

Design for All

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Photo: Mark D'Souza

Chairman's Desk:

Whenever I hear an old song of "Another brick in the wall" by Pink Floyd group

Daddy's home cross the Ocean.

Leaving just a memory.

The snapshot in the Family album.

Daddy what else did you leave for me?

Damn It! What did you leave behind for me?

All in all it was just a brick in the wall.

All in all it was all just bricks in the wall.

We don't need no education.

We don't need no thought control.

No dark sarcasm in the classroom.

Teacher leave the kids alone.

Hey, teacher leave the kids alone!

All in all it's just another brick in the wall.

All in all you're just another brick in the wall

We don't need no education.

We don't need no thought control.

No dark sarcasm in the classroom.

Teachers leave those kids alone.

Hey, Teacher leave those kids alone!

All in all you're just another brick in the wall.

All in all you're just another brick in the wall.

crowd noise

I don't need no arms around me.

And I don't need no drugs to calm me.

I have seen the writing on the wall.

Don't think I'll need anything at all.

No, don't think I'll need anything at all.

All in all it was just bricks in the wall.

All in all it was just bricks in the wall.

It shakes me and I ponder over what Education is? What I believe is that objective of education should be to open the faculty of mind which can take us ahead from where we are. It may lead to disaster or prove fruitful is in the womb of future for living ones. All education starts from mystery and curiosity to demystification and that was the beginning of phase of Black Magic. In Black Magic everything was mysterious and curiosity in man was very high for unveiling the same. It was lack of knowledge , the fear of unknown, the fear of death and many other factors they could not do what people can do as on today .I admire their tenacity courage and even the way they had challenged the death to know the truth. Slowly they conquered the fear of death. The biggest achievement of mankind is that he has forgot the death and assumes that he has come to live forever on this earth. This may be untrue but idea is working. This helps us to work for the betterment of the society. The black Magic off shoots led to Mathematics, Physics, Chemistry, Astronomy and many more branches of human learning.

I move further in history and find education moves from black magic to traditional crafts then to Modern education. In society, modern education (I call the western model of education) is not meeting the desired objectives since it has left out many sides of human life untouched and these have become unreachable to all of us. Some section of society is demanding the concepts of Universal Education. I personally believe that many school of thoughts should co exist in our society and let them work on their parameters for betterment of living being. This style of functioning has disadvantage that man has tremendous potential but it is facing the problem of throughput and wasting his creative energy in either repetitive or duplicate or arguing for run down or lost in no goal because he is confined to his own school of thoughts. His mind is closed . It lacks vision faculty.

I argue for standardization of every school of thought for benefits for all and fast pace development. In this standardization of creative thoughts either it may kill the most creative thoughts because it will not fit into the standard parameters set by our society or our humankind is not that mature to understand the individual's contribution. Take the example of Mr. Bole who invented the logics and anticipated the birth of computer before 150 years. Can flash of ideas be standardize? Some time some creative person thinks beyond the imagination of entire humankind that no one has ever thought in millions of years. Electricity

was present in this Universe before the day of earth existence, only Benjamin Franklin could unveil the mystery. It is very immature in my part if I favor one theory and ignore other. It is best let the readers should draw their own conclusion. Diversity provides alternatives, thereby funding freedom. For us education is a social function. Until we know what sort of society is best, we do not know what sort of education is best. One thing is their we are slowly moving from traditional to progressive and one day we shall be in critical education where we shall be in position to have the ability to reason well and then disposition to do so. Thanking you.

With regards

Dr. Sunil Bhatia

Dr_subha@yahoo.com

www.designforall.in

FORTHCOMING ISSUE OF NEWSLETTER

(JUNE 2007 VOL-2, No-6)

We are publishing our June 2007 Vol-2, No-6 issue of newsletter of Design For All Institute Of India on INDO-JAPAN FRIENDSHIP- 2007. Designers from Japan contribute all the articles and it is collaborative publication with IAUD (International Association Of Universal Design- Japan). This issue has Guest Editor - President of IAUD.

INDEX:

**1. Universal Design in Education: Facilities,
Information Technology, Instruction and
Student Service 6**
**Dr. Sheryl Burgstahler, University of
Washington, USA**

**2. Designing for All Children in School and Child
Care Centers
.....30**
Ms. Vicki L. Stoecklin , USA

**3. The tourism for All Net work
Responsible, Sustainable, and Inclusive
development of Tourist Destinations
.....40**
Dr. Scott Rains, San Jose, CA, USA

**4 Program And Event
.....56**

**5. News
.....61**

**6. Job Opening
.....85**

Editor's Note:

The editor and staff of newsletter of Design For All Institute Of India proudly present the Special Issue of our newsletter on Education and Universal design. In subsequent issues, we have more to share. Our June 2007 issue of newsletter is a very special contribution for our esteem readers from IAUD, Japan. It is our humble request that kindly write feedback to us for our publication and it will help us in improvement of our publication.

Happy reading and keep writing.

**Lalit Kumar Das
Head Industrial Design
Indian Institute of Technology Delhi
India**

Universal Design in Education: Facilities, Information Technology, Instruction, and Student Services

**By Sheryl Burgstahler, Ph. D.
University of Washington**

Elementary, secondary, and postsecondary students come from a wide variety of ethnic and racial backgrounds and with a wide range of language proficiency. Represented in most classes are many types of racial/ethnic backgrounds, ages, native languages, and learning styles, including visual and auditory learners. In addition, increasing numbers of students with disabilities are included in regular courses at all educational levels. Their disabilities include blindness, low vision, hearing impairments, mobility impairments, learning disabilities, and health impairments.

While classrooms, courses, technology, and student services are typically designed for the average student, *universal design in education* (UDE) promotes the consideration of people with a broad range of characteristics in all educational products and environments. UDE goes beyond accessible design for people with disabilities to make all aspects of the educational experience inclusive for students, parents, staff, instructors, administrators, and visitors with a great variety of characteristics. These characteristics include those related to gender, race/ethnicity, age,

stature, disability, and learning style.

Originally applied in the field of architecture and later to information technology, UD applications in education are relatively new (Bar & Galluzzo, 1999; Bowe, 2000, Burgstahler, 2006c; DO-IT, 2006; Plinder & Johnson, 2004). It can provide a philosophical framework for the design of a broad range of educational products and environments. These include:

- classrooms,**
- libraries,**
- student housing and residential life,**
- computer labs,**
- science labs,**
- websites,**
- educational software,**
- meetings,**
- instruction,**
- curriculum,**
- professional organizations,**
- registration options, and**
- other student services.**

In this article the author defines UD, describes the process of universal design, and then shares applications of UD in educational settings—physical spaces, information technology, curriculum and instruction, and student services.

