications.

The objective of the graduate seminar is to familiarize the student with the influence and impact of design in our global marketplace and social community. The seminar's focus is to establish a "global design consciousness" that is environmentally responsive and user-friendly in its attempt to improve our general livelihood. The seminar examines the question of how cultural identity and influences can, or should, contribute to product form, function and social development in the product marketplace and built environment.

The seminar also reviews the concerns for the appropriate development, use and fusion of advanced technology that could assist lesser economically developed countries in establishing their own identity in the both in a domestic (local) and international (global) marketplace. The seminar evaluates the ideology of what constitutes socially responsible design.

Students are required to develop case study topic of their choice that identifies and develops design applications that address inclusive design goals, in respect to universal design, sustainable growth, and development in all societies.

The seminar seeks to nurture a cross-cultural and diverse interdisciplinary environment that will promote a responsive exchange amongst not only design scholars, students and professionals, but also manufacturers, consumers and the socially alienated. Such dialogues have been realized and disseminated through the designated lectures, research, and development activities.

The participation of visiting lectures from the local and international arenas facilitates the varied seminar topics. The diverse weekly seminar topics and backgrounds of the speakers include: architecture, universal design, sustainable design, community development, urban design, small-scale enterprises, gender-issues, product, visual communication and information technology.

Our location in the San Francisco Bay Area has exposed our program to a tremendous wealth of design researchers, professionals and firms that have built their reputation and expertise in the successful commercial marketing, consumer interest and institutional/public appeal of universal design principles and applications in our built-environment. Individuals and groups like Molly Story, former Director of the Center for Universal Design, Professor/Author, Paul Longmore, Disability Rights Historian/Advocate, Ralf Hotchkiss, Whirlwind Wheelchair International, Susan Goltsman, MIG and Smart Design have participated in exposing and sharing with our students the broad-based and inclusive everyday approaches to universal design as an inherent and indistinguishable criteria of "Good Design."

In the Creative Work Projects that graduate students develop, it is quite often that their projects will also incorporate social, cultural and low-income economic conditions both locally and internationally. Recent projects have addressed, Public Wayfinding Systems in San Francisco, Public Toilets for Women, Applying Universal Design to Package Design, and Universal Manual Carpentry Tools in Brazil.

Lessons Learned for Expanding the Scope of Universal Design

In the past eighteen years, the integrated approach to universal design education has been a "seamless" infusion of into the integral design ethics, values, and principles of the product design curriculum in the design and industry department. This inclusive design approach has heightened the awareness of the functional requirements and opportunities for students, faculty, and the extended community to the value of interdisciplinary educational development at San Francisco State University.

The Department of Design and Industry at SFSU sees a tremendous opportunity to make a profound impact on the issues of diversity in design education and its relative environment. An environment that constitutes, and needs to be more responsive to, the social, cultural, and physical needs of the underrepresented, the disabled, and the disenfranchised.

There is a need to expand and enhance the representation, awareness, and the traditional focus of design education. A responsive awareness needs to be established, that goes beyond the esoteric values of the conventional marketplace to engage the needs of the expanding nontraditional markets of emerging economies. These economies must flourish and evolve, on the local or international level, within the context of sustainable development.

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Brian Donnelly received a MFA degree in Industrial Design from the Rhode Island School of Design in 1980 and is currently completing his doctorate in Educational Leadership at the University of California. Davis.

Brian has worked full time for two major Silicon Valley firms as an industrial designer and project manager. Brian was president of a design and manufacturing corporation, LifeSpan Furnishings, which developed universal designed furniture and environments that supported independent living for a wide range of users. As an educator, Brian worked for seventeen years at the university level as an Associate Professor in Product Design, Development and Manufacturing in the Design and Industry Department at San Francisco State University; Assistant Professor at Southern Illinois University; and adjunct Professor at the University department at San Francisco State University, Brian Donnelly cofounded and was Director of the Design Center for Global Needs. In recent years, Brian has been working at the K12 level in Career Technical Education in the area of Industrial Technology and Engineering. Brian has been a Design Education Consultant for the Autodesk Education Program since 2003, where, as one of the lead authors, one can find evidence of Brian's work in the 2008 and 2009 editions of Autodesk Design Kids.

Course Module:

Universal Product Design Breaking the Stereotypes

Brian Donnelly

Intro

The following module serves as the initial phase of a one semester (15 wk. x 6 hrs/wk.) Intermediate level product development course taught at San Francisco State University. The course, which is described on this site in a separate outline, directs students through a development process that begins with acquiring a deeper understanding of market opportunities and the potential of using Universal Design as one of a series of guidelines to maximize chances for successful commercial product development. The process continues with a series of activity modules that include in-depth user centered research, concept ideation, prototyping/user testing and concept finalization. Historically, several students in the class have carried their project through to the completion of a provisional patent application. Two examples of the diverse array of student projects are depicted below.



Fig.1 Laundry Carrier Student: Tuyet Tran See attached Caption, alt Tag and descriptive text



Fig.2 Information Kiosk Students: Troy Stevens and Len Gonzales See attached Caption, alt Tag and descriptive text

Course Module Goals:

As a Design educator with nineteen years of studio experience, I have made several important observations: 1. In many cases, a student will often come to class with a very limited vision regarding the broad scope of opportunities for product innovation. 2. This limited vision is particularly acute when asked to consider how they could develop a product in a way that would make it useable to a diverse population of users in terms of gender, age and ability. A widely held view considers products that facilitate greater inclusion as generally falling into the realm of assistive devices and health care products. 3. Students generally will be more motivated, energized and challenged if the course framework for intermediate and senior level studios allows them to pursue a project that is aligned with their own area of interest and (in many cases) has strong commercial viability.

Subsequently, there are two key goals for this and the preceding course module, (both included in this site):

1. Help students expand their vision of the world of product design that includes an appreciation of how Universal Design principles can enhance a competitive product development methodology.

2. Establish a foundation from which a student can identify a market need or desire that can be satisfied through the pursuit of a product development project that offers the student inspiration and motivation.

A Few Notes:

1. I have included a series of activities that are designed for group (large and small) and individual work. Organizing these into neat, computer generated tables gives them a sterile feel. In class I work with large sheets of paper and employ a number of animated techniques to engage students and especially draw in those students who seem to be reserved. To get the most out of the exercises, I encourage instructors to bring in lots of props and avoid being neat...Use markers and large sheets attached to the walls- provide ample opportunities for students to have fun - challenge them to think outside the box with no idea considered as too crazy! This is where innovation begins...

2. The term product as used in this course includes both Physical products- (-the keyboard, the hammer, the bike, the cell phone body) and Virtual products- the Web site interface, the screen menu for a DV camera, the information architecture for an internet appliance....



Fig. 3 See attached descriptions This internet appliance incorporates a physical produt (the, components, enclosure controls etc.) and a Virtual product- the software interface

3. The activities described in the preceding pages are designed with a great deal of flexibility in mind. Although written for product development, categories can be renamed for use by instructors in related fields of design such as Architecture, Graphics and Environmental Design.

Activity # 1 "How did we get so much stuff?" Duration (Approximately 1 hour) Format: large group activity Goals: The following activity is designed to:

1. "Break the Ice" and establish a positive, energetic tone for the course.

2. Help students develop a more focused awareness regarding the extensive cycle of actions related to the development of a product.

3. Initiate thought regarding the value of considering the needs of a diverse user population.

1-A. (3-5 minutes) Randomly divide the class into groups of two. Have student pairs introduce themselves to each other

(very briefly)Give each group an 8.5 x 11 in. sheet of paper with all of the letters of the alphabet listed in a vertical column with a 2-3 in. horizontal blank line next to each letter. Each group should fill in the name of at least one "thing" that starts with each of the letters in the list. They are limited to using things that they either have on them or brought with them to class. (Exclude parts of their anatomy) They can add additional names for any of the letters. Encourage "creative" thinking...

A. Apple, Altoids....

B. Book, ball point pen, bungee cord

C. Clip, coin, crash helmet,.... Etc.

You get the idea

1-B. Stop after 5 minutes. Play it up as a "friendly competition " What group filled in a name for all the letters of the alphabet? Let them announce their (personal) names to the class and then read off some of the "things" they listed. Rapidly continue the competition – "Who got 20 letters or more completed and so on. Try and give every student in class a chance to share something about their list.

You can write some of these on large sheets of paper or on a whiteboard.

1-C. Ask the students to count up how many things they had on their list and to divide them between "products of nature" (apple, banana, lint, dust...) and man-made products (dollar, camera, Frisbee, nose ring....) Quickly go around and ask groups to verbally present their totals..."7 natural and 29 man made-etc. You could write these out on the large paper or whiteboard.

1-D. Ask students to identify some the things they listed that would be difficult for some people to use due to a limited ability such as hearing, vision, mobility. Ask them to give a few examples and explain why they might be problematic for some users.

What can be learned?

1. Insight regarding the impact of product design and manufacturing on the environment. Select a few of the things they listed (hold them up as props and initiate a discussion about the resources (human and natural)that were used in designing, producing and distributing these things:

• How much energy is used to make and transport the product?

• What type and amount of material is used for production and packaging.

• What is the impact on air, water, soil quality from the various stages of production and distribution?

• What are the labor requirements and how do they impact the quality of life for people?

2 Insight regarding the extensive cycle of actions related to the development of a product Ask students to consider how much "stuff" we have in our culture that is man-made (for the most part the result of some level of design and manufacturing. Take a few of the man-made things they listed and using them as props talk about the process used to move them from the point of identifying a market need or desire to distribution and use. (I like to choose something simple (pencil) and something a bit more complex. (E.g. what was the impetus for a company to decide that it will commit lots of money to the design, manufacture and distribution of this bike helmet?) Encourage students to share their own ideas regarding the development of the products.

3. Insight regarding opportunities to improve the quality of a product (and the potential for increase marketability) by considering the needs of a broad range of users when either developing new or improving upon old products. Use the activity D (above) to imitate a short discussion about the value of considering a diverse user population in the Research and development of products.

Summary- I conclude this discussion by stressing the fact that it is obvious (from this simple exercise) that in our culture we already have "lots of things". As we move ahead with this class on product Development we need to be aware that the introduction of any new product has multiple consequences. With this understanding perhaps we can generate some desings that really have value.

Activity # 2 "Universal Design- isn't it about designing

Things like ramps and grab bars..."

Goals: The following activity is designed to:

1. Help students recognize the importance of understanding the user (their needs, desires, and the use context as a

foundation for discovering a market opportunity as the basis for innovative product development.

2. Help students discover that the application of Universal design principles can benefit the development process for a wide range of products extending beyond the stereotypical categories of health care and assistive devices.

3. Help students begin the process of identifying a market need and desire as a foundation for their course project.

Some Notes: Prior to this activity it would be useful to make a brief presentation on the principles of Universal Design. You could use the materials found at the Center for Universal Design web site or as I do, create your own presentation (with images and props) to give the students a basic idea about the In my examples I make it clear that all types of concept. products, including those that are "mainstream" can incorporate some aspects of Universal Design. I like to note that in most cases, companies generate profits when they can sell product or services to a large market (I'll talk a little about market share) In this regard, universal design as а methodology directed towards including a diverse range of users, can be viewed as part of a good business strategy.

It should be explained that student responses to the various questions posed in this activity are based upon "best guess" and assumptions. It is helpful to spend a few minutes and explain how more scientific market research methods would be conducted to obtain more reliable data: e.g. Focus groups, polls, interviews, contextual/ observational research, Interviews, usability testing, literature and human factors data reviews etc. Explain that several of these methodologies will be employed as they progress on their project.

2A the User, Use Context and Universal Design Duration (1.5 hrs.) Format-Large Group



Fig 4. (see attached descriptions) Fig 5. (see attached descriptions) Understanding the User, where and how a product is used is critical for the development of innovation solutions.

Instructor Preparation:

In order to make this an engaging and fun activity, it is important that the instructor bring in props or images of a diverse array of products. These will be used to conduct a reverse analysis regarding some fundamental characteristics of the product user populations and the use context(s). The type of product and the means of presentation are contingent on the type of classroom and presentation technologies available. Some examples to bring in: Children's playground structure (image) toilet, cell phone, CD, Playschool-trike, set of utensils, computer, a web site (e.g. applemusic.com), Yellow pages, PDA, Scissors, tooth brush, soap dispenser.... The tables that are presented on the following pages were divided up into smaller segments to comply with the constraints of web page layout. In order to conduct this activity you should merge and replicate the charts onto large sheets of paper to facilitate large group interaction.

List the products that you selected down the far left vertical column. (An alternative is to use if a computer and projection system)

You can click this link to obtain a PDF file with the tables merged. This can be printed out and distributed to students for their reference. (Insert link to PDF file)

Encourage wild thinking and work towards involving all the students in class.

2-A.1: Use Environments.

When the class meets break them into small groups of approximately four. Briefly Show the class each of the products that you selected (the real object or image). You will then explain that this first step is intended to analyze the frequency of use in three broad categories of environments. Start by defining the three categories:

Public: Use is conducted in an environment where a person or group is exposed for observation by the general public. (Example- drinking at a public fountain in a park)

Semi-Public- use is restricted to an environment where there is a limited exposure to the general public. (Example-drinking water from a fountain inside a gym locker room.) Private a large degree of control is maintained who uses the product and when use is observed.

(Example drinking water from a faucet in your home.)

For each product in succession ask the small groups to arrive at a consensus on the numbers to use for their groups' frequency rating. Quickly record each groups ratings (I'll use different colored markers and arrive at an aggregate rating for the class. Use a number scale to indicate the frequency rate for use of the product in each of the broad environment categories:

0= Never 5 = Very high frequency of use.

Example

	PUBLIC	SEMI- PRIVATE	PRIVATE
Toto Toilet	1	2	5
Nokia Cell Phone	5	5	5
applemusic.com	2	3	5

2-A.2: Patterns of Use. Explain that for the same series of products we will analyze the general patterns by which a product is used. Repeat the process of developing small group consensus and arriving at an aggregate number for the class. Use a number scale to indicate the frequency rate for use of the product in each of the broad scenarios: O = Never 5 = Very high frequency rate.

Example

	One product used by many (10+ people) simultan- eously	One product used by many (10+ people) at separate times	One product used by a few (3-9 people) simultan- eously	One product used by a few (3-9 people) at separate times	One product used by 1-2 people exclusively
Toto Toilet	0	5	0	5	5
Nokia Phone	1	4	3	4	5
apple music.com	1	5	2	5	5

2-A.3: Basic User Profiles- Gender

In each box indicate the rate of frequency by which members of each gender use the product: Repeat the process of developing small group consensus and arriving at an aggregate number for the class.0= Never 5 = Very high frequency rate. Example

	М	F
Toto Toilet	5	5
Nokia Cell Phone	5	5
Applemusic.com	5	4

2-A.4: Basic User Profiles- Age

In order to complete this task it is important that students acquire a basic understanding of the following age categories.

Infant	1 month to 1 year
Toddler	1 year to 2 years
Preschooler	2 years to 6 years
School age	6 years to 12 years
Adolescent	12 years to 20 years
Young adult	20 years to 40 years
Middle aged adult	40 years to 60 years
Young-old adult	60 years to 80 years
Old-old adult	80 years and beyond

In each box indicate the rate of frequency by which members of each age group might use the product: 0 = Never = 5 = 5Very high frequency rate.

Example

-	Infant:	Toddler	Preschooler	School age	Adolescent	Young adult	Middle aged adult	Young-old adult	Old-old adult
Toto Toilet	0	1	4	5	5	5	5	5	3
Nokia Phone	0	1	1	2	5	5	4	2	1
Applemusic.com	0	0	1	2	5	5	3	2	0

2-A.5: Basic User Profiles- Basic Ability Levels

Explain that this task is intended to examine the extent to which the listed products currently accommodate use by people of diverse abilities. This chart is purposely positioned before the final chart (2-A.5) pertaining to the integration of UD principles. Note that this chart does not cover every ability but as meant as an overview. Remind students that their responses are based on best guess and assumptions. This provides a good opportunity to emphasize the importance of user centered research involving diverse populations to avoid erroneous assumptions and stereotyping.

Rate the degree of ability that can be accommodated by the product.

0= Full Ability/No disability 5= Severe Impairment

Example

	Hearing	Vision	Mobility	Balance	Grasp	Strength	memory	Attention
Toto toilet	5	4	3	4	4	3	3	4
Nokia phone	4	1	3	2	1	4	1	1
Applemusic.com	5	5	5	4	n/a	n/a	3	3

2-A.6: Integration of Universal Design Principles

This activity provides an opportunity to expand upon the original presentation on UD. In the previous chart students offered their best guess regarding the extent to which a product supports various types of abilities. In this activity the UD principles serve as tools to analyze the product with respect to the features or lack of features (form, size, colors, mechanics, controls, interface, information architecture etc.) that impact the extent to which the product supports use by individuals with diverse abilities. In addition to looking at the product in terms of how it currently integrates UD principles, a second column is included for each principle that asks students to consider areas where there is potential for improving the product. This aspect of the activity offers an opportunity for students to identify a possible opportunity for innovation that they could pursue in the course as their project.

The following summary of the 7 UD principles are included as a reference for students. Use this opportunity to remind them of the presentation you made previously and encourage them to use on-line sources such as the Center for UD web site.9 put in URL)

1. Equitable Use: The design is useful and marketable to people with diverse abilities.

2. Flexibility in Use: The design accommodates a wide range of individual preferences and abilities.

3.Simple and Intuitive: Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

4.Perceptible Information: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

5. Tolerance for Error: The design minimizes hazards and the adverse consequences of accidental or unintended actions.

6.Low Physical Effort: The design can be used efficiently and comfortably and with a minimum of fatigue.

7. Size and Space for Approach and Use: Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Repeat the process of developing small group consensus and arriving at an aggregate number for the class. Under the column labeled Current, rate the degree to which the product currently integrates each of the seven principles of Universal Design: 0 = No integration 5 = Very high level of integration. Under the column labeled Potential, rate the degree to which you think each of the seven principles of Universal Design could be integrated into a next generation product:

0= No integration 5= Very high level of integration.

	Equitable Use		Flexibility in Use		Simple & Intuitive		Perceptible Information		Tolerance for Error		Low Physical Effort		Size and Space	
	Current	Potential	Current	Potential	Current	Potential	Current	Potential	Current	Potential	Current	Potential	Current	Potential
Toilet														
Cell Phone														
Web Site														

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2B The Student's Turn

Format- Small group and individual work outside class

In Activity 2A, the instructor introduced the products for the exercise. In this activity students, working in small groups, will develop their own list of products to examine. This accomplishes two goals: It provides students with more practice in developing their product analysis skills relative to User profiles, Use context and Universal Design. Secondly it presents another deeper opportunity for students to explore possible semester projects that they will be motivated to pursue.

2-B. 1 Instructor Preparation:

You can click this link to obtain a PDF file with the tables merged. Print out and distribute to students for their reference. (Insert link to PDF file). Instruct students on how to find the PDF file that they can print out inn multiple copies for their homework assignment (to be explained later)

Divide class into new combinations of four. Provide each group with large sheets of paper and markers. Explain that during this first activity they are going to brainstorm a long list of products. For each of the 18 categories listed below that have one minute to come up with as many as possible. No discussion is necessary just write down anything a person says. Encourage craziness. I'll use a watch and tell them when to move to the next category. In 18 minutes the class will come up with an amazing list of products. It can be helpful to quickly review the categories as a large group and then tell them to dive in. Note the term product could be interchanged with words such as environemtal so that the activity could be incorporated into course form other design areas

1. A product that will help someone relax: chair, massager, hammock, CD player...

2. A product that will help improve a person's health: scale, exercise bike, treadmill...

3. A product that will help a person create: potters wheel, sketch pad, 3d software...

4. A product that will provide safety: car seat, table saw guard, batting helmet...

5. A product that will make work easier: shovel, cordless drill, a work light...

6. A product that will provide entertainment: MP3 player, Karaoke machine, book...

7. A product that will provide comfort: pillow, heated car sear, Jacuzzi,....

8. A product that will help a person play: Monopoly, golf clubs, boogie board...

9. A product that will help a person learn: Leap frog, flash card, Internet encyclopedia

10. A product that will provide transportation: bike, scooter, Mini-Cooper, train, Segway...

11. A product that will keep track of and manage time Swatch, Alarm clock, sundial

12. A product that will support wayfinding: Map, Trimble GPS, road signs,

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13. A product that will help conserve energy; Compact Fluorescent, Electric car...

14. A product that will organize information; Rolodex, Palm Pilot, Filemaker Pro, recipe...

15. A product that will help **CONSERVE** resources Recycle bin, composter, Port-a-potty

16. A product that will save **time**: Microwave, Tivo, credit card, catalogs, eBay, Amazon...

17. A product to create, capture manipulate images: DV cam, Scanner, Photoshop

18. A product that will help a person eat: steamer, camping stove, Cuisin art...

2-B.2 Homework Assignment

Have each group divide up the Categories so each student has at least four. Each student is to then select at least three products from the list generated by the group for that category. As an outside assignment they are to complete the charts located on the handout you provided. (2A 1-6). For the next class they are to bring in the completed charts (approximately 12) accompanied by their own props which can either be a real product or an image of each of the products they have listed. If a computer and projector is available students could place digital images on a CD or send them to the instructor via email.

2-B.3 Class Presentation

When students return to class they are instructed to reconvene into their last groups. Allow each student 10 minutes to present the results of their homework assignment to the members of their group. Encourage dialogue between group members. I use this opportunity to move around and "eavesdrop" on groups-offering some input and especially encouragement.

After each group member has had a chance to speak take a break. Upon returning ask each group to make a short (five minute presentation on a few of the more interesting products that their group had just reviewed. Encourage them to pick some examples where there appears to be strong potential for improving the product. This creates an opportunity for students to really start to zero in on some potential product. Encourage dialogue within the entire large group. Offer students guidance in terms of presentation skills (oral and visual)

Brian Donnelly

Course Module 2: Universal Product Design – Discovery the Market Need Brian Donnelly



Brian Donnelly received a MFA degree in Industrial Design from the Rhode Island School of Design in 1980 and is currently completing his doctorate in Educational Leadership at the University of California. Davis.

Brian was president of a design and manufacturing corporation, LifeSpan Furnishings, which developed universal designed furniture and environments that supported independent living for a wide range of users. As an educator, Brian worked for seventeen years at the university level as an Associate Professor in Product Design, Development and Manufacturing in the Design and Industry Department at San Francisco State University. Brian Donnelly co founded and was Director of the

Design Center for Global Needs at SFSU.

Brian has been a Design Education Consultant for the Autodesk Education Program since 2003, where, as one of the lead authors, one can find evidence of Brian's work in the 2008 and 2009 editions of Autodesk Design Kids.
Course Module 2

Universal Product Design- Discovery the Market Need Brian Donnelly

Intro

The following module serves as the second phase of a one semester (15 wk. x 6 hrs/wk.) Intermediate level product development course taught at San Francisco State University. The course, which is described on this site in a separate outline, directs students through a development process that begins with acquiring a deeper understanding of market opportunities and the potential of using Universal Design as one of a series of guidelines to maximize chances for successful commercial product development. The process continues with a series of activity modules that include in-depth user centered research, concept ideation, prototyping/ user testing and concept finalization. Historically, several students in the class have carried their project through to the completion of a provisional patent application. Two examples of the diverse array of student projects are depicted below.



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Course Module 2 Goals:

1. Provide students with skills in the area of observational research and competitive product analysis.

2. Further establish a foundation from which a student can identify a market need or desire that can be satisfied through the pursuit of a product development project that offers the student inspiration and motivation.

Reminder:

The term product as used in this course includes both Physical products- (-the keyboard, the hammer, the bike, the cell phone body) and Virtual products- the Web site interface, the screen menu for a DV camera, the information architecture for an internet appliance....

The activities described in the preceding pages are designed with a great deal of flexibility in mind. Although written for product development, categories can be renamed for use by instructors in related fields of design such as Architecture, Graphics and Environmental Design.

Module 2- Activity # 1

In this activity, students are going to be organized into groups hat form a variety of "family groupings with a diversity of ages, genders and abilities. (While there are many more variables that distinguish people these three seem to be enough to contend with. You will set up some basic organizational structure but you want to leave room for students to come up with imaginative profiles for the characters that will become part of this activity. Once the "families are organized they will be assigned different group experiences. (For example one family will be going on a camping trip, another trip to the shopping mall). The objective for this activity is to inspire each group to generate an exhaustive list of all the activities that each family member will engage in as they embark on their respective outings

Instructor Preparation: Before class, organize a series of cards equal to the number

of students in class. (3X5 index cards work well). In the top left corner place a colored sticker or a colored mark that corresponds with the age groupings below. Come up with a mix of cards so that there are a reasonable number of adults and a good combination of other ages.

Infant	1 month to 1 year	Yellow
Toddler	1 year to 2 years	Dark Blue
Preschooler	2 years to 6 years	Dark Green
School age	6 years to 12 years	Orange
Adolescent	12years to 20 years	Purple
Young adult	20 years to 40 years	Red
Middle aged adult	40 years to 60 years	Light Blue
Young-old adult	60 years to 80 years	Lime
Old-old adult	80 years and beyond	Magenta

Mod 2 Figure 3

Divide the cards into diverse groups (minimum 3 people per family with the largest group at 5 max.) Place a number in the upper right hand corner to identify the group. (See illustration for card sample.) Place the cards in a box and have students randomly select and get together with the students with the same group number. In the lower right you should have included a table (you can print this out) with a list of abilities. Students should rate their level of ability with 0= Full Ability/No disability 5= Severe Impairment. In the upper section they should record a name for their character (real or fictitious). In the center area they should write a few sentences to describe the person- what sorts of things they like, favorite foods, activities etc.

It is often fun to have each student very quickly introduce "themselves" to the entire class- it can result in some funny moments....

Name of your character	(real or fictitious)	Grour	
	(real of fictuous)	#	
Brief Description of the character			
	Vision	1	
	Hearin	ng	
	Mobili	ty	
	Grasp)	
	Balan	се	
	Streng	gth	
	Memo	ry	
	Attent	ion	

Mod 2 figure 4

After the groups are formed you assign each one to a group experience. Some examples include:

- A trip to a shopping mall
- A Camping trip
- Trip to a museum
- Trip to a Baseball game
- A day at home
- A vacation flight to Hawaii

Provide each group with some large sheets of paper. They have 40 minutes to come up with a detailed list of all the activities each family member would engage in as they move through a 12 hour period from 7 a.m. till 7.p.m. Suggest that they write the names of each person along the top horizontal edge. Along the left vertical edge place the time in one hour increments. Now as a group, encourage them to get crazy and as detailed as possible with as many activities they can think of that the various characters would engage in for each of the different 12 hour slots. At the end of 40 minutes have the groups stop. It can be fun to take a few moments and have each group read out some of the more interesting or amusing activities.

Take a break...

Reconvene groups and distribute a large sheet of paper to each of the group members. Each group member should write down the name of their character at the top of their sheet. Ask them to divide the paper into four vertical columns. In the first left hand column write down the 10 most intriguing or challenging activities that their character engaged in during the 12 hour period. Leave enough horizontal space between each of the ten so the list extends from bottom to top of the page. Label the second column Degree of Difficulty. Label the third column: Current Product Solutions and label the fourth column Product Rating.

At this point you want the students to work as groups. Each member will get a turn to have the group discus their 10 activities. Under degree of difficulty get each "family member' to indicate the rate of difficulty for them relative to their age and ability level. 0=impossible to accomplish task 5 = easy to accomplish the task (I've placed space for five respondents that can be modified to suit the group size- each group member is identified by a number- you could also use initials.). It is interesting for students to realize how the ratings will vary depending on variables such as age and ability level of the respondent.

In the third column let the group brainstorms any products or combination of products that they think could help a person successfully complete the task.

In the fourth have the group reach consensus on a rating number indicating the degree to which each product or combination of products would accomplish the task.

O= the product is a total failure 5= the product looks and works great

Activity	De Dif	gree ficu	e of Ilty			Current Product Solutions	Pro	odu	ct ra	ting	I
	1	2	3	4	5		1	2	3	4	5
Cooking eggs	5	5	4	2	0	Egg-buddy Frying pan microwave mixing bowl Spatula Wooden - spoon chicken	4 4	4 4	3 4	23	2
Packing Suitcase						Crowbar Straps Soft luggage Trunk Garment bag Duffle bag					

After groups have had enough time to work on their grids take a break. When the groups reconvene take a few minutes to have each group present a few of their more interesting and challenging listings.

What was learned:

Students gained more experience in group work and thinking outside the box. The importance of considering the diversity of user needs, backgrounds and abilities is reinforced

As a result of this activity students have started to recognize some patterns that reveal activities that are problematic for a number of people and a lack of good product solutions for those activities. Consequently, many students will be getting close to identifying a project that they are both interested in and that has market potential.

Module 2- Activity # 2 "Observing Others-

The key to User centered research"

For home work each student is to select their most intriguing activity. (It can come from the previous exercise or one that was identified elsewhere. Using a camera, Video recorder or drawing they are to observe and document a minimum of five people engaged in the activity. The group of 5 subjects should incorporate some level of appropriate diversity.



Mod 2 Figure 6



Mod 2 Fig 7 Examples of student initiated Observational research Students are to prepare a 10 minute in-class oral/ visual presentation where they provide a detailed explanation for each of the following questions: Students should use images to the greatest degree possible with their responses

• What were the specific goals of the activity?

• How long did it take for each of the users to complete the activity?

• What product or combination of products were employed by each user to accomplish the activity

What was the degree of difficulty for each of the users?
 0=impossible 5 = easy

• What specific aspects of the activity presented challenges or created frustration for the users?

- What product features enhanced the activity?
- What product features presented challenges?

Hoe important was the style/appearance of the product
(s) to the users? (subjective)

• What new product features might enhance the user's ability for completing the activity?

• What ideas might you have for a totally new innovative solution for this activity?

If possible the student can also try and interview the users to gain feedback to these questions.

What was Learned

The in-class presentations offer students an opportunity to understand the importance of observational research and develop the skills to use this process as an effecting product development tool.