The Definition and Process of Universal Design

The term *universal design* was coined by the architect Ronald Mace, who challenged the conventional approach of designing for the average user and provided a design foundation for more accessible and usable products and environments. Mace and other visionaries developed the definition of UD used by The Center for Universal Design (CUD) at North Carolina State University: "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design." An example of universal design is doors with sensors that make them automatically open for individuals walking with packages, those using wheelchairs, the elderly who experience weakness, parents pushing baby strollers, and workers using rolling carts to deliver products. The general definition of universal design has been tailored to many specific applications. For example, the Universal Smart Home Design has been described as "the process of designing products and housing environments that can be used to the greatest extent possible by people of all ages, abilities and physical disabilities." (Pisha, & Coyne, 2001b)

Universal design puts high value on *both* diversity and inclusiveness. UD is a goal. It is also a process that requires taking a macro view of the application being considered as well as a micro view of subparts of the application. A review of applications of universal design

in a wide variety of settings, suggests that the following process can be used to apply universal design:

- ***Identify the application.*** Specify the product or environment (i.e., the service, course, website, or other application) to which universal design is to be applied.
- ***Define the universe.*** Describe the overall population (e.g., students in a course or users of a technology) and then the diverse characteristics of potential members of the population for which the application is described (e.g., with respect to gender; age; size; ethnicity/race; native language; and abilities to see, hear, move and manipulate objects, and learn.)
- ***Involve consumers.*** Determine how to include people with disabilities and other diverse characteristics in development and implementation of the application.
- ***Adopt UD guidelines/standards/performance indicators.*** Create or select existing UD guidelines/standards. Integrate UD practices with other best practices within the field of the specific application.
- ***Apply UD guidelines/standards/performance indicators.*** Apply universal design along with design standards of good practice within the field to the overall design of the application, subcomponents of the application, and maintenance and procurement

processes.

- ***Plan for accommodations.*** Develop processes to address accommodation requests (e.g., purchase of assistive technology, arrangement for sign language interpreters) from individuals for whom the design does not automatically provide access.
- ***Train and support.*** Tailor and deliver training and support to stakeholders (e.g., instructors, computer support staff, procurement offices, administrators).
- ***Evaluate.*** Include universal design measures in the evaluation of the application, evaluate the application with a diverse group of users, and make modifications based on their feedback. (Burgstahler, 2006d)

Universal Design of Physical Spaces

At the Center for Universal Design at North Carolina State University a group of architects, product designers, engineers, and environmental design researchers established seven principles of universal design to provide guidance in the design of products and environments (Connell, Jones, Mace, Mueller, Mullick, Ostroff, Sanford, Steinfeld, Story, & Vanderheiden, 1997). Listed below are the seven principles of universal design.

- ***Equitable Use.*** The design is useful and marketable to people with diverse abilities.

- ***Flexibility in Use.*** The design accommodates a wide range of individual preferences and abilities.
- ***Simple and Intuitive.*** Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. ***Perceptible Information.*** The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- ***Tolerance for Error.*** The design minimizes hazards and the adverse consequences of accidental or unintended actions.
- ***Low Physical Effort.*** The design can be used efficiently and comfortably, and with a minimum of fatigue.
- ***Size and Space for Approach and Use.*** Appropriate size and space is provided for approach, reach, manipulation, and use regardless of the user's body size, posture, or mobility.

Universal design can be applied to specific educational environments (including dormitories, classrooms, student union buildings, libraries). It is important to ensure that classrooms, labs, workspaces, equipment and other products environments are physically accessible to and usable by students, instructors, staff, and visitors with a wide range of physical abilities. Nonessential physical effort should be minimized and options should be provided for the use of equipment, handles, locks, cabinets and drawers from different

heights and by individuals with different physical abilities, with one hand, and who are right- and left-handed. Seating should be arranged to encourage participation and allow room for wheelchairs, personal assistants, and assistive technology. Signs should include large print and provide symbols as well as words to assist those who have a variety of primary languages. Consult the *ADA Checklist for Readily Achievable Barrier Removal* at <http://www.usdoj.gov/crt/ada/checkweb.htm> for more suggestions. For computing facilities, consult *Equal Access: Universal Design of Computer Labs* at <http://www.washington.edu/doi/Brochures/Technology/comp.access.html>.

Universal Design of Information Technology (IT)

IT has the potential to level the playing field or further widen gaps in educational and career attainment between individuals who have disabilities (or are from other minority groups) and members of the majority. Design guidelines to assist computer manufacturers and software developers in creating products that are usable by a broad audience were developed by a group of professionals representing different stakeholder groups (Trace Center, n.d.; Vanderheiden & Vanderheiden, 1992). Each guideline, listed below, is phrased as an objective followed by examples of how the objective might be achieved.

- ***Output/displays*, which includes all means of**

presenting information to the user: The design should maximize the number of people who can

- **not miss important information if they can't hear.**
- **have line of sight to visual output and reach printed output.**
- **see visual output clearly enough.**
- **not miss important information if they can't see.**
- **understand the output (visual, auditory, other).**

- ***Input/controls*, which includes keyboards and all other means of communicating to the product: The design should maximize the number of people who can**

- **reach the controls.**
- **find the individual controls/keys if they can't see them.**
- **read the labels on the controls/keys.**
- **determine the status or setting of the controls if they can't see them.**
- **physically operate controls and other input mechanisms.**
- **understand how to operate controls and other input mechanisms.**
- **connect special alternative input devices.**

- ***Manipulations*, which includes all actions that must be directly performed by a person in concert with the product or for routine maintenance; e.g., inserting disk, loading tape, changing ink cartridge: The design should maximize the number of people who can**

- **physically insert and remove objects as required to**

- operate a device.**
- **physically handle and/or open the product.**
- **remove, replace, or reposition often-used detachable parts.**
- **understand how to carry out the manipulations necessary to use the product.**

- ***Documentation*, with a focus on operating instructions: The design should maximize the number of people who can**
 - **access the documentation.**
 - **understand the documentation.**

- ***Safety*, including alarms and other protections from harm: The design should maximize the number of people who can**
 - **perceive hazard warnings.**
 - **use the product without injury due to unperceived hazards or the user's lack of motor control.**

Applications of these guidelines to IT have demonstrated that it is possible to create products that are simultaneously accessible to people with a wide range of abilities, disabilities, and other characteristics. Software that allows a variety of font sizes to be used to display text provides an example of the universal design of (Freed & Rothberg, 2006). Consult the Knowledge Base of the *National Center on Accessible Information Technology in Education (AccessIT,*

<http://www.washington.edu/accessit/>) for guidance on how to make information technology accessible in educational settings.

The World Wide Web emerged in the 1990s and is used widely in educational settings. The World Wide Web Consortium (W3C), which develops and maintains protocols used on the web to insure interoperability, is committed to universal design. As expressed by its inventor and director, "The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect." W3C's Web Accessibility Initiative (WAI) developed guidelines and checkpoints for the accessible design of websites. In 2001, the U.S. Access Board adopted much of the work of the WAI when it developed minimum accessibility standards for IT designed, procured, and used by federal agencies in response to the 1998 amendments of Section 508 of the Rehabilitation Act of 1973. The Section 508 standards promote the flexibility goals of universal design and are used as guidelines by many states, educational institutions, and other organizations that are not directly covered by the legislation. Even so, IT companies rarely take the full spectrum of user diversity into account when they develop their products, unintentionally erecting barriers to their use by people with disabilities and others.

Universal Design of Curriculum and Instruction

The field of UD can provide a framework for the design of instruction and curriculum. Using the Center for Universal Design definition format, *universal design of instruction* can be defined as the design of instruction to be usable by all students, without the need for adaptation or specialized design. The Council for Exceptional Children elaborates as follows:

In terms of learning, universal design means the design of instructional materials and activities that makes the learning goals achievable by individuals with wide differences in their abilities to see, hear, speak, move, read, write, understand English, attend, organize, engage, and remember. Universal design for learning is achieved by means of flexible curricular materials and activities that provide alternatives for students with differing abilities. These alternatives are built into the instructional design and operating systems of educational materials-they are not added on after-the-fact.

The Center for Applied Special Technology (CAST) has focused its efforts on universal design for learning (UDL), especially as it applies to technology-based curriculum. It defines UDL as, "a research-based set of principles that together form a practical framework for using technology to maximize learning opportunities for every student." UDL is applied when curriculum designers create products to meet the needs of

students with a wide range of abilities and learning styles and preferences. UDL draws on "brain research and media technologies to respond to individual learner differences. It reflects an awareness of the unique nature of each learner and the need to address differences." UDL curriculum offers:

- ***Multiple means of representation***, to give learners various ways of acquiring information and knowledge,
- ***Multiple means of expression***, to provide learners alternatives for demonstration of what they know.
- ***Multiple means of engagement***, to tap into learners' interests, offer appropriate challenges, and increase motivation. (CAST)

In 1997 a meeting of researchers and product developers on universal design was convened by ERIC/OSEP Special Project funded by the U.S. Department of Education. Participants stated "Publishers should prepare and teachers should select instructional materials that are supportive and inclusive of students who have wide disparities in their abilities to see, hear, speak, read, etc....(Orkwis & Mclane, 1998, p. 3-4) The group recommended the following first steps for curriculum developers and teachers.

- **Provide all text in digital format.**
- **Provide captions for all audio.**
- **Provide educationally relevant descriptions for images and graphical layouts.**

- **Provide captions and educationally relevant descriptions for video.**
- **Provide cognitive supports for content and activities:**
 - **Summarize big ideas.**
 - **Provide scaffolding for learning and generalization.**
 - **Build fluency through practice.**
 - **Provide assessments for background knowledge.**
 - **Include explicit strategies to make clear the goals and methods of instruction.**

Unfortunately, most educational software programs available today are not universally designed. Instead of including flexible features that provide access to students with disabilities, they erect barriers to the curriculum.

Universal design principles can be applied to the overall design of instruction as well as to specific instructional materials, facilities, and strategies such as lectures, classroom discussions, group work, Web-based instruction, labs, field work, and demonstrations. Universally designed curriculum provides students with a wide range of abilities, disabilities, ethnic backgrounds, language skills, and learning styles multiple means of representation, expression, and engagement (<http://www.cast.org/>). Listed below are examples of instruction that employ principles of universal design. They are organized under seven performance indicator categories, with a goal statement for each. They are based on a

comprehensive literature review and formative feedback from stakeholder groups nationwide (Pisha & Coyne, 2001; Scott, McGuire, & Shaw, 2003; Silver, Bourke, & Strehorn, 1998).

- ***Class Climate.*** Adopt practices that reflect high values with respect to both diversity and inclusiveness. Example: Put a statement on the syllabus inviting students to meet with the instructor to discuss disability-related accommodations and other special learning needs.
- ***Physical Access, Usability, and Safety.*** *Assure that activities, materials, and equipment are physically accessible to and usable by all students and that all potential student characteristics are addressed in safety considerations.* Examples: Develop safety procedures for all students, including those who are blind, deaf, or wheelchair users; label safety equipment simply, in large print, and in a location viewable from a variety of angles; repeat printed directions orally.
- ***Delivery Methods.*** *Use multiple accessible instructional methods.* Example: Use multiple modes to deliver content and motivate and engage students—consider lectures, collaborative learning options, hands-on activities, Internet-based communications, educational software, field work, etc.
- ***Information Resources.*** Assure that course materials, notes, and other information resources are flexible and

accessible to all students. Example: Choose printed materials and prepare a syllabus early to allow students the option of beginning to read materials and work on assignments before the class begins and to allow adequate time to arrange for alternate formats, such as books on tape.

- ***Interaction.*** Encourage effective interactions between students and between students and the instructor and assure that communication methods are accessible to all participants. Example: Assign group work for which learners must support each other and that places a high value on different skills and roles.
- ***Feedback.*** Provide specific feedback on a regular basis. Example: Allow students to turn in parts of large projects for feedback before the final project is due.
- ***Assessment.*** Regularly assess student progress using multiple, accessible methods and tools and adjust instruction accordingly. Example: Assess group/cooperative performance as well as individual achievement.
- ***Accommodation.*** Plan for accommodations for students for whom the instructional design does not meet their needs. Example: Know how to get materials in alternate formats, reschedule *classroom* locations, and arrange for other accommodations for students with disabilities.

For details and a checklist for applying universal design to student services consult *Equal Access: Universal Design of Instruction* at http://www.washington.edu/doi/Brochures/Academics/equal_access_udi.html.

Note that employing universal design principles in instruction does not eliminate the need for specific accommodations for students with disabilities. For example, a sign language interpreter or real-time captioning may need to be provided for a student who is deaf. However, applying universal design concepts in course planning assures full access to the content for most students and minimizes the need for special accommodations. For example, designing Web resources in accessible formats as they are developed means that no redevelopment is necessary if a blind student enrolls in the class.