As a consequence of the research presentation and class feedback, the vast majority of students will have finally discovered a project that they are interested in. they also tend to have a sense of what projects may have some commercial potential. For those students who are still "searching" for the best project, they have (as a result of module 1 and 2 activities) a mechanism for discovering a project that will work for them.

What is Next: Following the completion of module 2, each student is required to submit a detailed Design proposal for their project. This document includes items such as: Concise description of the needs and or problems that the proposed project will satisfy. A detailed explanation of all design criteria including a detailed profile of the proposed market... A number of the activity charts used in module 1 and 2 along with observational research documentation are incorporated into their proposal.

Brian Donnelly

Design Consultant

Former Associate Professor, Department of Design and Industry San Francisco State University

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H2AID

Tom Etheridge San Francisco State University

PROBLEM

Bathing is an essential part of personal hygiene. However, bathing carries the risk of being burned or scalded by hot water. This risk is especially high for infants; for disabled persons; and for stroke victims, who have difficulties gauging temperature as a result of their stroke. I aim to design a device that uses visual feedback to indicate relative water temperature, so that people of all abilities can bathe safely and independently without the risk of scalding. My design process is informed by research and interviews with occupational therapists concerning stroke patients and their specific needs.

SCENARIO

To set the scene for the problem i have devised a scenario indicating all the problems that are currently facing a stroke patient.



INTERVIEW WITH A OCCUPATIONAL THERAPIST

In order to design for an inclusive market, I first needed to understand the types of impairments that stroke victims can

suffer. I worked closely with occupational an therapist to understand how strokes could affect daily activities such as self care and bathing, and summarized have the information below. Α stroke victim can suffer a variety of long-term effects from neurological to physical disorders. In particular, the stroke can



damage the neural pathways so that the patient cannot differentiate between temperatures and tends to recognize all stimuli as pain. Some treatments are available to compensate for these deficits using visual feedback and transcutaneous nerve stimulation. However, through patent research and interviews I found that there is no aid currently available on the market that uses visual feedback to relay information about changes in water temperature. Since bathing has both hygienic and therapeutic value for stroke victims, this indicated a particularly meaningful design opportunity.

PERSONA

It may be hard to appreciate how difficult it is for a person suffering from the effects of a stroke to undergo the simple task of running a bath. In order to develop empathy and understanding, I constructed a persona based on the interviews with the occupational therapist. Although this persona is fictional, the character exhibits some of the characteristics that a stroke victim might have and was thus an essential aid in the design process.

EXISTING PRODUCTS

To research what is on the market I

want to see what is available for regular bath time users and what is currently available for stroke patients. I based the

53
married
desensitization to painful stimuli, recovery of sensory function is needed
sensory functions will increase from 50% - 67% over 1-2 months period prior to the stroke.
difficulty in sensory feedback, hard to sense change in object temperatures, suffers from myopia therefore has trouble in determining depth

research on the current market niches and the existing bath temperature thermometers.



enter, Looks cheap.







ANALOG
THERMOMETERLCD RUBBER DUCKCOLOR CHANGING DISCFLOATING LCDPROS: Colorful, Child Friendly,
Easy to manufacturePROS: Quirky design, Floats, Bright
colorsPROS: Colorful floating device
temperature of the water increasePROS: Large visible screen
changes color when the
and can stick on the side of the
bath tubCONS: Hard to view the
Hard to know when the bath
temperature is at the right toCONS: Colorful floating device
temperature is at the right toCONS: Colorful floating device
temperature of the water increasePROS: Large visible screen
bath tub

PRODUCT DESIGN SPECIFICATION

From the research gathered from the Interview and looking at existing products on the market I have been able to construct a Product design specification highlighting all the important points I need to cover when designing the water device.

Performance

- Visual indication of temperature using LEDs
- Sleek appearance
- Floats in water
- Displays temperature clearly
- Incremental temperature scale
- Watertight
- Can be connected to bath plug
- Won't corrode in water
- Temperature resistant to 212F
- Uses ultra-bright LED's
- Emits beeping warning when temperature changes

• Clear visible display of temperature change.

Service life

• The design will be used on average 4 times a week

Manufacturing Cost

- The design will cost no more than \$15 to manufacture
- The design concept will cost no more than \$30 to make

Market price

• The product will cost no less than \$25 or the relevant equivalent depending on countries currency.

CONCEPT IDEAS



CONCEPT MODELS

 MODEL 1

 Simple clean design, lights protrude above the design.

 MODEL 2

 Ying and Yang. The design is aimed primarily at children due to the simple forms

 MODEL 3

 This is the model chosen to further the development process. It is clean and sophisticated.

WORKING MODEL

The working model shows the principle of design. When the heat sensor is placed in water,

the lights indicate the relative temperature of water. As the temperature increases, so does the number of LED lights that are illuminated. In the final product, this principle will apply, with one additional light illuminating with each increase in temperature interval.



THE LIGHTS

This series shows how the additional LED lights will illuminate for each incremental increase in temperature. The small blue light indicates a cold temperature, and the large red is a warning to indicate the water is too hot. The middle, yellow and orange temperatures are optimal for bathing. At this point, I named my product the H2Aid to indicate how it helps people to gauge water temperature.



- 77 F Too cold

78 F - 85 F Luke Warm

86 F - 94 F Optimum for a Child

95 F - 104 F Optimum for a Adult

104 F + Too Hot

WORKING MODEL 2

STAGE 1

As the H2Aid enters the water it will immediately start to read the temperature. It will glow blue when the temperature is below 68F

STAGE 2

As temperature of the bath water increases different lights will light up, Here the H2Aid is indicating the water is at optimum temperature for bathing

STAGE 3

If the water temperature increases above 104 F then then the red light will turn on indicating the water is too hot to enter



EXPLODED DIAGRAM



GA



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ERGONOMIC ASSESSMENT

L solicited feedback from occupational therapists and designers throughout the design process. It. was gratifying to receive the following feedback about the H2Aid concept from my collaborators:

"It would be useful for people who have lost sensory function this maybe stroke victims whose neuro pathways have been damaged



PROFESSIONAL

AND

or elderly individuals when there sensory (visual and tactile) feedback is reduced."

"This piece of equipment can help overcome the difficulties caused by the visual and tactile sensory deficits and ensure individual maintains an independent lifestyle."

" By implementing aids to ensure individuals can maintain as much of their normal routine and independence is important. This will reduce the amount of change the individual will have to face and therefore reduce stress and maintain wellbeing."

- E. Manning, Occupational Therapist, Brunel University, London, United Kingdon.

"The form factor of the H2Aid is really appropriate for almost anybody, from children to older people. It fits nicely in the hand, floats in the bath, and gives clear visual feedback which is accentuated by the color and size of the indicator lights. I think it would be as welcome in a bathtub as in a jacuzzi; it's a clean, attractive, approachable, and usable form."

- H. Chu, Professor, San Francisco State University.

WHY SHOULD UNIVERSAL DESIGN BE CLINICAL?

The goal of this project was to create a user-friendly device to aid people of all ability levels to safely enjoy a bath. By concentrating on the needs of stroke victims and working with therapists, I was able to more deeply understand the types of feedbacks that would be appropriate to stroke victims and other users with sensory challenges. An underlying goal of this project, for myself as a designer, was also to create a device that was aesthetically pleasing and friendly, rather than cold or clinical looking as many heathcare devices can appear. In the end, design can achieve both therapeutic function and aesthetic interest, and I feel that the H2Aid speaks to both these needs.



Tom Etheridge San Francisco State University Universal Design: Elementary School Curriculum Design



Hiroki Takeshita

Hiroki Takeshita is currently pursuing an M.A. in Industrial Design from San Francisco State University. His current passions are human centered design and design education. He excels in the areas of graphic communication, design research and product design.

In 2005, he received a B.A. in Interior Design from California State University, Chico, where he studied spatial design and human factors. Hiroki was born and raised in Japan and has lived in California for the last 9 years. He can be reached at hiroki@sfsu.edu

Introduction

This booklet represents a semester long project, which involved developing a curriculum. It is for a graduate level course titled, "Seminar in Design Topics: Case Study Design Education" taught by Professor Martin Linder.

I was inspired by Hitachi Japan Universal Design Program, which teaches middle school students Universal Design. I decided that I would teach 5th and 6th graders Universal Design as well. This book covers research, planning, class materials as well as testing of the curriculum.

UNIVERSAL DESIGN

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- planning
- project learning goals :: schedule :: desired results matrix
- class materials
- lectures :: demo :: workbook sample
- curriculum testing

 project testing :: student work :: survey and results :: assessment :: exit interviews

Introduction

This booklet represents a semester-long project, which involved developing a curriculum. It is for a graduate level course titled, "Seminar in Design Topics: Case Study Design Education" taught by Professor Martin Linder. Below is a description of the class:

Product and Visual Communication Designers are often in a position to educate others about their profession, methods, skills, tools and value. "Seminar in Design Topics: Case Study Design Education", is intended for students whom anticipate opportunities in secondary, community college, university and professional education and training. Most often designers are selected to teach based on inter- est and success in their design profession. Rarely do these professional designers have any background in developing a curriculum that would enhance their ability to be effective as an educator. This course will help prepare students to be success- ful educators both in industry and academia.

"Seminar in Design Topics: Case Study Design Education" will bring the student though the process of planning learning experiences for high school, college or industry students. Because we are preparing you to engage in thought- ful and scholarly teaching, this course involves both reading theory and writings about classroom practice and nuts-and-bolts work on careful, thoughtful lesson and unit planning. You will learn to plan lessons with reference to classic and cur- rent scholarship about teaching and learning. I was inspired by Hitachi Japan Universal Design Program, which teaches middle school students Universal Design. I decided that I would teach 5th and 6th graders Universal Design as well. This book covers research, planning, class materials as well as testing of the curriculum.



"Only by wrestling with the conditions of the problem at hand, seeking and finding their own solution (not in isolation but in correspondence with the teacher and other pupils) does one learn."

~ John Dewey, How We Think, 1910 ~

Survey and Results

At first, I conducted survey to find out 5th and 6th graders' education levels of art, design as well as on universal design. I had a sample of 18 students who were at the age of 10 to 13 and attended middle schools in the San Francisco Bay Area. Questions in the survey includes if the students have taken any art classes, how it affected their interests in school, if they have participated in any design class, how they took the class, and lastly not least, if they are familiar with the term and the idea of universal design. On the next page, the actual survey is shown.

The results are shown the following pages.

Approximately 90% of the students have participated in art classes. Of the 90%, 31% said the class was taken place in school and 44% of them said it was held outside of the school, including art center and art camp. 56% of Over the 90% said the art

Student's Name:	Age:
Have you taken any art classes	?
1. Yes 2. No	
If yes, how did the art class affe	ect your interest in school?
1. Positively	
2. Negatively	
3. Not much effect	
Have you taken any design clas	ises?
1. Yes	
2. No	
If yes, did you take the class as	required, elective or outside of school?
1. Required	
2. Elective	
Outside of the school	
Have you heard of a term "Univ	rersal Design"?
1. Yes	
2. No	
'Universal Design" is an idea th	at everything is designed easy for everyone to use.
Are you familiar with this conce	ipt?
1. Yes	
2. NO	

classes had a positive influence on their interests in school. None of them said it affected negatively. Only 17% of the 18 students have taken a design class, most of them were held outside of the school.

To my surprise, eight students said they have heard the term "Universal Design". When asked if they were familiar with the concept of "Universal Design", seven students said yes. Of the eight people who have come across with the term, over a half of them said they are familiar with both the concept and the term.

This survey was helpful in understanding of the middle school students' knowledge. I did not anticipate over 40% of them have heard the term in the past. Universal Design may not be an unfamiliar topic to teach to middle school students.





e) How did you take the design class?





g) Are you familiar with the concept of "Universal Design"?



h) Are you familiar with both the term and the concept?



Persona

Josh

Josh goes to elementary school in San Francisco and is in the 6th grade. He plays soccer but not very well. He likes to play video games at home with his friends and his older brother.



He is into role-playing games like Final

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Fantasy. He also likes to read science fiction books.

In the classroom, he is usually quite; however, his extensive knowledge about technology and astronomy impresses his classmates.

Nick

Nick is a 5th grader who likes to play all kinds of sports. He attends public school in San Francisco. His favorite class is P.E. He grew up in San Mateo and moved to San Francisco when he was 5 years old. He lives with his mom and his younger brother who goes to the same school. He



doesn't enjoy classes very much but loves hanging out with his friends.

Katie



Katie is in 5th grade and attends elementary school in San Francisco. She lives with her mom and dad in the Pacific Heights. She is the only child in her family. She is shy. She likes to draw animals. On weekends, she likes to play with her bunny rabbit named Fluffy. She also

enjoys going shopping with her parents.

Project Learning Goals



Goals of my Universal Design curriculum are for students to:

- 1. be exposed to Universal Design principles
- 2. build understanding of other people's needs and points of view
- 3. appreciate the knowledge and passion designers put into designing products

Schedule

There will be a total of 10 classes. Each session lasts for two hours. The class meets twice a week. The curriculm is designed to last five weeks.



Desired Results Matrix KNOWLEDGE AND SKILLS

Students will gain knowledge and skills in:

1. other people's point of views.

STAGE ONE - Desired Results -

ESTABLISHED GOALS

Students to;

1. be exposed to Universal Design principles.

2. build understanding of other people's needs and points of view.

3. appreciate the knowledge and passion designers put into designing products.

UNDERSTANDINGS

Students will understand;

1. perspectives of people who live with disabilities.

2. the importance of being considerate of other people

3. the concept that everything should be made intuitive to use and understand for everyone.

4. "human centered" design approach.

ESSENTIAL QUESTIONS

1. Why is Universal Design important to us?

2. What products can you find in your everyday life that is easy for everyone to use?

2. What are the elements that make a product easy for everyone to use and understand?

3. How can you design a product and environment that can make life easy for everyone?

4. What kind of assistance from other people would you appreciate if you had disabilities?

2. brainstorming.

3. sketching.

4. communicating his/her ideas.

5. listening to others.

6. working with a group of people.

7. thinking critically.

8. building self-esteem.

STAGE TWO - Assessment Evidence -

DIRECT EVIDENCE

1. Photo Documentation: Students are tasked with finding examples in their everyday lives. They need to take pictures of good and bad examples of Universal Design. This is done as either in-class assignment or homework. This offers the students to observe their surroundings and share their finding with class.

2. Workbook: Students each get a workbook, which they have an opportunity to look at images of products and think and answer critically about if they are good or bad examples of Universal Design and why.

INDIRECT EVIDENCE

Students will have;

1. Quiz: What are three main ideas of Universal Design? Examples?

2. Prompt: How many senior citizens and people with disabilities live in US?

Goals of my Universal Design curriculum are for students to: STAGE THREE - Learning Experiences -

1. Lectures on Universal Design principles, the importance of it and good/bad examples.

2. Photo documentation to find good/bad examples.

3. Sharing photos of their discoveries and discussion.

4. Guest speakers: listening to the experience of people with disabilities.

5. Discussion and questions on guest speaker's experience.

6. Field trip to City Disability Center.

7. Role play.

8. Empathetic modeling activities: stimulation of being disabled.

9. Guessing what is inside the bag.

10. Thinking critically and discussing with the class what makes product or environment easy to use for everyone.

11. Brainstorming, sketching and constructing a new remote control.

12. Presenting their ideas.

COURSE DESCRIPTION

The society is changing. There are increasing populations of elders and people with physical disabilities in the United States. Universal Design is a concept that everything should be made easy to use for everyone. The course aids students in understanding the principles and the importance of Universal Design. It examine our everyday products and environment that give barriers to diverse people. It also provides students with insights in perspectives of people with disabilities and in designing for Universal Design. From this course, the students learn to apply what they have learned to brainstorm, sketch and construct a product which is easy to use for everyone.

Lecture 1 • Introduction of Universal Design •

The first lesson will introduce the principles of Universal Design. Universal Design is the idea of making products and services easy to use for all people, whatever their age, gender, or physical condition. Understandings of this lec- ture are; general knowledge of Universal Design (what is universal design and who is it for?), the importance of Universal Design, and good/bad products and services based on Universal Design principles.

This lecture will help the students for the follow up assignment to test their understanding. The assignment is photo documentation. The students are tasked to take pictures of good and bad products, based on universal design principles, they can find at their school.





NOTES: Refer to the picture and explain that not everything is made easy for everyone.



NOTES: Ask the students if they are familiar with this concept.



NOTES: This slide shows 3 main ideas of Universal Design.



NOTES: Ask the students why it is easy to use for everyone.



NOTES: Pass around conventional and this medicine bottles and have the students compare them.



NOTES: Ask the students to explain the image and state the reason why this is good.



NOTES: First ask the students to think why Universal Design is important in our community.


NOTES: This slide shows people who tend to be impacted with environmental barriers.



NOTES: Quiz - ask the students what age group are senior citizens and how many there are in US.



NOTES: There are 39 million senior citizens in the US currently. So, it is 39 times more of this.



NOTES: The population of senior citizens in US is increasing.







NOTES: Have the students pair up with a student next to them, and have them think the answer.



NOTES: This summarizes the goal of this lecture.

Lecture 2 • Visual Impairment •

The lecture reviews the concept of Universal Design and present more ex- amples specific to address products and environment that give freedom or barriers to people who live with visual impairment. The quizzes and questions also are asked to increase class participation as well as the students to think critically about their surroundings and other people's needs. Understandings of this lecture are; people with visual impairment, good/bad products and services particularly helpful for people with visual impairment, and how to design an everyday product that is easy to use for everyone.



NOTES: Ask the students what they remember from the previous class.





s this a Good Example of Universal Design?

NOTES: This slide shows a shampoo with small prints on the back that are difficult to read for all.





NOTES: Explain the students nice features such as bralle, raised letters, high contrast and icons.







NOTES: The students have to feel an object (radio remote control) inside the bag and guess.

Let's redesig	n a radio remote control for
people with	visual impairment.
Include the	following:
1.0n/Off1	Satton
3. Shape of	Remate Control
	0

Lecture 3 • Mobility Impairment •

The focus of this lecture is on mobility impairment. It reviews the concept of Universal Design and present more examples specific the needs of people with mobility impairment. The students have an opportunity to listen to the experience of a guest speaker. The questions that follow the guest speaker's sharing will address how to think deeper on how we can create environment that makes life easy for everyone. Having presented to good/bad examples of products and being exposed to people with mobility impairment, the students are able to work on group work activity to develop a ideal school bus for them with confidence.



NOTES: Ask the students what they learned in the previous lessons.



NOTES: "What is Universal Design?"



NOTES: Ask the students to name three main principles and also bring an example of each.



NOTES: Ask the students what they see in the side and have them think if this is a good example.



NOTES: "Is this a good example of Universal Design?" "Why? Or why not?"



NOTES: "How about this?"



NOTES: "How about this?" (credit: James Mueller, Universal Design)



NOTES: Guess speaker with mobility impairment will share his/her everyday experience.



NOTES: The students use their workbook to write down the answers. Then share with the class.



NOTES: The class is divided into groups. The students discuss and share their ideas in their groups.



NOTES: In the same group, the students spend time to come up with one final idea per group.

Demo 1 • Crafting a Model with Crayola Model Magic •

This demo is introduced to the students when they are assigned to construct a prototype model of their ideal remote control. The modeling material is Crayola Model Magic. This demo is presented by Crayola. It reviews good techniques to use to craft a remote control with ease and safety.



To create a shape you want for a remote control, first crumple the foil into a ball for a base.



Roll and flatten strips of Model Magic.



Then, wrap the strips around it.



Roll balls of the modeling material and press them to attach. This technique is useful for buttons.



To form a brand new color, marble two different colors and knead them together.



for creating small pieces, you can use a plastic knife to cut the modeling material.

Other techniques to demonstrate:

- Use a marker to write on the modeling material.
- Use a comb to add texture.
- Use a skewer to poke a hole.
- Use a pen or marker to roll to flatten the modeling material.

Workbook Sample

Each student gets a workbook. The workbook is used to evaluate their under- standings. This is part of the direct evidence in the desired results matrix, which is presented in the previous chapter.

The workbook has questions they can fill in. The questions include; are they good or bad examples Universal Design?, why?, how can we create products and environment that make life easy for everyone? Also, it has designated pages where they can sketch out their ideas for a new remote control and an ideal school bus they are tasked to redesign. It is collected after each class session for evaluation purposes.

ACM MAS THE EXPERIMENCE OF		DHHY YOUT DEVELOP	r,	
	_			
and a state of the second state in an				
HOW GATHE CREAT PROJECTS INT. MARC PERSONNAL PROJECTS INT.				
KOW GAR HE ORGAN PROJECTS THAT MARE LIFE BUDY CONTRACTORY				
YON GALLE OVER PROJECTS FYE MARCHE BUD YONGVEROM				
YON GALLE OVERSTANDING HAT				
HOW GAR HE ORGAN PRODUCTS HAT MANEY PE INTRACONSTRUCTS				

Inside the workbook, students can fill out questions and sketch out their ideas.

UNIVERSAL DESIGN	
Let's think about products and communities that make life easy for everyone!	
NAKE-	_

The cover of the workbook each student get.

Project Testing 1

I had an opportunity to test most of my lesson plans with Dana Bali, who is 10 years old and attends local middle school. She is from Saudi Arabia and English is her second language. In this first test, I tested the first lecture, which introduces the concept of Universal Design and also two empathetic modeling activities, including visual and hand control impairments.



Dana, 10, is writing down her favorite fruits with a glove on to experience poor hand control.



Her sister (left) also joined and experienced difficulty in writing with poor hand control.



They are feeling raised letters with their fingers to guess words like "lion" and "monkey."

Project Testing 2 • With Dana •

In the second test, I tested the follow-up lecture, which showed more examples of products, services and environment that were designed with Universal Design concept in mind. Also, I tested three activities. The first one was guessing an object (TV remote control) inside a bag without looking the object. Then, she had to evaluate different remote controls and was tasked to redesign one.



Dana is sketching her second idea of her ideal TV remote control.



She is trying to guess what is inside the bag by only feeling the object without looking.



she is comparing seven different remote controls to identify good/bad features of a remote control.

Project Testing 3 • At Presidio Hill School •

I also had a great opportunity to test out my curriculum at Presideo Hill School in San Francisco. I taught an hour-long class at the after school program with help of two other graduate students, Ikue Enomoto and Thomas Deckert.

The class materials, lecture as well as activities, were revised, which brought a success to the class. The students seemed engaged as shown.



Students writing their names with a glove on to experience having difficulty with hand control.



5th grader, Dov (left), says writing with a glove on was "super hard!"



Comparing two different medicine bottles as good and bad examples of universal design.



Almost each slide has at least one question so the students stay engaged with the lecture.



Dov is trying to guess a word "mango" with raised letters while covered with eye mask.



In a workbook, students can record their experience after experiencing being visually impaired.



Zev and Dov are sketching their ideas of products and services that make life easy for everyone.

Project Testing 4 • With Dana •

In this test, the class was focused on mobility impairment. After the lecture, Dana answered a few questions to test her understanding on how Universal Design could aid people with mobility impairment. After Ikue demonstrated how to use a wheelchair, Dana also had an opportunity to experience if she was to be physically disabled. It helped her to gain insights on the disability.



Dana used a wheelchair for the first time in her life to experience mobility impairment.



Dana fills out questions relating mobility impairment.



Ikue Enomoto demonstrates the use of wheelchair.

Project Testing 5 • With Dana •

At the 5th meeting with Dana, I tested out an activity, which was to photo- graph good and bad examples of Universal Design. Dana borrowed my camera and we both went out to find well/ill designed products and environment in her apartment complex. She was able to find as many as five good and 4 examples, which she thought were difficult to use for her and everyone.



As Dana points out, the wide entrance with level floor makes it easy the building for everyone.



The staircase right when you enter the building doesn't accommodate everyone with easy access.



The elevator buttons have both braille and raised letters for people with visual impairment.

Project Testing 6 • At Presidio Hill School •

I went back to Presidio Hill School to test out another lesson plan with Ikue Enomoto and Angelina Engler who came to assist me with the class. We had 12 students who were 10 to 12 years old. The class was focused on mobility impairment and the students were assigned to redesign a public bus with Universal Design principles in mind.



In the beginning of class, students are making their name cards.



Angelina is passing out candy to the students.



Looking at good and bad examples of Universal Design.



Students are engaged with the class with many opportunities to share their ideas.



Angelina and Ikue help the students with redesigning a bus in-class assignment.



Examining the current public bus and discussing an ideal bus.



Some of the students' work on redesign of a bus.

Project Testing 7 • With Dana •

In the final meeting with Dana, I tested out follow up lesson plan on redesign of a TV remote control. Dana sketched out her ideal remote control again improving upon one of the original ideas. She also made a list to evaluate the importance of each button. Then, I demonstrated how to use Crayola Model Magic so she could make a final model of her ideal remote control.



Dana holds up her final model of her ideal remote control and her sketch in her workbook.



She writes down features she thinks are important to her ideal remote control.



Using Crayola Model Magic, she forms her ideas toto a three dimensional model.

Student Work 1 • Redesign of a TV Remote Control •

This lesson of redesigning a TV remote control was split into two classes. First, Dana had an opportunity to look at seven different remote controls. She spent time analyzing each of them and listed out elements she thought were good and bad. Then, she considered features to include in her new remote control, sketched her ideas and eventually, made a clay model.

What features do you want for your new remote control? Invosided and no shupe singles sits Big Badac Braille with every Things What features do in your new remote control make it easy to use for everyone? maked Soft grip and Braille Braille Braille

Dana wrote down features she wanted for her new remote control.

bad G 00 0 Slope

She compared seven remote controls and evaluated each of them to list good and bad features.



She sketched three distinctive ideas. She selected the middle one to refine her ideal remote control.

Student Work 2 • Quiz •

Inside the workbook, students were asked to look at images to think if they were good or bad examples of Universal Design. Most students were success- ful in answering the questions and the lectures, which included good and bad examples helped them to write down the reasons why they were good or bad.



On the list next to her sketch, she determined that On/Off button was the most important.



Final model, which revealed a nice size for her and also had a good grip as she planned.



One of the students at Presidio Hill School, Drew, wrote down the questions as shown.

Student Work 3 • Imaging a World that Easy to Live for Everyone •

After two empathetic modeling activities, which involved the students to experience having physical disabilities, the students were tasked to think how they could create products and communities that make life easy for everyone. First, they wrote down their ideas of what that would look like in words. Then, they drew out their ideas on the following page.



Student Work 4 . From Wheelchair Activity .

At the 4th meeting with Dana, I brought in a wheelchair to stimulate the experience of mobility impairment. Before the stimulation, I had her answer a few questions in which she had to think what she would appreciate and what assistance she would need if she was on a wheelchair. Then, after the experience, she was asked her experience differed from her expectations.

a) What kind of products and environment would you

appreciate if you were unable to walk?

a which dair and flat floor, derasoties, not rampen the putton to push on the door attracticly.

b) What kind of assistance would you need from people

if you were in a wheelchair?

This question was answered verbally instead. Here are her answers;

- Opening a door

- Picking her up from places to places

- If she was unable to move her hands, she would need help in pushing her wheelchair.

- Getting on and out of her wheelchair.

One of the students, Zev, had an idea of a "slide" which can carry people up and down the stairs.

c) How was the experience for you being on a wheelchair?

. The fun plusing with it but it's no being on it. (Iter land opining the door) and a norvion place.

d) What did you learn from this experience?

ell's kind of hard because you shall use your hand all the time, Under it was Sortill Il it's hurdered because they get find easily and showt they can it rest their back easily and they go every where and don't late a rest.

Student Work 5 • Redesign of a Public Bus •

This is a lesson focused on mobility impairment. The students of Presidio Hill School had an opportunity to redesign a bus. First, they made a list of features they want to add to their ideal bus, and then, they each drew out the ideas. Many of them considered wide as well as flat level door entrance as ideal features they wanted for their new bus. What features do you want for your new bus?



Lindsey, student of Presidio Hill School, listed out features she wanted to include in her new bus.



"What do you want your new bus to look like?" She sketched out her ideal bus.

Survey and Results

At the end of the second testing at Presidio Hill School and two of the testings with Dana, I gave a survey for students to complete. The survey included five questions and was utilized to evaluate the class on whether it was fun/boring, and easy/difficult to follow, what they felt of the class, and what they learned from the class. 63% of the students thought the class was very fun. 57% of them felt it was very easy to follow the class, with a few thought the difficulty was about average; yet, none perceived it was difficult or very difficult. Lindsey from the Presidio Hill School liked "seeing (in the class that) people are caring about people with disabilities."

a) How fun or boring was the class?







c) How was the experience of the class?

- "Cool."

- "It was the best because we worked with clay."

- "Entertaining."

- "I like seeing people are caring about people with disabilities."

d) What did you learn from this experience?

- "I learned that you can design anything when you set your mind to it."

- "Designing for blind people."

e) Additional comments or question.

Student:Survey		
Student's Name:	Age:	
How fun or boring was the class?		
1. Very fun		
2. Fun		
3. Average		
4. Boring		
5. Very boring		
How easy or difficult was it for you to follow the o	lass?	
1. Very easy		
2. Easy		
3. Average		
4. Difficult		
5. Very difficult		
Please briefly describe your experience of the cla	55.	
What did you learn from this class?		
Please write down any additional comments or qu	iestion.	
Thank you for your time.		
· · · · · · · · · · · · · · · · · · ·		_

180 Design For All Institute of India April 2009 Vol-4, No-4
Assessment 1 • Feedback from Thomas and Ikue, As Assistant Teachers •

What did you think of the class?

"The children were Curious and active. They did not seem to relate much to the discussion of "senior citizens" and disability until it was put into con- texts they were personally familiar with (e.g. Andre's relative in wheelchair and the 2nd activity."

- Thomas

"Kids lost focus during the presentation. But the questions helped to get them back to focus on the lecture. They don't or can't expand on discus-

"I think that your concept of teaching young children about universal

- Ikue

Assessment 2 • Feedback from Ikue and Angelina, As Assistant Teachers •

Thomas Deckert and Ikue Enomoto came with me to Presidio Hill School to assist me with the first test. After the class, I asked them to write down how they felt about the class and how it could be improved. They both had some positive comments to share. Also, their suggestions on how it could be improved are valuable for the next class.