Accessible design of curriculum and instruction benefits students with disabilities but also benefits others. For example, captioning course videos, which provides access to deaf students, is also a benefit to students for whom English is a second language, to some students with learning disabilities, and to those watching the tape in a noisy environment. Delivering content in redundant ways can improve instruction for students with a variety of learning styles and cultural backgrounds. Letting all students have access to class notes and assignments on a Web site benefits students

with disabilities and everyone else. Planning ahead saves time in the long run.

Universal Design of Student Services

UD can be applied in order to make student services accessible and usable by all students. These services include computer labs, video and multimedia, libraries, recruitment and admissions, registration, financial aid, advising, career services, housing and residential life, tutoring and learning centers, and student organizations. When universal design is applied, services make everyone feel welcome, able to get to the facility and maneuver within it, able to access materials and electronic resources, and able to participate in events and other activities. Efforts should be made in the following areas. *Planning, Policies, and Evaluation*. Diversity issues should be considered in the planning and evaluation of services.

- ***Facility and Environment.* Assure physical access, comfort, and safety.**
- ***Staff.* Make sure all staff are prepared to serve all students.**
- ***Information Resources.* Assure that publications and websites welcome a diverse group and that information is accessible to everyone.**
- ***Computers, Software, and Assistive Technology.* If**

used, make technology accessible to all visitors.

- **Events.** Assure that everyone feels welcome and can participate in events sponsored by the organization.

For details and a checklist for applying universal design to student services consult *Equal Access: Universal Design of Student Services* at http://www.washington.edu/doit/Brochures/Academics/equal_access_ss.html.

Conclusion

Universal design holds promise for improving all aspects of the learning environment for students with disabilities at all academic levels. Ultimately, applying UD widely will benefit society by making academic and career opportunities available to more citizens and by enhancing professional fields with the perspectives of people with disabilities.

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<http://www.washington.edu/doit/Brochures/Programs/ud.html>,

<http://www.washington.edu/doit/Brochures/Academics/instruction.html> and

http://www.washington.edu/doit/Brochures/Academics/ud_edu.html .

DESIGNING FOR ALL CHILDREN IN SCHOOLS AND CHILD CARE CENTERS

By Vicki L. Stoecklin

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Group**

Children need age-appropriate and developmentally appropriate physical environments that support, promote and include child-directed and child initiated play and learning. Active, creative play and exploration is central to normal child development.

The physical environment can either contribute to children's development and support learning and exploration or become a permanent impediment to the above stated goals. The design and layout of the physical environment which includes the building, interior finishes, outdoor spaces, room arrangement and selection of equipment has a profound impact on children's behavior. Quite unlike adults, children figure out how to behave in most situations through instantaneously reading the environment. Children also read the environment differently than adults, not as background but as something to interact with.

The concept of designing for all children is based upon the tenets of child development which recognizes that each child is unique and passes through a series of recognizable stages of development, which are different for each child including children with

disabilities. The underlying definition of design for all children is similar in context to the definition of universal design. Designing for all children means creating environments that can be usable by all children without the need for adaptation. It also means that the environments are free from both physical and social barriers. The following list of key elements can be used by designers, architects and early childhood staff in creating environments that are inviting and functional to every child.

Equitable Use

The intent for children with disabilities is to provide for equal and equitable access. Equal access does not mean segregating and stigmatizing any user, able-bodied or disabled. Designing for equitable use means creating a design that is functional to a wide variety of users and one that allows for socialization between all children. For example, in designing a water play element for children our company chose to create a universal design of multi-height tables that would allow for an undertable or side approach by wheelchairs of various heights, walkers of various sizes and design or standing children of various heights. Children could then self select the height and design of the table which best worked for them. This design solution also allowed for socialization to occur between all types of children who used the table, both able-bodied, those using chairs or walkers and non-disabled

children of various sizes. A far less equitable approach would have been to label each side of the table by chronological age of the intended users and to then designate areas for wheelchair and/or walker access. We used this same approach when we designed a custom train table for children.



Equitable use means creating a design that works for all types of users and does not exclude any intended users. For example, the suggested height of a transfer deck for a child using a wheel chair is stated in a variable height measurement. Depending on what height you choose to make this transfer deck and if the adjacent stairs are going to be used by non-wheel chair using children, you may be creating a situation where the needs of the wheel chair using child are superceding the needs of the other children. Young children of all stages of development and older children with delayed motor development simply cannot adapt

to inappropriate design. For example, if the stair next to a transfer station is too high, they just cannot use it. You can imagine the problems when access to the piece of climbing equipment creates a situation where no children can get on the equipment without assistance from an adult. This same principle can be applied to creating appropriate sinks and toilets for all children. Not only should these facilities work for the child with disabilities but it must work also for the non-disabled child as well. If sinks and toilets are too high they can't be reached and if they are too low you may be creating safety problems especially for very young or cognitively impaired children who might climb in them.

Another example of inequitable design is when the intended function of the design is lost after the adaptation is made. One piece of equipment that comes to my mind when thinking of this problem is the elevated sandtable. Sand serves as a sensory experience for children of all ages, abilities and development. As a sensory experience, sand play is best executed as it has been for probably centuries, with the child being immersed in the sand. I feel that designers and manufacturers are defeating the principle of equitable use when an equivalent solution for sandplay is the elevated sandtable. The elevated sandbox/sandtable creates a situation where now, no one can get in the sand including the non-disabled child. Anyway, at what one height would you put one

elevated table to meet the needs of all children? Quickly answered, that one magical height intended to meet all children's needs simply does not exist. A more equitable design solution is to continue to use a traditional sandbox that could have added to it a transfer station for a child using a wheelchair and/or add an adapted stair for children using walkers, a child with limited sight or a child with underdeveloped motor abilities. In this manner, all children can continue to experience the sensory experience of immersed sandplay. Immediately from birth, children rely on touching, feeling and using their senses to provide information. We should create environments that are rich for exploration through all the senses: touch, taste, sight, sound and smell.



Designing for all children means creating spaces that are free from social barriers. Spaces, indoors and outdoors, must allow for positive interpersonal

interaction and socialization between children with different abilities and of both genders. Spaces must be available for small groups, solitude, quiet play, large groups and active play. Appropriate space will create opportunities for the development of self-confidence and social skills.

Flexibility and Independence

For any age child, the environment should foster independence. A developmental task of childhood is to move from total dependence on adults to a more mature independent stage. Independence can best be achieved by creating environments that can be used by children with a wide range of individual preferences and abilities. When designing an interactive cooking station, we created a design of multi-height movable counter tops and multi-height stools that could both be adjusted to meet the diverse needs of a group of children including those with disabilities.