Ikue Enomoto and Angelina Engler came to assist me with the second test at Presidio Hill School. Again after the class, I asked them to write down how they felt about the class and how it could be improved.

"They [the students] looked interested in what they were hearing about, and loved answering questions. I think it was good we put a lot of questions so we kept them focused. I

noticed that the images of good examples at the end of PPT did not work well. Especially the measuring spoons was hard to lead students to the answer "color-coding is helpful". Also, redesign a bus was a little hard because there are a lot to do with. It was really difficult to keep them on track." - Ikue "I think that your concept of teaching young children about universal design is really great. I liked that you had all of the materials prepared for the students and hand outs and other such hands-on materials. I really liked that you used the picnic table example, the kids seamed to respond very well to that. I think one of the most challenging things I found was working with the one boy on the creative task at the end. I wanted to make comments that wouldn't hinder his creative spark but also bring his focus back to the task at hand. I think it would be good to come up with an action plan for yourself to keep the students focused on the goals of the assignment when doing a creative exercise." - Angelina

Exit Interview 1 • With Cherie, Director of After School Program •

a) What did you think of the class?

I conducted an interview with Cherie Lockwood, who is a director of After School Program at Presidio School in San Francisco. Although she did not have the chance to observe the entire two classes I taught at the school, she managed to watch some of them. She articulated her thoughts on how she felt about the class and the impact two of my lessons had on the students if any. "Anytime, students have an opportunity to learn something outside their curriculum, especially when they have people outside the school come in and teach a class, it's an eyeopening experience for them. The class was fun for them. It really allowed them to think critically about their surroundings. It is an important age for them when they can make observations and see what's around them. But unless they are asked to think deeper about why the things are the way they are or how they got that way or what consideration was put into their surroundings, I don't think they would have thought about it before this class."

b) What kind of impact did the class have on students?

"I know that all the kids that took the class enjoyed it. I heard a lot of posi- tive things afterwards. I think in general, it gave them a better understanding of design. A few of them when I first told them about the class, they were like, 'design? is that just drawing?' or 'what is that?' So, the class definitely allowed them to learn more about design in general. It also helped them to think about why design is important to them, everyday, all the time, all around them, you know how design affects them. You know, it also helped them to think about not just themselves, but get a better understanding of how design affects everybody, especially those who are not like themselves. Those people who may have difficulties with things that they don't have difficulties with.



Dana wrote down features she wanted for her new remote control.

Exit Interview 2 • With Lindsey, 6th Grade •

I conducted another interview with Lindsey, who is a 6th grader at Presidio School in San Francisco. She participated in the second testing I did at the school. She showed interests in sketching out her ideas. When I asked her after the class what she wanted to become in the future, she said "architect". She was one of the most engaged in the class. I learned from this interview that the class affected her very positively.

c) What did you learn about Universal Design?

"I learned many things. I learned that you can be an architect or a designer, and you can design a thing that will help people with different needs. Like a bench at a park, for a wheelchair, that was like amazing, coz my grandpa is in one. So, I could get him out the house for one [smile]."

a) How did you feel about the class?

"It was very interesting. I liked designing the thing, putting down a floor plan of the bus, designing the outside, and making the name for the bus. That was really fun - to see how I could help other people."

b) What would you like to learn more?

"I would like to learn more about what are the teaching - how you can get involved in this and come as a career like this. And also, different designs too, not just buses that'd help people, but like everyday products that can help people. Not just transportations but how you can help - like when you go to a Great America or something, if there's a ride that has a wheelchair access and stuff like that. That'd be cool to see."



I went back to the school to conduct an interview with Lindsey, 6th grade at Presidio Hill School.

Acknowledgements Hitachi Japan, Universal Design Program Professor Martin Linder Ikue Enomoto Presidio Hill School Cherie Lockwood Ayman Bali Dana Bali Professor Ricardo Gomes Professor Hsiao-Yun Chu Daisuke Masui Thomas Deckert Angelina Engler Razan Abduljabbar Lindsey Brammell Geoff Brown San Francisco State University

Hiroki Takeshita :: San Francisco State University :: hiroki@sfsu.edu Appeal: 1.

Dear Colleagues,

My name is Tony D Susanto, a member of this mailing list and a PhD student at School of Computer Science Engineering and Mathematics – The Flinders University of South Australia.

Currently I am conducting a research to find out what factors which influence citizens to adopt and to use SMS applications for public services, such as sending SMS to report criminal activity or to give opinions, to send a request-SMS to get information about bus time-tables, or to pay bills using SMS. (Detail about this research can be accessed at http://smsegov. info).

Every citizen's view is important for this research and I would like to request you to help this research by participating in this survey. There are 8 simple questions which require no more than 10 minutes of your time. Please click at this link to participate on the survey:

http://smsegov.info/formsurvey1.html

The outcome of this research can assist government and egovernment practitioners to develop citizen-centered egovernment which is more accepted and used by citizens. The findings of this survey are expected to be finalized by 1 July 2009. If you would like to be informed about the result, please send me an email, I would be pleased to send the summary to you.

Thank you very much for your valuable time and assistance.

Tony D Susanto, PhD Student,

Technology Adoption, E-Government, and Mobile Technology School of Computer Science Engineering and Mathematics – The Flinders University of South Australia This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee. For more information regarding ethical approval of the project the Secretary of the Committee can be contacted by telephone on (+61) 8201 5962, by fax on (+61) 8201 2035 or by email sandy.huxtable@ flinders. edu.au

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Press release from office of Representative Jan Schakowsky follows:

HOUSING BILL HR 1408 OFFERS ACCESSIBILITY FOR DISABLED

Schakowsky Legislation Seeks "Fairness" and "Common Sense" for Mobility-Impaired

WASHINGTON, DC (March 10, 2009) – People with mobility impairments have limited access to most homes constructed with federal assistance because there are currently no federal standards for accessibility features that these homes must include. However, new legislation introduced today by Rep. Jan Schakowsky, D-IL, the Inclusive Home Design Act (HR 1408) would greatly increase the number of homes that are accessible for people with disabilities.

"Universal standards for homes built with federal money are long past due," said Rep. Schakowsky. "Implementing accessible features when homes are built is a simple matter of fairness, cost effectiveness, and common sense."

Currently, 95 percent of new single-family homes and townhouses built with federal assistance fail to include any features that make it possible for people with mobility impairments to live in or visit the homes.

The Inclusive Home Design Act, authored by Rep. Schakowsky, aims to increase the residence and accessibility options available to mobility-impaired individuals by employing "visitability" standards. The principles of visitability and inclusive home design seek to create homes that are affordable, sustainable, and utilize a design approach that integrates accessibility features into newly-built homes. Inclusive standards and incentives have been adopted by at least 44 towns and states, including Chicago, Naperville, and Urbana, Illinois; Atlanta, Georgia; Vermont; Texas; and Kansas. Bolingbrook, IL and Pima County, Arizona have the two most successful laws, requiring that every home built be based on inclusive design. Respectively, over 4,000 and 11,000 homes have been built under their standards with more homes added every day. This legislation builds on that momentum.

Specifically, the Inclusive Home Design Act would require that all newly-built single-family homes and townhouses receiving federal funds meet four specific standards:

• Include at least one accessible ("zero step") entrance into the home

• Ensure all doorways on the main floor have a minimum of 32 inches of clear passage space

• Build at least one wheelchair accessible bathroom on the main floor

• Place electrical and climate controls (such as light switches and thermostats) at heights reachable from a wheelchair

The legislation applies to new construction, not renovations of existing homes. The average added cost per home for the required features run from \$98 (for homes built on a concrete slab) to \$573 (for homes with a basement or crawl space); however, retrofitting a home can cost several thousand dollars. In multi-story homes, the requirements apply only to the main floor.

Residents who develop disabilities or face age-related mobility problems often face expensive renovations at their own cost or public cost. More often, when renovations are unfeasible, residents live in unsafe conditions or are displaced from their homes into nursing homes. Additionally, disabled people – from children to the elderly and their families – can become socially isolated because architectural barriers in homes prevent them from visiting their friends, neighbors and extended family.

"It makes no sense to build new homes that block people out

when it's incredibly easy and cost effective to build new homes that let people in," said Rep. Schakowsky. "We have the ability to increase mobility and improve quality of life for America's disabled; failure to act is a moral crime."

Original Co-Sponsors to the bill include: Sam Farr, Madeleine Bordallo, Jim McGovern, Luis Gutierrez, and Mark Kirk. Also, the legislation is supported by the following 23 groups: Concrete Change, Access Living, ADAPT, American Association of People with Disabilities, American Association on Mental Retardation, American Council of the Blind, American Network of Community Options and Resources, Access to Independence, ARISE, Brain Injury Association of the United States, Congress for the New Urbanism, Disabilities Rights Action Coalition, Easter Seals, Living Independence Network Corporation, Making Choices for Independent Living, National Alliance for the Mentally III, National Association of Protection and Advocacy Systems, of the Councils on Developmental National Association Disabilities, National Council on Independent Living, National Multiple Sclerosis Society, Paralyzed Veterans of America, The Arc of the United States, and United Cerebral Palsy.

News:

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Beyond Grassroots: CD ROM on Institution Building at BCDI

Bamboo & Cane Development Institute, Agartala (BCDI): CD ROM as a live documentation of intentions and actions of the design team from NID, Ahmedabad in partnership with the team from BCDI, Agartala. –"Beyond Grassroots: Bamboo as Seedlings of Wealth".

This CD ROM was produced in 2003 - 2004 using reports, movies and pictures that were part of the very detailed visual documentation that was maintained by the NID and BCDI teams using digital tools that were constantly available as a project policy. The intention was to build an Institute that could address the very complex needs of the "Grassroots sector" in rural India through the creation of human resources, knowledge resources as well as market linkages with the use of a potential local material such as bamboo which could be used to support a whole spectrum of development activities that could lead to positive change in the lives of the people. This CD ROM can be downloaded as a 560 MB zip file that unpacks into hyper linked folders and files all connected through a series of navigation screens shown on the blog.

We believe that India and other nations may need many institutes like this one if we are to use design to transform our rural economy with the use of local resources in a sustainable manner and in a politically stable eco-system that can survive well into the future with the use of design, democratic decentralized local governance and local entrepreneurship. <Beyond Grassroots: CD ROM on Institution Building at BCDI >

http://design-for-india.blogspot.com/2009/03/beyond-grassroots-cd-rom-on-institution.html

As Indian industrial giant Tata opens a design studio in Britain, *Catherine Dawes* talks to UK boss Steve Hughes about the group's European ambition

We've all heard of outsourcing to India. One company is doing it the other way round. Tata Elxsi – part of the Indian behemoth of companies Tata Group – has opened a studio in the UK. The Indian design consultancy has 3,500 staff in four locations across the country. Its UK operation is starting from slightly more humble beginnings – with six staff in a serviced office in Milton Keynes.

"The European market isn't always very open to working with an Indian design agency," says Steve Hughes, who heads up the UK office, called Design Studio Europe. Tata Elxsi India already works on projects for the global and European markets and the UK studio has been opened to make it easier to target Europe and multinational companies, many of which have head offices in the UK. "In the US they have a tendency to outsource, so they are more open to working with a foreign design consultancy," says Hughes, adding that there are also the problems of dealing with a five-and-a-half-hour time difference.

As well as giving European clients easier access to the consultancy, Tata Elxsi hopes that it can help these customers make the most of opportunities in Asia. "It's a market we know well and the way it consumes is very different to here," explains Hughes. Attitudes to portion sizes, packaging formats and recycling are all very different in India, he says. For example, talcum powder is still preferred over deodorant in India and Tata Elxsi redesigned the packaging for Ponds talcum powder to make it easier to apply.

Tata Elxsi Design Studio Europe will initially focus on designing for the FMCG market. "Tata Elxsi in India is already working with big players like Unilever and Reckitt Benckiser so it makes sense to start with that. And given the economic climate FMCG makes sense." The UK studio is intended to function as a satellite of the main Indian hub. To begin with, it will offer a UK base for projects the Indian office is running. However, Hughes says new projects have been won because of the new studio and they are working on projects of their own.

Engineering success

Tata Elxsi in India started out making silicon graphics equipment and the company still has a strong technology base. Most of the staff trained first as engineers before qualifying as designers. The Industrial Design Centre at the Indian Institute of Technology in Mumbai, one of the most prestigious training grounds in the country, requires design students to already possess an engineering degree.

Tata Elxsi India's remit is broad. The company works on projects as diverse as army vehicles, satellite TV set-top boxes, medical devices and consumer goods packaging. The consultancy worked on the launch of Junior Horlicks in India. "In the UK, Horlicks is seen as a malty drink that old people have before they go to bed. Horlicks was a very minor brand before the launch of the Junior product and it is now a flagship brand for GlaxoSmithKline," says Hughes. Tata Elxsi created a series of cartoon characters for the packaging, which is shaped to give the animals a 3D-style effect. Junior Horlicks was so popular with mums, buying it as a nutritional drink for their children. that Glaxo launched Women's Horlicks.

While these are the sort of projects Design Studio Europe will be tackling, Hughes says the studio is able to tap into the breadth of knowledge at the Indian parent company. The UK studio entered Boris Johnson's Routemaster bus competition. "Tata Elxsi has an unusual closeness, for a design agency, to manufacturing so it will often collaborate with other design agencies – they will do the front end and we will do the back, making sure it all comes together," he adds.

Hughes says as well as the sheer scale of the Indian hub, it offers other advantages. "When I first started in design, you were given a technical brief by the client and got to work. Now, you are expected to research the market and the client's business." He gives the example of a frozen-food product. Research was conducted across 15 countries in three continents. It involved consumer one-on-one interviews, field testing and investigating how consumers bought and used the product. He points out: "If you stand by an open freezer in a supermarket, you're not going to stand there for very long because it's cold. So it's important that the pack says what it needs to say quickly."

"The interesting thing is not all the raw research, but how you extrapolate that data to create the pack. I've seen many consultancies where the solution at the end isn't commercial. The depth of knowledge in Tata allows us to bring in viable insights." In the long-term, Hughes says the studio would like to develop its own intellectual property (IP). "As a designer you're effectively giving your intellectual property away all the time. You develop a format and a patented opening – for example – and the patent is owned by the client." The consultancy would like to develop partnerships with industries, where it retains a share of the revenue from the IP. "Particularly in medical devices, there's a wealth of opportunities for developing IP and opportunities to earn revenue from your own IP." However, he acknowledges that this usually requires internal funding for the project."

Tata Elxsi is in talks with a drinks company looking to get into vending machines. Now that the economy has taken a nose dive and loans are harder to come by, it is investigating all the funding options for the machines, including whether Tata can share the risk and the revenues.

Expansion plans

So far, much of the packaging work by Tata Elxsi India has been structural design, due to its background in product design. Hughes is hoping Design Studio Europe can offer graphic design too. "One of the criticisms of the UK studio has been that we are not branding focused enough." There are currently six staff in Milton Keynes, Hughes hopes this can grow to 10 people in a year's time and 20 people in two years – economy permitting.