Often times what happens in some settings over time is that the adults and sometimes the children learn to adapt to poor design. I remember observing this phenomenon in an early childhood inclusionary setting that had children with diverse abilities and disabilities enrolled. One of the four pieces of outdoor playground equipment had been adapted for children with disabilities. This particular piece of equipment only had a transfer deck for children who were using

wheelchairs. However, this program did not have any children enrolled who used wheel chairs but it had a high number of children enrolled who used a variety of walkers. I watched in amazement as teachers were forced to take each child out of their walkers and carry them up the stairs. Not only does this type of poor design foster dependence on the child's part but it created a situation very unsafe for the teachers and children. As a team, we chose to remedy the situation by creating a master plan for the complete renovation of this outdoor play space to make it better meet the needs of all children. Data was collected for this design project through extensive observations of children and interviews with staff including physical therapists. In addition to the transfer stations, we added a series of steps and ramps which could be used by children in either walkers or wheelchairs.

Designing for all children means understanding that children come in a variety of sizes which is sometimes not directly related to chronological age. Our team makes use of a variety of anthropometric charts which are then adjusted based on the children's motor abilities and how the design will be used. Many children with disabilities do not follow typical growth patterns.

Includes Safety

Creating designs for all children must include adherence to a variety of mandatory and voluntary safety guidelines not only for children but for staff as well. The design must support active experimentation and risk-taking without being unsafe for children. The physical environment and equipment must be arranged to minimize hazards and errors. It must also support the role of staff and parents in assisting in the play and learning environment. I could list numerous examples of unsafe buildings, playgrounds, furniture and equipment I have observed in schools, day care centers, children's museums, public schools and children's play spaces all over the world. Dangers include inadequate or no shock absorbing fall zones which could prove lethal to a child, designs which encourage inappropriate behaviors, materials and plants which are toxic to children, and strangulation and body entrapment hazards which can also be potentially lethal.

A Team Effort

The process of envisioning and designing environments that support competence, independence, exploration and inclusion is far more complex than following a list of suggested guidelines. The product can only be as good as the process that creates it and the expertise of the design participants.

Designing for all children requires a multi-disciplinary, cross-functional design team from the beginning. The team should meet in a concurrent format where experts who design the facility and those who operate it create the design program, goals and requirements together at the same table. Program goals, building use, children's needs, staff needs and parents need drive the concurrent design process. Other issues that need to be examined up front in the process are furniture, equipment and operating costs prior to designing the physical space. Everything impacts everything.



The design team needs to be structured and sensitive to staff, parental and community input. The team should have members with specialized expertise in

early childhood education, special education, child development, children's environmental design, architecture, landscape architecture, interior design, horticulture, acoustics for children, equipment selection, universal design for children and cultural competency. A team can bring the added benefits of a broad view and collaborative creativity.

In summary, designing for all children asks us to more closely examine our values and beliefs and to learn to collaborate with others whose expertise may be different than our own. As much as we may be different, we are all alike in many ways. Designing for all children finds a way to support and encourage each child's abilities, similarities, and uniqueness.

Vicki L. Stoecklin is the Education and Child Development Director with White Hutchinson Leisure & Learning Group, a Kansas City, MO firm, which specializes in design and consulting for children's environments including children's museums, children's leisure and entertainment sites, schools, child care facilities and outdoor environments which use nature. Vicki has a Master's degree and twenty-nine years experience studying and working with children including children with disabilities. She can be reached at voice: 816-931-1040, Ext 102, fax 816-756-5058, Missouri relay (TTY) 800-735-2966 and e-mail:vicki@whitehutchinson.com. Additional

information about their company can be found at www.whitehutchinson.com/children

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(This is a special Article for participants of EIDD annual conference of Tourism for All on 27-29th June 2007 in Italy)

The Tourism for All Network

Responsible, Sustainable, and Inclusive Development of Tourist Destinations

Dr. Scott Rains, San Jose, CA, USA E-Mail:
srains@oco.net

Overview

This project was developed by the Inter-American Institute on Disability and Inclusive Development - IIDI and its partners. It is a response to the enormous unmet demand of tourists, especially from the U.S.A., Europe and Asia, for accessible cruises and the market potential they represent for inclusive destination development .

We refer, mainly, to retirees and seniors, who possess time, money and the desire to travel, but who find themselves with reduced mobility, generally due to

physical, visual or auditory limitations, among others. This rapidly growing population has increased its life expectancy guaranteeing a long-term growth market.

Our project incorporates the values and objectives of diversity and inter-generational integration while simultaneously seeking to generate employment opportunities through economic and social development. This will be accomplished through the active participation and initiative of local excluded and low income groups, and local employers.

Vision

To accomplish an integrated application of the principles of sustainability and social inclusion in tourist destination development

To promote infrastructure, economic, and cultural transformation in order to raise the quality of life and well-being of those who visit or reside there.

Goal

To create a network of accessible tourist destinations operating under plans that integrate environment management and accessibility guaranteeing inclusion of the tourist with varying ranges of functional capacity, such as seniors and people with disabilities. In this we affirm the objective of Universal Design

which is "a framework for the design of places, things, information, communication and policy to be usable by the widest range of people operating in the widest range of situations without special or separate design" 1) often achieving its goal "at little or no extra cost." 2)

Specific Objectives

Improve existing tourist products and services, making them accessible to all by:

- 1. Preserving the environment;**
- 2. reValuing the local culture;**
- 3. Promoting inclusion social, minimizing discrimination, prejudice, and exclusion**
- 4. Fighting poverty and generating conditions of better income distribution;**
- 5. Educating the tourism industry, the general population and public officials about the values of environmental sustainability, social inclusion and responsible tourism;**
- 6. Educating the general public and public officials on the social and economic benefits generated by the practice of environmental sustainability, inclusion and responsible tourism;**

Justification

Annually, North American adults with disabilities and/or reduced mobility spend, on average, \$ 13.6 billion in tourism. In 2002, this group made 32 million trips and, in total, spent:

- 1. \$4.2 billion on hotels;**
- 2. \$3.3 billion on airfare;**
- 3. \$2.7 billion on food and drink; and**
- 4. \$3.4 billion in commerce, local transport and other activities.**

The most popular international destinations for this tourist segment are, in order of preference:

- 1. Canada;**
- 2. Mexico;**
- 3. Europe;**
- 4. The Caribbean.**

Of the total of 21 million people, 69% had traveled at least once in last the 2 years, including: 3.9 million business trips; 20 million tourism trips; 4.4 million business-oriented trips/tourism.

During those 2 years, of the total of 2 million adults with disabilities or reduced mobility, 7% spent \$ 1,600 outside the continental U.S. Moreover, 20% had traveled at least 6 times during those 2 years.

A study by the *Open Doors Organization* it estimated, in 2005, that people with disabilities and/or reduced

mobility would spend \$ 35 billion in restaurants in that to year. The same study disclosed that lives than 75% of these people frequent restaurants at least once a week. The U.S Department of Labor reported that the burgeoning market of North Americans with disabilities or reduced mobility possess \$175 billion in disposable income.

In the United Kingdom, the *Employers Forum on Disability* reported that there are 10 million adults with disabilities and/or reduced mobility in the United Kingdom with an annual purchasing power of 80 billion British Pounds. In Canada, the *Conference Board of Canada* reported that, in 2001, the annual combined disposable income of Canadians with disabilities or reduced mobility was \$25 billion CAN.

These numbers tend will to be multiplied by the currently restrained demand if the destinations - in contrast to what happens today - access and inclusive are offered. We see this fact as a great opportunity to develop both international and national tourism in the South-American countries, while we generate possibilities citizen education around inclusion, the reduction of the poverty and local socioeconomic development.

In the port of Rio de Janeiro there are about 30 thousand people per to year due not disembark due to lack of access. If we invest in the accessibility of ports, markets, cultural spaces, and the infrastructure of

transport, hotels and restaurants, certainly the cruise industry will attract this market that today is offered no accessible option. Then, able to disembark, these passengers will contribute to the economic well-being of these cruise tourism destinations.

In the case of Uruguay and Argentina, we have noted the rapid development of initiatives for the promotion of the Tourism for All, in particular those taking into account the great potential of social tourism in the Southern Cone. Initiatives along these lines have great usefulness and can attract thousands of new travelers.

Project Scope

The strategy of the project is to address the growing yet underserved tourism market consisting of seniors or others with disabilities while providing employment within existing destination communities using a criterion of sustainable development.

The project began with the identification of areas of strong tourist appeal in key ports that are used by the cruise industry along the coast of South America's Southern Cone. The project is currently engaged in identifying existing resources for tourists in this market as well as contacting existing enterprises engaged in sustainable businesses who can be linked to the tourism sector as a market - or, in some cases, as a supplier. The project scope encompasses policy,

services, public works, private sector and non-governmental organization initiative.

The creation of various experimental projects is also foreseen. Each, designed in accordance with the characteristics of its locality, can serve as a development laboratory to improve project practices and build capacities that will scale throughout the Region.

Central Principles of the Project

The project aims at the creation of pilot network of tourist destinations utilizing a management plan involving all the community initially directed toward the resolution of these problems:

- 1. Access to Infrastructure, applying Universal Design principles and established code and practice for accessibility to constructed environments and spaces including ports, public markets, tourist attractions, means of transport, historical, cultural, and natural attractions, etc. to communication and information; to the services offered by the tourism sector.**
- 2. Tourism for All, creating and deploying adequate human resources, equipment and technology in the search for solution that provide access and full participation of tourists with varying levels of functional capacity including seniors and people with disabilities.**

- 3. Environmental (Green) Management, initially addressing the problem of waste, through sensitization and environmental education directed to the general public, entrepreneurs, public officials and tourists; through, engaging existing communities of waste recyclers ("catadores"), redirecting and recycling waste, and enabling new stakeholder groups to integrated into the value chain associated with waste materials allowing the manufacture and sale of products back to the tourist market.**

- 4. Attitudinal and Cultural Transformation, based in the principles of social inclusion, as well as through educational programs and capacity-building among youth to become agents of change against violence, for the promotion of the health, and for social inclusion.**

Each locality possesses its own character and interests. Any area or sustainable project that is in tune with the approach to development outlined here may, through a proposal application process, participate in this project. Private enterprise and responsible commerce (Fair Trade), micro-credit, projects addressing diversity, are expected and welcome.

With reduction of poverty and inequality as foundational goals of this project and in conjunction with the UN Millennial Development Goals this project foresees partnerships with NGOs, agencies of the United Nations (OMT, UNDP, UNICEF, UNESCO, ILO, FAO), with social entrepreneurial networks such as

Ashoka and Avina, and with agencies of international cooperation in general.

Selection of Destinations

The Tourism for All Network will be comprised of key destinations in various countries, seeking in this manner to identify common criteria, practices, and standards of quality. These will serve as a baseline for global standardization independent of the specific implementations in particular locales.

The initial focus of this project will be to pursue the transformation of international tourism destinations along the routes taken by cruise lines in South America. It is our expectation that addressing this currently expanding and dynamic market sector will bring visibility to our initiative and demonstrate its present potential. This strategy not only guarantees automatic generation of demand but results in the opportunity of gathering market statistics to implement further refinements or corrections. It permits the monitoring and the evaluation of the results of the project, taking into account that seniors and people with disabilities are a primary cruise market.

Financing and Sustainability

This initiative proposes to work within existing structures and programs. In this manner it intends to evolve strategies of synergy, prevent duplication, avoid

generation of special sub-projects and economize on expenses. This initiative envisions the creation of a network in which each partner commits to implementing inclusion within the range of the services it provides in its domain of action utilizing its own resources to address issues should they arise. For example:

- 1. If a partner city undertakes an urban infrastructure project it will, within its budgetary constraints, apply principles of Universal Design and practices of accessibility. Current research documents that construction of accessible spaces does not significantly increase construction expenses (maximum 1%);**
- 2. If a partner non-governmental organization is working with young children and youth, in projects related to education and civic engagement, or with women, they can, through the use of inclusive strategies, create tourism-oriented initiatives that could undoubtedly be sources of income-generation supporting their mission;**
- 3. If a local hotel or hotel chain has already budgeted for a program of human resource development they could modify it to include training with attention to diversity and inclusion.**

In terms of cost of the project as a whole, moving from the macro level, what remains is the question of the availability of resources appropriate to the needs of each sector. Today Brazil and the Region possess these

resources and a sufficient installed capacity to meet the demand in practically all these areas. The costs can be absorbed by those who request the support.

What represents the biggest challenge in this proposal is, in fact, the maintenance - over the long run - of commitment to the strategy of inclusive development. To insure that the project is sustainable, investment in cultural change and community empowerment (ownership) is required at the local level. To do so requires a permanent process of support, monitoring, and evaluation. I also requires that each sector be diligent in exercising its responsibilities and assuming its costs in this investment.