The small office in Milton Keynes, which opened in November, is intended to be the first of a series of satellite offices that feed back into the main Indian hub. Hughes is keeping tight lipped about where future offices might be: "We should be able to serve Europe from here. If we needed another office we could open one, but this will be the main European studio. There are really high quality designers here, and we want mostly local staff, who know the market and speak the language." Designers will be able to move between the UK and Indian studios. Possible future locations could include the US and the Middle East.

Looking forward, Hughes has two firm plans. One: to get rid of the bright orange wall in the office. "I hate it, you can't do colour matching work with that reflecting on your computer screen." The other is to win some awards. "The design industry seems to measure itself by the awards it wins." He says design consultancies will often have their awards lined up as you go in the front door and he feels winning one or two will cement Tata Elxsi's presence in the UK. "We'll get peer recognition and it will say: we have arrived."

3.

Secy - Tourism, S. Banerjee invites Svayam to make all heritage sites in India accessible

Svayam, an initiative of SJ Charitable Trust, in partnership with Ministry of Tourism (MoT), Government of India (GoI), today, organised a Conference on Accessible Tourism. The Conference was inaugurated by Shri S Banerjee, Hon'ble Secretary, MoT, GoI. The objective of the Conference was to bring the Government authorities, academicians and stakeholders on one platform and hence, facilitate exchange of dialogue to understand the needs of people with reduced mobility and motivate them to enable inclusive tourism. Ms. Sminu Jindal, Founder, Svayam and Chairperson, ARUNIM was also present at the occasion.

During the conference, various perspectives were presented with respect to MOT's initiatives in Accessible Tourism, Accessible Tourism - Key challenges & Strategies for future, Obstacles as seen by a tourist, Marketing & Business Opportunities in Accessible Tourism, Universal Design in Accessible Tourism Infrastructure. Presentations were made by national and international experts including Shri S Banerjee, Mr. Tom Rickert, Executive Director, Access Exchange International, USA, Mr. Jamie Osborne, Transit Planner, San Francisco Municipal Transportation Agency, Prof. Lalita Sen, Texas Southern University, USA, Mr. Rajiv Kohli, President-ASTA, Mr. Gaur Kanjilal, Executive Director, IATO, Mr. Amitoj Singh, IIT Delhi and Dr. Gaurav Raheja, IIT Roorkee among others.

Inaugurating the Conference, Shri S Banerjee, said, "We are delighted to partner with Svayam for this Conference and stand committed to extend our full support to make this a complete success. Ministry of Tourism has been pro-active in taking initiatives to create inclusive tourism for everyone and also acknowledges the efforts made by Svayam. Today, we invite Svayam to make all heritage sites in the country accessible and also provide suggestions on other tourism infrastructure such as hotels, airports, etc in order to make them inclusive. We also invite Svayam to be a part of core committee on making tourism infrastructure accessible. Our attempt is to make Incredible India accessible to all. This will not only promote tourism in India but also provide means of generating sustainable revenue for the tourism industry."

"Our ministry does not give financial assistance to the states which do not include accessibility into their planning. Moreover, we classify hotels only if they have included specific inclusive features," he added.

Ms. Sminu Jindal said, "We are extremely grateful to the Tourism Ministry for associating with us in this endeavour. The Ministry has been receptive to our suggestions and has been supportive in inclusion of facilities which enable barrier-free environment for all. With regards to making tourist places and heritage sites accessible, we have already begun with World Heritage Sites. After working with ASI in making Qutub Minar most accessible, we are currently working on Red Fort and Taj Mahal, and would further take up other sites in Agra and Goa. The Incredible India campaign would surely get an impetus with such initiatives. This would also provide boost to tourist inflow in the country."

About Svayam: Svayam an initiative of Sminu Jindal Charitable Trust has been working towards providing independence and dignity to people with reduced mobility. Svayam has been engaged in making various public places accessible to all especially the elderly and the disabled. To date Svayam has been invited by ASI as Access Consultants and has undertaken access audits for the heritage site of Qutub Minar. Recently, Svayam received National Tourism Award of Excellence jointly with ASI for making the World Heritage Site of Qutab Minar in New Delhi as Most Accessible & Disabled Friendly Historical Monument. Svayam has also been invited by govt civic agencies like the NDMC as Access Consultants to make its public conveniences accessible and barrier-free.

By Kumar G S. Source: Read It India

Managing for Integrity: Strategies and Approaches

5th Annual Course for Practitioners in Business, Government, NGOs, Foundations, Aid Agencies 29 June – 8 July 2009

Central European University Summer School (SUN) 2009



5. New Executive Director of National Institute of Design



Mr. Pradyumna Vyas is the new Executive Director of NID with immediate effects, announced by Government of India.





Engineering Design and Innovation (EDI) is a one or two year master's program created in 2007 by the Segal Design Institute at Northwestern University. EDI is intended for recent engineering graduates, and is one of few graduate programs in existence today that teach the human-centered design process to engineers in a multi-disciplinary context.

Students in EDI learn how to solve design problems in ways that meet the needs of people and the demands of business. Graduates of the program are prepared to collaborate on teams in industry with designers, researchers, marketers, and managers to create innovative products and services. EDI is currently accepting applications for the 2009-2010 academic year.

Learn more about EDI at <u>http://www.segal. northwestern.</u> <u>edu/</u>edi, or contact Kim Hoffmann, Associate Director of EDI, at <u>kimhoffmann@ northwestern. edu</u>.

Rachel Powers, Founder

847.424.0039 office, 847.372.8222 mobile

http://visde.com/ , rachel@visde.com

Assistant Professor, Adjunct Segal Design Institute Northwestern University http://www.segal. northwestern. edu/ rachel-powers@ northwestern. edu

8.

Give flight to your dreams

(Courtesy: Times of India)

When Resul Pookutty bagged the Oscar, it was a proud moment for Indians and it brought an unprecedented recognition for technical artistes working behind the scenes.

The artistic talent is here to stay and will only get bigger and better. Youngsters for whom a picture speaks a hundred words there is a career awaiting in the creative field of digital design, animation and gaming. Shaping the dreams of aspiring boys and girls is a globally recognised DSK Supinfocom International Campus at Fursungi in Pune. The institute replicates the

7.

education model of the Supinfocom, the leading French institute in the world.

France has been a global leader in art and fashion and Supinfocom is a haloed name among institutes for digital design, animation and gaming. Facilitating direct expertise transfer from Supinfocom, the DSK institute provides right education and artistic mentoring that is so essential for building a blooming career in industrial design. The faculty board consists of full-time trainers from Europe with more than ten years of industry experience. The institute is equipped with state-of-the-art machines and an ultra-modern campus. The institute is equipped with state-of-the-art machines and an ultra-modern campus. While the campus is already functional, it will be further embellished by sports and healthcare facility, auditorium, multi-cuisine canteen, single occupancy hostel rooms, Wi-Fi connectivity etc. All this comes at a fraction of cost compared to institutes in other parts of the world.

The industry aligned programmes aim at creating high quality job-ready professionals and entrepreneurs. Striking a strong interface between academics and industry needs are live projects and internships undertaken during the course. On course completion, students are awarded certificates based on continual internal assessment and the final year project evaluation by jury members from industry. The certificate is accredited bv National Commission for Professional Certification (CNCP), France. The certificate is recognised by the companies worldwide as an equivalent of Masters Degree. The institute, which is the first of its kind in India, adds another feather in Pune's cap. And, for those embarking on a career in digital art and design, the future is indeed very bright.

9.

Reel-time glory for NID students (Courtesy: Vasundhara Vyas Mehta, TNN)

AHMEDABAD: The priest and Polla go on a treasure hunt. At the end of the long hunt, the priest realises Polla has taken him on a wild goose chase.

That's because he leads a life in the normal world, enacting the numerous folk tales he has listened to while growing up. Quite experimental, that .Well, so are the other three films made by students of National Institute of Design, Ahmedabad (NID) chosen to be part of Europe's biggest international student film festival, Sehs?chte.

They will be screened as part of the competitive section Focus'. The festival is being held between April 21 and 26 at Potsdam-Babelsberg in Germany.

Pollena Kathe' (Polla's Story) is a 15-minute film made in Tulu by PJ Udayraj. Purna Virama' by Ujjwal Utkarsh shows a bus being dismantled, with each action related to something happening to people.

The Furnished Room' by Priyanka Chhabra has three stories shown simultaneously in three different frames. In God is Dead', a seven-minute film by Rudais Muhammed, a person is faced with the dilemma of being considered God as he's a ritual artist from Kerala.

"It's great to be part of such a prestigious festival. I'm looking forward to meeting students of film-making from other countries and watch good films in the three days," enthuses Muhammed.

The four students are from the film and video communication course - two have completed their diploma projects, while the others are still working on it.

Says an upbeat Arun Gupta, co-ordinator of the department, "I'm very proud they've been selected. Our's is just a department under a much bigger institute. Yet, our students have given tough competition to institutes focused only on film-making. Of the 16 films chosen, four are from NID. Also, all the students are from the same batch."

Every year, Sehs?chte's Focus section looks at a region. This year, the Indian subcontinent is in the spotlight and entries are from India, Pakistan, Sri Lanka, Bangladesh, Bhutan and Nepal, adds Gupta. The films are selected by a special jury.

10.

A Norwegian to lead BEDA

The managing director of the Norwegian Design Council, Jan R. Stavik, has taken the helm as president of the Bureau of European Design Associations (BEDA).



He is replacing Michael Thomson, who stepped down at the weekend.

Stavik is to be supported by Design Business Association chief executive Deborah Dawton, who has been elected vice-president.

Together they will work to influence the development of design policy at EU level. The organisation expects to publish consultation papers for the European Commission next month, under a likely heading of Design as a Tool for Innovation.

11.

India's first Institute of Apparel Management (IAM) promoted by AEPC Society for Human Resource Development under the aegis of Apparel Export Promotion Council is an industry driven institution offering professional programmes with sector specific and industry driven careers in the fast growing apparel industry.

The IAM is an institute of higher learning for

- * Design
- * Management & Merchandising
- * Technology
- * Retail

The long-term vision for IAM is to position itself as a Multivarsity for trained managers and design professionals under validation from select premier international/ national institutes.

The envisioned growth of the Indian Apparel industry will need over one million merchandisers, marketing and design professionals, strategic design managers, product development experts, production managers and technologists and IAM is poised to fill this 'National Deficit', working closely with the training arm of AEPC, the network of ATDC's across the country for industry-driven solutions.

With its strong ties with the core Fashion/Apparel industries and ownership by the industry, the IAM is able to continually draw upon the industry for both faculty resources and training inputs, thereby making its teaching programmes unique, vocationally apt, industry focused and covering the entire "fibre-to-fashion", "concept to consumer chain. 12.

MPG Achieved at 2009 Shell Eco-marathon Americas(R)



A student team from Brazil celebrates a successful run at the 2009 Shell Eco-marathon Americas, fuel а efficiency the challenge where winners achieve the farthest distance using the least amount of energy. This year's winning team reached 2,757.1 mpg at the event at the Auto Club Speedway in Southern California.

(PRNewsFoto/SHELL)

HOUSTON, TX UNITED STATES



This could be the fuel tank of the future according to students competing at the 2009 Shell Eco-marathon Americas challenge held at the Auto Club Speedway in Southern California on April 15-18, 2009. Many of the more than 500 students that competed from across North and South America used a similar size fuel tank that holds 250 mL. (PRNewsFoto/SHELL)

HOUSTON, TX UNITED STATES



Laval University prepares for their winning run at the 2009 Shell Eco-marathon Americas challenge, earning 2,757.1 mpg. The student competition at the Auto Club Speedway in Southern California included 44 teams and 500 students from across North and South

America. (PRNewsFoto/SHELL) HOUSTON, TX UNITED STATES

Program & Events:

Copenhagen Business School HANDELSHØISKOLEN

1.

ifip

THE DANISH SCHOOL OF EDUCATION AARHUS UNIVERSITY





This Working Conference in India is jointly organized by Copenhagen Business School, Denmark; Aarhus University, Denmark; Indian Institute of Technology, Guwahati, India; and Centre for Development of Advanced Computing, India, with support from IFIP.

HUMAN WORK INTERACTION-DESIGN 2009 Working Conference on

Usability in Social, Cultural and Organizational Contexts – in conjunction with the 4th Cultural Usability Project Seminar Hosted by:

Centre for Development of Advanced Computing (C-DAC), A Scientific Society of Ministry of ICT, Government of India, Pune, India.

Venue: Pune University, India.



Wednesday and Thursday, 7-8th October 2009 Deadline for submissions: August 3rd 2009.

HWID 2009 Working Conference Website: International Federation for Information Processing: Cultural Usability:

http://www.ifip.or.at/ http://culturalusability.cbs.dk/

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Submission 2009/5/30 Deadline



the most prestigious design award in Asia of the last 34 years

- 1.1 Annual Report
- 1.2 Assorted Promotional Item

Greeting card, promotional mailing, calendar, postal item, etc.

- 1.3 Book
- 1.4 Character

Mascot, cartoon character, branded character, etc.

1.5 Editorial

Cover, single page or spread pages of magazine/journal/periodical, etc.

- 1.6 Environmental Graphic
- 1.7 Illustration 1.8 Institutional/Marketing Literature
- 1.8 Institutional/Mar
- 1.9 Logo
- 1.10 Packing
- 1.11 Photography
- 1.12 Poster Commercial
- **1.13 Poster Cultural Promotion**
- 1.14 Poster Thematic
- 1.15 Stationery Set

Business card, letterhead, envelope, etc.

- 1.16 Typography
- Typeface design, small graphics, wordmark, etc.

1.17 Visual Identity System

Corporate, brand and event, etc.

- 2.1 Domestic Accessory
- 2.2 Electronic & Electrical Consumer Product
- 2.3 Fashion Accessory
- 2.4 Furniture
- 2.5 Time pieces, Gift and Premium
- 2.6 Toy
- 3.1 Exhibition & Window Display
- 3.2 Hospitality & Entertainment
- 3.3 Landscaping
- 3.4 Office
- 3.5 Residential
- 3.6 Retail
- 4.1 Consumer & Promotional Website
- 4.2 Website for Non-Profit organization
- 4.3 Corporate Website
- 4.4 Business & Community Portal
- 4.5 eMarketing Material

Banner ad, eDM, etc.

New media work under the above categories but goes beyond the existing parameters of commercially commissioned project



Download Proceedings with Full Papers (7.5 MB)





Female Inventors & Innovators Awards Deadline: 29-May-2009

The Search Begins for UK's Brightest Ideas in Female Inventors

& Innovators Awards

Health & Beauty, Most Innovative Technology, Foods, Best Product Design and Packaging, Exceptional Creative Items in Arts and Crafts, Best Innovative Business Idea, Science and a category for Higher Education & Learning Institutions such as universities and colleges. There are 10 categories in total including the main award Female Inventor of the Year 2009.

Contact Bola Olabisi (Mrs) Managing Director, Global Women Inventors & Innovators Network (GWIIN), The Shoreditch Building 35 Kingsland Road London E2 8AA 7.

DESIGN COMPETITION! FIRST PRIZE EUR 750 Integrity Online University

what is integrity?

Integrity is a concept that includes accountability, competence, corruption control, and core values such as honesty and public service. Much of the world is currently facing an economic and social crisis as a result of the failures of integrity.

what is Integrity Online University?

Integrity Online University is an initiative to provide practical and useful courses for students, post-graduate students, and full-time professionals in the fields of law, public administration, public policy, business, etc. interested in learning how to improve integrity in their societies and work environments.

The online courses will be offered in several languages. This is a new initiative and we are looking for innovative designs and learning ideas that can help us to make this a useful and interesting tool. What should we teach? How should it be taught? What will students, postgraduate students and full-time professionals in your country find most useful and interesting? How can we actively interest them?

We are looking for innovative ideas for graphic interface and learning features of Integrity Online University that will make this a useful learning environment for people around the world interested in these issues.

judging

Entries will be judged by a jury consisting of, policy leaders, educators and governance professionals headed by Fredrik Galtung, Tiri CEO. Judges will score each entry according to the 5 following criteria:

1. Innovation: unique and innovative qualities of the graphic design.

2. Efficiency: how the content layout makes learning faster,

simpler, and easier than conventional methods.

3. Research: your analysis of local needs for this learning experience;

who is most likely to benefit? To find this interesting? (this can be presented as an annex)

4. Aesthetics: the aesthetic appeal of the product.

5. Impact: how will we know that the courses were useful? awards

First Prize - €750 cash prize

Second Prize - €250 cash prize

The faculty member of the First Prize winning entry will receive an international book voucher worth €250.

Award winners will be announced on the Tiri website.

Deadline - May 15, 2009

Who can enter

This competition is open to all students currently enrolled in a programme of study for the current academic year. To ensure your program is eligible, your faculty should please let Rachel.Lustig@tiri.org know that your institution will be participating in the competition.

All entries must be the original works of entrants. There is no cost to enter, and there is no limit on the number of entries per participant.

What to enter

The following is required for entry:

• A PowerPoint presentation in English with the main features and design elements. There is no limit on the length of the PowerPoint although we encourage quality and originality of ideas over quantity.

• Optional: You can choose to add a separate explanatory document or to include your explanations in directly in the PowerPoint presentation.

Please also provide

The full names, contact details, and degree programme of the team or individual submitting the entry.

The name and email address of your faculty / professor. How to enter

Submit your entry to: <u>info@tiri.org</u>

What is Tiri?

Tiri is a London-based independent non-governmental organisation that works with governments, business and civil society to find practical solutions to making integrity work. For more information, please see www.tiri.org.



Tutorials at HCI International 2009

Twenty-three Tutorials (half-day and full-day) are offered at introductory, intermediate and advanced levels covering the entire spectrum of the topics of the HCI International 2009 Conference, to take place in San Diego, CA, USA, 19-24 July 2009.

In order to take advantage of the mid-registration period you need to register until 30 April 2009. Registration for Tutorials is independent from the Conference registration. A discount of 50% is on offer for Students. Further information about registering for Tutorials is available through the Conference http://www.hcii2009.org/registration.html website at: For Conference participants, who are interested to participate both in the technical sessions and the Tutorials, two different packages are offered: The "Best Deal" package includes conference registration and your choice of any combination of three full-day equivalent tutorials (two half-day tutorials are equivalent to one full-day tutorial). Your discount for this package amounts to the cost of one full-day tutorial. The "Good Deal" package includes conference registration and your choice of any combination of two full-day equivalent tutorials. Your discount for this package amounts to 150 US dollars. The above deal pricing applies to a single order that has the specific package items.

Registration for the Tutorials is available through the Conference Management System

https://www.hcii2009.org/

DeThinkingService ReThinkingDesign

First Nordic Conference on Service Design and Service Innovation Oslo, 24th-26th November 2009

Deadlines:

The deadline for suggestions is: 20th April 2009

Deadline for papers: 24th August 2009

Contact information:

To find out more, register interest for the conference or send in a suggestion please go to:

http://www.norskdesign.no/servicedesign09/call_for_papers

You are also welcome to contact us at submissions@aho.no

Simon Clatworthy

Professor of Interaction Design

Institute for Design

Tel: +47 22 99 71 41

Mob: +47 911 42 337

Blog at service-innovation.org and http://ahoi.tumblr.com/

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10.

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11.

Ph D programme in Design at IDC, IIT Bombay

Applications are invited for admission to Ph D Programme in Design at IDC,IIT Bombay for the session commencing from July 2009. The last date for application is 2nd of May 2009.

For application forms and other details, refer to IIT Bombay website:

http://www.iitb.ac.in/academic/toadmission.jsp

We have 18 brilliant students enrolled in the Ph D program at present at IDC. Have a look at their areas of research:

http://www.idc.iitb.ac.in/students/phd.htm

The main objectives of the program are:

. Generate and publish new knowledge in chosen areas of specialization in design

. Generate and publish new knowledge in inter-disciplinary areas

. Create designers who are professionally competent, but also have a strong inclination towards theoretical issues in specialized areas.

. Create teaching and research faculty for Design Institutions.

Its unique structure permits fulltime as well as part time candidates to register for the Ph D.

The academic programme leading to the Ph.D. degree is broadbased and involves course credit requirements and a research thesis.

The Institute also encourages research in interdisciplinary areas through a system of joint supervision and interdepartmental group activities.

Research Scholarship/ fellowships sponsored by Microsoft and Crompton Greeves as well as Institute's Teaching/Research Assistantships are also available. For further enquiries write to: office@idc.iitb.ac.in

and for details regarding academics at IDC, IIT Bombay refer to

http://www.idc.iitb.ac.in/academics/phd.html

12.

For the first time, London 2012 is inviting young designers aged 16-21 years to create a new infill for the London 2012 Olympic logo.

This special version of the logo will sit alongside the London 2012 Paralympic logo and be known as the London 2012 'education logo'. It will be seen in communities across the UK!

Live it. Breathe it. Design it.



Our challenge to talented young designers is to create a new infill that reflects the amibitions and excitement of Get Set, the official London 2012 education programme, and the London 2012 **Olympic and Paralympic** Games.

We are looking for a distinctive concept that fits with the London and 2012 brand its strategy of participation. What says 'education and young people' in the UK? Can you create a single design or image which reflects vour ideas?

The winning design will

be used by schools and colleges up and down the country and

the winning designer will get the chance to work with London 2012 to see their artwork turned into an official logo!

Find out more!

Download the full competition brief and get designing! (PDF, 2.17MB)

The competition closes on Friday 5 June 2009, so don't waste a moment - get started!

Test and submit your designs!

Test your design inside the logo, save it, print it and send it to a colleague or friend for a second opinion.

When you are happy with your design, <u>submit it to London</u> 2012. Remember, you must submit your entry before 4pm on Friday 5 June 2009 or you'll miss out.

13.

Stream: Fluidity in Design – 20th Anniversary DAI Student Design Exhibition

Submitted by rvalencia on March 10, 2009



The 2009 annual DAI exhibit showcases a variety of exceptional works in product, graphic, digital media, industrial and environmental design. Opening night will be Wednesday May 13, 2009 in Jack Adams Hall, Cesar Chavez Student Center, from 6-9pm.

The Exhibit Design class, coordinated by Prof. Pino Trogu, is responsible for the planning, budgeting, developing and installing of the entire show. This interdisciplinary exchange between product, visual communication and industrial technology utilizes professional practice experience in an academic environment.

Due to severe budget constraints, the class is soliciting donations that will go towards purchasing materials for the

show. To learn more about the show or to contribute online, please visit the website: www.daishow.com

email stream@daishow.com phone (415) 338-2211

Exhibit hours Tue. May 12 4pm-9pm, Wed. May 13 9am-9pm Thu. May 14 9am-9pm , Fri. May 15 9am-12pm

14.

Workshop

on

Interactive (Human-Computer) Technologies for the End-user

25th May, 2009

at



IIT Delhi

A program under UKINIT Sponsored by EPSRC

SUPPORTED BY HP LABS INDIA

Under the aegis of Foundation for Innovation and Technology Transfer (FITT), IIT Delhi & The Bharti School of Telecommunication Technology and Management, IIT Delhi

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the 4th United Designs International Biannual Design Exhibition Main Gallery, California State University Northridge Los Angeles, California, USA

Welcome to the fourth United Designs Exhibition, a celebration of international awareness between education and profession in graphic design. The new preference for design participation had been changed with technology and profession, but always the message remains prominent force in way we solve the problem. For designers, the design problem is bounded by restrictions such as clients and budget constraints, but always we strive to explore new visual expressions, which can communicate the intent of message. In this exhibition, we discover unique approaches in the preference for the design expressions by designers from the world. We don't look at restrictions as a barrier for creativity but it is an opportunity for bringing creativity to the intellectual level. This exhibit is a tribute to all the participants of the United Design exhibition.



Exhibition Date: Monday, June 29–Monday, July 20, 2009 Opening Reception: Saturday, July 11, 2009

ORGANIZER

 Art Department, California State University Northridge (CSUN)
 Korean Society Experimentation in Contemporary Design (KECD) SPONSORSHIP American Institute of Graphic Arts (AIGA Los Angeles, USA) Korean Federation of Design Associations (KFDA) Korea Institute of Design Promotion (KIDP) Ministry of Foreign Affairs and Trade (MOFAT) Korea Tourism Organization (KTO) Design Research & Education Lab (DREL) DESIGN CATEGORIES (All participants)

Poster: About world environmental awareness, A1 size
Practical Design: Any printed design project done in year 2008–20 INVITED DESIGN FIRMS (Selected by directors: Selection closed) Enzo Finger (www.enzo.no) Norway
 Sapient (www.sapient.com) USA Kim Baer Design Associates (www.kbda.com) USA Hamagami/Carroll, Inc (www.hcassociates.com) USA Meat and Potatoes, Inc (www.meatoes.com) USA Fabrica (www.fabrica.it) Italia Skolos and Wedell (www.skolos-wedell.com) USA Subcommunication (www.subcommunication.com) Canada DIRECTORS Chief Director: Inyoung Albert Choi KECD Vice President & Hanyang University, Korea Director: David Moon California State University Northridge, USA Director: Scott Hutchinson UCLA Extension, USA Director: Don Tarallo Bridgewater State College, USA You can download forms from www.designresearchlab.com/uniteddesigns.html United Designs for All Visual Communication Designers.

16.

Shahneshin Foundation CALL FOR ENTRY / Press Release

SF launched the Design Award.

http://www.shahneshinfoundation.org/awards/special.html



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Shahneshin Foundation (SF), P.O. Box 1211, CH-8700 Kusnacht-Zurich

Switzerland

T: +41 43 540 00 26

F: +41 43 540 00 27

w: shahneshinfoundation.org

17. Hosted by the Hong Kong Designers Association (HKDA),



these coveted multidisciplinary awards for professional designers have been awarded to a who's who of the design profession from Hong Kong and Asia over the last 34 years. To enter go to www.hongkongda.com/awards09

On behalf of HMDA, we would like to inform you that HMDA in association with The Energy and Research Institute (TERI), New Delhi and Terra Viridis Partnership (TVPL), UK is organizing a 3 day training program on the Environmental Building Design in Hyderabad from 30th April to 2nd May 2009 at Hotel Katriya De Royal, Hyderabad. This training program has specifically design for Architects, planners, been civil engineers, building services consultants such as HVAC engineers, Plumbing consultants, faculty of architecture & civil engineering departments and the final year students of architecture & civil engineering.

Background

HMDA started the 'Environmental Building Initiative' for Greater Hyderabad in November 2007 for which they had appointed 'The Energy & Resources Institute' (TERI), and 'Terra Viridis Partnership' (TVPL), as consultants to develop the 'Environmental Building Guidelines & Regulations (EBRGs)' for the city and to formulate the initiative.

In parallel to this initiative, the Ministry of New and Renewable Energy (MNRE) in Delhi has developed a National Building Rating System for India called GRIHA (Green Rating for Integrated Habitat Assessment). As per a recent mandate by the Ministry released on 5th February 2009, all government buildings have to compulsorily comply with GRIHA rating and achieve at least 3 stars. Also, in an effort to promote GRIHA across the country, the Ministry has announced incentives for Architects as well as Clients for achieving GRIHA compliance. In addition to this, MNRE is developing a comprehensive set of energy efficiency guidelines to be followed for all types of buildings. These guidelines will be circulated to all the Urban Local Bodies (ULBs) and Urban Development Authorities (UDAs) within the country, which will be encouraged to be introduced into their local building by laws.

In view of effective awareness generation upon these guidelines, HMDA has already initiated a dialogue with MNRE to take forward a combined agenda of GRIHA and its own Environmental Building Initiative forward in Hyderabad by proposing to collaborate with the ministry for setting up a

18.

Regional GRIHA Secretariat in Hyderabad. The key activities of this Secretariat will be to undertake training and capacity building programs for different target groups upon imparting technical knowledge and know how in achieving GRIHA compliance and implementation of these guidelines and also act as a Technical Resource Cell vide information dissemination on the eco-friendly building techniques, technologies, products, suppliers, best practices etc.

As part of its 'Environmental Building Initiative', HMDA is conducting this training program for building professionals at a highly subsidised rate (as the cost of consultants and some of the associated costs are part of the initial project cost).

Hence, we request you to take this opportunity to register for the program. This program can only accommodate a limited number of people. However, if we receive extra interest in such trainings, we as consultants involved might be able to convince HMDA to conduct more such programs at similarly subsidized rates. Hence, we also request you to kindly pass on this invitation to other building professionals who might be interested in participating in the training.

Details of the Training Program

Details of the program including the agenda, content, registration details and an overview of the guidelines are provided in the enclosed files. In brief, the 3 day program will cover of the following

1. Concept design lectures and hands on simulation exercises on energy efficient building design with an introduction to energy related EBRGs

2. Concept design lectures and hands on use of computer based calculation tools on efficient water and waste water management in buildings along with an introduction to water related EBRGs

3. Design lectures on integrated solids waste management, pollution reduction, ecological and geological consideration and use of sustainable building materials in buildings and their related EBRGs

4. Exposure tour of some of the best practices in the city of Hyderabad on the 3rd day

5. Existing and proposed incentives to promote the integration of these guidelines in building design

Director, TERI

Swati Puchalapalli

Director, TVPL

Srikumar Sattaru

Environmental Planning Consultant, TVPL

19.

Conference and Expo: Sustainable Transport and Travel for All

Sub-themes

- Affordability and Accessibility
- Environmental Concerns and New Technological Development in Accessible Transport
- Accessibility Concerns and Solutions for those with Cognitive and Sensory Impairment
- Accessible Tourism

HONG KONG, CHINA

Job Openings:

1.

We at Pramati have following job openings:

1) UX Designer

- come up with conceptual designs and wireframes

- able to mock-up designs into HTMLs

- knowledge of Usability and Visual design a plus

2) UX Manager

- take total ownership of the project

- would define the overall UX strategy of the project

- responsible for resource allocation and effort estimation

- good understanding of HCI, UCD

- track record of hands-on experience in UX projects

- 5+ years of experience

3) UX Developer

- knowledge of HTML, CSS, Javascript, ASP/JSP, XML

- knowledge of cross-browser, cross-platform compatibility

- knowledge of Usability a plus

4) AJAX developer

- good knowledge and extensive experience working with AJAX

- knowledge of other RIA tools such as Flash, Flex a plus

Mail your resumes and portfolio links to: anirudho@pramati.com To know more about what we do check out http://pramatiservi ces.com/index.jsp?id=uit

Business Analyst Pramati Technologies

2.