The Consortia

Local consortia of stakeholders are necessary to manage their own projects. Essential stakeholders include state and municipal governments, the private sector, taxi cooperatives, restaurants, hotels and their associations, public markets, port authorities and cruise operators operating in the region, among others. These will be the first beneficiaries of the initiative, gaining access to a growing market, on the condition that they provide adequate services. Research demonstrates that this market already exists and is growing, although it is today dormant or restrained, awaiting possibility expand itself exponentially.

Other stakeholders to be included either directly or indirectly in these consortia include bi- or multilateral agencies, non-governmental and civic organizations, community representatives, and human rights and economic development groups.

Coordination of the Tourism for All Network beyond the local level should occur at a national level in each country where this initiative is undertaken. Regional Committees and an International Committee should have consultative rather than regulatory or fiscal responsibilities.

Reach and Impact

The activities undertaken by the tourism industry and participating communities will allow establishment of a baseline, permanent monitoring and the evaluation and measurement of concrete impacts. These will relate as much to the evolution of the market as to the destination's socioeconomic development and environment health. Other permanent aspects of the initiative will support individual projects and include programs of certification, development and/or implementation of specifications such as building codes, enforcement of local legislation, and the creation of resource centers on Inclusive Destination Development.

All the initiative will serve in the participating countries as laboratories and support for the implementation of

the United Nations Convention on the Human Rights of People with Disabilities (CRPD) passed by the General Assembly on December 13, 2006. The region also celebrates the start of the Decade of Americas for the Rights and the Dignity of the People with Deficiency (OAS 2006-2016).

This initiative, through its innovative approach, has generated much interest among a diversity of stakeholder sectors at various levels and has begun to extend its alliances and partnerships to entities such as:

- 1. World Tourism Organization (WTO)**
- 2. Ministry and representative and regulating Secretariats of Tourism, agencies and entities of the area, in Brazil, Uruguay and Argentina;**
- 3. Government of the States and Cities interested in joining the Network;**
- 4. International and national NGOs, general tour operators, and specialized operators in the areas of adventure tourism, social tourism, public events, sustainability and other questions of the environment;**
- 5. Schools of Tourism and academia;**
- 6. Agencies of Development such as BNDES, IDB and the World Bank, Mercosul, among others.**

During the last World-wide Tourism Forum - DestiNations 2006 in Porto Alegre, RS (11/29/06 - 12/02/06) some of these alliances were established and others are in progress.

Plan of Action: Network of Inclusive Destinations

Selection of initial destination sites will be the first step of the project. Next steps include accessibility audits of the port and associated tourist areas as well as cataloging and assessment of available services. Local groups should establish short, medium and long term priorities and develop low, average and high budget estimates. Identification and recruitment of partners into the Local and National Consortia and the Regional Committee should take place simultaneously with undertaking the initial stages of making infrastructure and services accessible.

In this way we can build the resources of the local network and concretely launch the campaign. Direct contact of partners and other work by the local network will serve to mobilize partnerships between all the sectors mentioned above. During this phase of negotiation on the creation of the structure of the project, surveys of the current situation in the participant destinations will have to be undertaken and as well as development of a plan of action reflecting different levels of complexity, timelines, and budget.

As a result of exploratory conversations already undertaken the Network should incorporate the following cities which lie along the main cruise itineraries:

Brazil

Salvador da Bahia

Búzios

Rio De Janeiro,

Angara Dos Reis

Santos

Florianópolis

Uruguay

Montevideo

Punta del Este

Argentina

Buenos Aires

Puerto Madryn

Ushuaia

An estimated 18 - 24 months will be necessary for this initial stage.

For more information:

Rosangela Berman Bieler

email: RBBieler@aol.com

IIDIsab@aol.com

1)

<http://www.adaptiveenvironments.org/index.php?option=Content&Itemid=3>

2)

http://www.design.ncsu.edu/cud/about_ud/about_ud.htm

Resources Defining Inclusive Travel and Inclusive Destination

Development: <http://www.suite101.com/article.cfm/18423/114773>

http://www.suite101.com/article.cfm/travel_with_disabilities/115176

http://www.suite101.com/article.cfm/travel_with_disabilities/116993

<http://www.suite101.com/article.cfm/18423/114773>

<http://www.rollingrains.com/archives/001517.html>

PROGRAM AND EVENT:

1.



**Save the Dates: EIDD Annual Conference 2007 -
Tourism for All - Milan Triennale - 28-29 June 2007.
More information will follow soon.**

***Riserva le Date: Conferenza Annuale EIDD 2007 -
Turismo per Tutti - Triennale di Milano - 28-29 giugno
2007. Seguiranno ulteriori informazioni.
Chiediamo scusa per gli invii multipli.***

**2. Noldus Observer software is one of the integrating
software for integrating different parameters like eye
movement, hand / body movement, facial expression,**

ECG, muscle EMG etc. The system is profusely being used in human behavioral study, Usability study, product development, postural study, assembly line / workstation design, and so on.

IDC has procured has procured the complete system and a two days training workshop is going to be conducted on Friday, May 11 and Saturday, May 12 from 10:00 am to 5 pm. The venue will be IDC auditorium. While the Friday is reserved of IDC and IITB internal people, Saturday is open to all who are interested and working in the area of usability study or interaction design. For attending the program, no fees are required except sending your name. I know this is quite hectic but better to take the advantage of the situation.

Gaur G. Ray

Professor, Industrial Design Centre

Associate Professor School of Biomedical Engineering

Indian Institute of Technology Bombay

Powai, Mumbai 400 076

India

Ph : 91 22 2576 7821 (Office)

Mobile : +91 9820493362

Fax : 91 22 2576 7803

<http://www.idc.iitb.ac.in/ggray/bio.html>

3.

Interested in environments for children?

Are you planning on remodeling?

Are you planning a new facility?

Ready to make changes in your existing environment?

Want to know more about naturalized outdoor spaces?

**Attend The Institute On Creating Sustainable
Environments For Young Children**

June 7-8, 2007

Nebraska City, Nebraska

We still have a few spaces left and have extended the registration deadline to May 31, 2007. This institute provides a place where early childhood educators and designers can find out more about how to create high quality environments that meet children's needs and protect Mother Earth.

Learn how to select green materials, green furniture and create outdoor environments based on nature.

Rooms are sold out at the host hotel, Lied Lodge and Conference Center, but space is available at two nearby hotels, Best Western, 402-873-7000 and Apple Inn, 402-873-5959, which are both just a few miles from Lied Lodge.