UI & Web Designers with 2 yrs +

experience.

Interested can reach me with their CV [Subject Mails appropriately: resume is not a subject]: <u>m.merchant@peopletree.net.in</u>

Call: 09844843004

3.

If you are currently working as an Art Director in a reputed Advertising Agency, then Philips Design will be the right place for you to translate marketing communication strategies into effective on-brand design strategies/ solutions.

You will lead the design through to production by meeting deadlines and demonstrating a high degree of flexibility.

Ability to art direct and delegate would be a must.

You should possess Bachelors degree in the relevant design area with 8 to 10 years experience in Ad or Design Agency with high level of professional skills including computer skills and related value adding knowledge.

You can look forward to an informal and challenging work environment, networking across Global Design Professionals, supplemented with excellent prospects for growth and an international career in any of the Global Branches.

Please forward your detailed resume including Digital Portfolio to - jissa.cj@philips.com

4.

Looking for Sr Sketcher/ Sketcher for Full Time and also for Part time (Freelancing/ working from home)

Client Briefing:

It is a learning based content provider focused on the children industry. We work with clients to create products products that help kids learn and teachers teach.

Its ability to match innovative concepts with efficient execution has helped the company forge strong and successful relationships with major publishing organizations in the US and Europe. The company has presence

in US, UK and India clients include Cengage Learning, Disney Learning, Pearson, Readers Digest, Oxford University Press, Nelson Thornes and Scholastic, among others.

Position: Sr SKETCHER - PENCIL SKETCHING

Able to design REALISTIC WORK

With a good Experience of Pencil sketching and able to do realistic sketching

Salary: 35,000 to 50,000/- PM

Full Time location would Be DELHI

And Can work from any where in India as a FREELANCER

Excellent English Communication Skills Is a Must

Kindly revert me back with your portfolios along with your CV Resume without Portfolio wont be Considered so KINDLY FORWARD YOUR SAMPLE OF SKETHER OR ONLINE PORTFOLIO LINK IF ANY FORWARD ONLY HAND MADE SKETCHES

ankita.c@universalh unt.com

5.

Job Description

ABB Corporate Research Centre in Bangalore is an integral part of Power and Automation MNC ABB. As part of ABB's extensive Global R&D network with an international team of highly qualified and experienced domain experts, the center's mission is to conduct state of the art applied Research in disciplines like Software Architecture, Usability & Human Computer Interaction, Information Security etc. The center also contributes in development of Industrial IT software to maintain and support a range of software intensive ABB products.

We are now looking to strengthen the research team with high caliber researchers in Usability and Human Computer Interaction area.

Position: Usability & Human Computer Interaction Researcher Job Description:

Propose and conduct applied research in Usability & HCI to identify and develop novel interaction and product concepts for ABB Products across Robotics, Industrial Automation and Power domains.

Apply User Centered Design methods to conceptualize & design useful & usable products and services

Proficient in user research methods like interviews, focus groups, contextual inquiry, creating personas etc

Conduct Task and Work Flow Analysis using different methodologies like GOMS, Cognitive Task Analysis, Concur Task Trees etc

Conceptualize and prototype (low and high fidelity) novel design solutions

Plan and conduct usability tests & evaluations - Heuristic evaluations, cognitive walkthroughs etc) & testing (formative and summative)

Good communication skills with ability to analyze and communicate results effectively to stakeholders

Evangelize User Centered Design across and with in organization Guide development teams in implementing user interface design Apply latest usability developments, methodologies and technologies to ensure good user experience design

Key Competencies Required

Interest in new technologies and tweaking the same to suit requirements Open mind to explore new frontiers and ideas

User Centered Design Techniques – User Research, Concept design & prototyping and Usability evaluation & testing.

Good creative thinking and problem solving skills

Team player with good communication skills

Ability to collaborate & work with geographically distributed teams Educational Qualification: Masters/Phd in Design/Psychology/ Human Factors, HCI

Experience: 3-6 years

Job Location: Bangalore

Only those candidates with formal university degree in HCI/

Design/Psychology / Human Factors or related disciplines will be considered

If the above sounds interesting, send in your details to n.anbu@in.abb.com or call 9741399802

6.

We are looking for UI designers with 1-2 yrs experience, on contract basis for 3 months(can be extended to full time employment) for a small startup in Pune. Design school Interns & fresher are welcome to apply. Should have good command on design tools like photoshop, dreamweaver, etc. If interested, please write to me for more details. +91.9096811937 (pune)

7.

Hachette Book Publishing India Office seeks qualified designers who can do attractive book design including cover and page layouts. Designers need not be very experienced, but those with a good understanding of print design and a sense of creativity are welcome. The work would be on assignment basis, with contracts made per book(s). One can check more about Hachette at <<u>http://www.hachette childrens.co.uk/</u>> http://www.hachette childrens.co.uk/

Those interested may send mail with samples of your work to <u>anupama.purohit@hachetteindia.com</u> anupama.purohit@40hachetteindia.com

8.

Adobe Systems is seeking User Experience Designers who will be responsible for creating great experiences for several members of the Adobe product family. You will work collaboratively with fellow members of the User Experience team to conceptualize, design and prototype ideas; then inspire members of Product Management, Engineering and Quality Engineering to develop award winning products. Responsibilities:

• Represent the "User Experience", translate customer requirements into defined specifications and inspire the Engineering team to develop the right product.

• Participate in the product definition process with the Product Manager, Engineering Manager and User Research and influence product strategy and direction.

• Develop and maintain usage scenarios, navigation maps, prototypes, specifications and other design documents.

• Work with development teams to make sure that the workflow reflects the customer's needs and ensure consistency among features.

• Define innovative user interfaces and interaction styles which result in improved user productivity.

• Develop expert-level knowledge of competitive and complementary products and bring new ideas to the team.

Knowledge & Skills:

High degree of creativity and problem solving ability

• A passion for designing compelling user interfaces

• Excellent presentation & communication skills

• Team player

• A strong portfolio demonstrating past interaction design solutions

• Expertise in design tools like Photoshop, Illustrator etc

• Prototyping skills using tools like Flash, Flex, Dreamweaver and OR the knowledge of imaging / video domain applications would be definite plus.

Experience:

4 - 6 years of experience for the User Experience Designer position

6 - 10 years of experience for the Sr. User Experience Design position Location: Bangalore and Noida

If you would like to contribute towards improving the experience with Adobe products and the above job description excites you then we would like to hear from you.

Contact Parul Datta paruld@adobe.com

9.

weRead (A lulu company) is seeking an intern for User Interaction & Visual Design team to improve existing and create new designs for our products.

* The right candidate will have specialization and interest in visual design of consumer software products, with significant web-based experience. * This position is based in Bangalore.

We build products that enable users to tap into the wisdom of their social network. Our offering takes on the mission of promoting readership of books by finding information that is customized and relevant to a user's personal tastes, needs, and context.

Responsibilities:

- * Design clean yet compelling visuals for web products.
- * Design interactive mockups for social applications

* Think creatively about product features and evolution

* Ensure web site communicates with and engages users with world-class usability

* Assist in the development of effective products and features messaging and positioning

* Analyze user behavior data

* Interact directly with users via interviews or usability tests General requirements:

* Experience with web-design, layout typography and current visual/aesthetic styles.

* Excellent exposure to usability and user experience design

* Affinity for rapid prototyping

* Experience in designing new user interfaces & shipping consumer products

* Comfortable with latest technologies, tools, and approaches to web design.

* *must be well versed with photoshop, illustrator and other web design tools.

* Flexibility when faced with complex challenges

* Experience in developing applications on Iphone/mobile is a plus To apply please send in your resumes and portfolios to <u>sajmera@lulu.com</u> with the subject line as UED intern

Please make sure that you go through our product and include relevant work samples (visual and interaction design for web products and social media) in your portfolio.

10.

A Internet & Mobile Start-up by established Media House, Mumbai is looking for "Head User Experience & Design".

Anyone interested could get in touch with Darshan Patodi

At <u>darshan.patodi@gmail.com</u> Please do not hit the reply or reply all button. Get in touch with him only.

Position Name: Head User Experience & Design

a. Eligibility: 5+ years of experience in UI Design for Internet & Mobile platform

b. Salary: Negotiable

c. Location : Mumbai

d. Mail Resume To <u>.p.darshan09@gmail.com</u>

11.

CSC (PayPal IDC) is hiring User Interaction Designers.

Exp: 5 - 10 Years

Work Location - Chennai

Job Description

Qualification:

Degree or Certification in Human Computer Interaction, Design, or other related discipline

More than 4 years of solid industry experience designing GUI's for websites and web applications

Must possess a solid working experience with appropriate design tools including Photoshop, Illustrator, Visio, InDesign etc.

Should have experience with international and localization design considerations

Strong communication, analytical and interpersonal skills working within cross-functional teams a must

Portfolio required - MUST

Qualification and Skills (Preferred):

Degrees from premier institutions like IIT and NID

Experience designing payment solutions for consumers and businesses Working knowledge of visual design and typography principles Ability to create personas, profiles, and usage scenarios based Ability to rapidly prototype designs in hand-coded HTML. Mandatory Skills:

1. Human computer Interaction (HCI)

2. Human Factor International (HFI)

3. Certified Usability Analysis (CUA)

4. Usability Professional Association (UPA)

5. User Centric Design (UCD)

6. User Experience Design

7. Information Architecture

8. Task Flows

9. Usability Analysis

10. Conceptual Design

11. Wireframes Design

12. Interaction Design

Please send your resume to jdhanavenkat@csc.com If you need any further information on this requirement feel free to call Dhana @99406 44985.

12

Looking for entrepreneurial people, with skills in the are of usability with the latest techniques, that can help me building a search portal in the Netherlands with extra functionalities for ordering, workflow streams, back office administrations etc.

The look and feel is critical as user friendliness is for the success. Preferably the look and feel should be state of the art, web 2.0 based and graphically lean and modern.

For more enquiries or offers please contact me at <u>jcavadino@gmail.com</u>. Jan-Arnout Cavadino

13.

J.S.SMahavidyapeeth a head quartered in Mysore runs about 300 educational institutes in Karnataka, Tamilnadu, Noida, Mauritius from crèche' to research level. Requires coordinator, Design Faculty to run U.G/P.G. level courses in Interior, Fashion Design at J.S.S. Centre for Design, HAL 2nd Stage, Indiranagar, Bangalore. If interested please contact S. Gananath at gananaths@yahoo.in

or on 080-25214774. 14.

Urgent requirement for a full time designer at CMSS (<u>http://cmss. in/</u>), Mumbai.

CMSS has its own set of proprietary software products & applications, and is currently in the process of setting up an in-house design team.

Position: Jr. Designer

Reports to: Design Director

Job Description and Requirements:

1. Good understanding of colour, typography, corporate identity & branding.

2. Giving precise shape to innovative concepts & designs that define and exceed the client's requirements & expectations.

3. Implementing User interface design for websites, web based applications and multimedia presentations.

4. Designing clear and concise sitemaps that illustrate the sites architecture and navigation system.

5. Graphic Designing of a variety of print based marketing collateral; posters, brochures, stationary, logo style manuals, advertisements for newspapers and magazines, promotional items such as t-shirts, badges & cap

designs, storyboards, etc.

Offered salary: As per industry standards, in accordance with the individuals expertise and experience.

Freshers may apply as well.

Interested individuals can email their resume & portfolio to:

<u>atul.paranjpe@ cmss.in</u>

atulparanjpe@ gmail.com

Design Director, CMSS

+91 9819112243

15.

An opening for a head designer/ artist at Vastrakala in Chennai Vastrakala is a house of couture embroidery and is headed by Mr Jean Francois Lesage.

www.jeanfrancoislesage.com

They are looking for someone with an art/ design base who can handle briefs

and take care of designing the art work.

If anyone is interested, do get in touch with <u>njeyasingh@gmail.com</u>. This post will be a full time position.

16.

Job details overview

• We are hiring likeminded Designers who breathe and live Design

• Execute projects independently to develop User-Centric Solutions

(Applications/ Websites/ Intranets/ Extranets)

• Work closely with our Business Analysts and Development Teams to extract User Requirements, conduct Heuristic Evaluations, and conceptualize a complete User Experience Design solution

Work closely with our Sales and Marketing teams to showcase UX to our customers

• Work right from Desirability to Creativity to User Experience and Product Realization

Role Details

• Strong exposure designing RIAs using Web 2.0 features, Client applications, Websites, Intranets and Mobile-handheld devices for multiple industries.

Elicitation of User Requirements from Business Requirements

• User Profiling; Competitive Analysis; Usability Analysis

• Interaction Design; Information Architecture, Wireframes; Rapid Prototyping

- Heuristic Evaluations/ Usability Testing
- Strong command over Visual Design and understanding of line, shape and form, space, texture, value, color, and color interaction
- Strong understanding of Branding
- Creation of Branding and User Experience Style Guide
- Usability Testing (Direct and Remote)

- Knowledge of tools like Visio, MS Office,
- Excellent knowledge of entire Adobe Family, Coral design tools
- HTML and CSS expertise preferred

Soft Skills

- High Integrity
- Problem solving skills and learning attitude
- · Good communication, analytical and presentation skills
- Team player

Process oriented

Exp in years: 4-6 years

Education - M.Des/ BFA / NID Graduates

Excellent in communication & presentation skills.

Must be willing to travel to internation locations on short term basis.

Send your Resume to:- <u>bharathi_nagendran@ mindtree.com</u> 17.

Looking for young designers/freshers willing to work in Bihar, in the handloom sector.

Designer needs to put in 5-7 days a month in the respective cluster. Rest of the days , they can be on their own any where in the world. We shall pay them Rs.2.00 Lacs per annum consolidated.

initial contract for 1 year, extendable on mutual consent, upto 3 years. It is a Govt. project. Interested individuals can email their resume.

F& L A , NIFT Gandhinagar

Design consultant - IL&FS

dsyn_rvarun@yahoo.co.in 18.

(More jobs are available in our website www.designforall.in)

Advertisement:



Invites far-sighted philanthropists to collaborate on new concept education institutes Innovation, Design & Entrepreneurship Academy

An institute were students learn to use their knowledge for the advancement of the society and their own as well.

An education system where gurus are owners and enjoy the autonomy to build tomorrow's India

70% share of gurus & 30% share of philanthropist visionaries

Write in confidence or meet

Lalit Kumar Das B. Tech (IITK), M. Tech (IITD) M.A. (Industrial Design), RCA London

IDD Centre IIT Delhi, New Delhi 110016 Phone: 09891941433 E. Mail: <u>lalitdas@gmail.com</u> For free Registration: write to subscribe@designforall.in

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Editor@designforall.in

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(Erratum: Inadvertently we have posted the wrong picture of Prof Ponmile Olonilua in our March 2009 Vol-4, No-3 issue of Newsletter for the article of What Next.....on the page No-16. We regret. Editor)