More information and registration materials can be found at:

www.whitehutchinson.com/children/sustainableinstitutesustainableinstitute.shtml

**Our address: 4036 Baltimore Avenue
Kansas City, Missouri 64111**

4. Invitation:

On behalf of the Graduating Batch of IDC, I am extending a warm welcome to you all for DDS 2007. The Industrial Design Centre (IDC), IITB, invites you to participate during DDS 2007. We hope you all will be part of a memorable and eventful Design Degree Show. The inauguration of the exhibition is at at 11.00 am on 25th of May 2007 at the Exhibition Hall, Nehru Centre, Worli, Mumbai. This year the DDS, themed 'Poorna', is being held at Nehru Centre, Mumbai from 25-27 th May 2007 and further at IDC, IIT Bombay from 29-31 st May 2007.

These are the events organized as part of DDS 2007:

- 1. Exhibition of Student Projects**
- 2. Student Project Presentations**
- 3. IDC Animation/Film Screenings**
- 4. Exhibition of Design Schools in India**
- 5. Workshop on Design for High School Students**
- 6. Workshop for Design Students**

- 7. Evening Seminars on Design**
- 8. Designers meet and Dinner**

Further details are available at <http://www.idc.iitb.ac.in/~vc/dds.html>

This is a special year for the Indian Institute of Technology Bombay (IITB), as it completes its 50 th year from the time that Pandit Jawaharlal Nehru had inaugurated the Institute in 1957.

With warm regards,

Ravi Poovaiah

Professor and Head

IDC, IIT Bombay

022-2576 7801

ravi@iitb.ac.in

NEWS:

[1.Indian enterprises win Green Oscars](#)

Indian enterprises have won two of the five Ashden Awards for sustainable energy for 2006, popularly known as the 'Green Oscars', and a cash prize of £30,000 each .

The organisations which have won the award include Appropriate Technology Institute (AARTI), Pune, for the design of a revolutionary biogas system that generates gas for cooking from food waste and other sugary and starchy material.

The other is International Development Enterprises of India (IDEI) which has been behind the manufacture and distribution of 510,000 treadle pumps - a simple device that uses human power to pump water from wells, streams and lakes up onto the fields allowing farmers to grow crops all year round.

Besides, Vivekananda Kendra and Nardep, bagged the second prize of 10,000 pounds for making a series of advances to biogas designs which generate gas for cooking and developed effective ways of using slurry as a powerful fertilizer using a combination of new and traditional techniques.

Lord May of Oxford, a former Chief Scientific Adviser to the UK Government and former Head of the UK Office of Science and Technology presented the awards to Anand Karve of AARTI and Amitabha Sadangi, Executive Director of IDEI at a largely attended function at the Royal Geographical Society in London on Thursday night.

Prominent among those present on the occasion was David Cameron, MP, Chief of the Conservative Party.

Receiving the award, Karve described it as a great honour conferred on his organisation. He said the potential user of the new biogas technology in Maharashtra are estimated to be 1.5 million households. So far, the Institute has covered about 8,000 of them.

"The award money will be used for expanding our awareness generation campaign and the training programme for artisans," he said, adding that over the next two years "we hope to reach more than 25,000 urban households."

Sadangi said the Ashden Awards "are a reflection of the world we would like it to be. It is easy to feel despair every time we read about tragedies in the poorest parts of the world. But when I look at the finalists of Ashden Awards and their work, I see hope.

"IDE, India, will use this award money to introduce Treadle Pump in Chattisgarh, one of the backward states in India. Treadle Pumps will help people to increase productivity and reduce poverty."

2.





3. The Science of Seating Selection

Getting the Right Chairs is a Matter of Good Stewardship

05/01/2007

The Science of Seating Selection

Getting the Right Chairs is a Matter of Good Stewardship

by RaeAnn Slaybaugh

If you see people squirming this Sunday, try not to take it personally. Sometimes it's not you – it's your ergonomics.

Stated simply, ergonomics is an applied science that seeks to improve the design and function of tools and other objects used by people. By understanding the range and capability of the human body, ergonomists look at a seating choice depending on who will be sitting in the chairs, how long they'll remain there, and the functions these people will be expected to perform.

To help us break down the anatomy of an ergonomically sound church seating choice, I worked with four collegiate professors and culled the research of various related associations. In the end, it seems a good chair is simply a sum of the quality of its parts.

The E-Word

Most people have heard the term “ergonomics” before, but it’s usually in reference to office furniture. Its applicability to church seating is considerably less notable – but experts say there’s a reason for this: design increases in importance with the time spent in a chair.

“Sitting places more pressure on your lower back than standing and can result in more problems and discomfort,” explains Cindy Burt, MS, OTR, ergonomics program manager at UCLA’s Environment, Health & Safety Dept. As such, she places more importance on a chair’s design if someone will be sitting in it for prolonged periods of time (i.e., a total of three or more hours a day).

The fact that many chairs in a worship environment won’t see this kind of use changes how churches should shop, explains Alan Hedge, Ph.D., a Cornell Univ. ergonomics professor and director of the Human Factors and Ergonomics Laboratory.

“It’s doubtful that people sit on church seats for long enough to cause a back injury,” Hedge says. “However, for people with back injuries, even an hour on a chair that’s uncomfortable can be too much.”

John Lloyd, acting director of the Center for Product Ergonomics at the Univ. of South Florida, agrees with Hedge: duration of exposure is indeed a key factor in seating selection. The considerations would be more lenient for a seat that’s used only one hour per day vs. 40 hours per week, as is the case with office chairs.

In fact, Lloyd adds, properly designed church pews are “perfectly fine” for anyone free of medical factors requiring special considerations, such as preexisting back, neck or hip problems. Otherwise, experts recommend making an investment in special, adaptable seating for a limited number of the congregation.

Sit Up Straight

According to an ergonomic seating evaluation developed by the Cornell Univ. Ergonomics Dept., lumbar (lower back) support is an important factor when deciding which chairs to buy. In layman’s terms, lumbar support is usually achieved with gentle curves in the backrest. This shape prevents the flattening of the lumbar spine that occurs in most people when seated. Some chairs let users adjust the size and sometimes firmness of the lumbar support curve in the backrest, accommodating different preferences and body shapes. Many chairs also feature back

supports large enough to provide mid-back and upper-back support.

Both lumbar (lower back) and thoracic (upper back) support are critical, but comfortable chairs don't always promote good posture. Research has shown that a slight recline places the least amount of pressure on the spine, and all four experts agreed this means about 100 degrees of built-in tilt. In other words, a seat back should lean between 10 degrees and 15 degrees from the seat. Univ. of California Berkeley ergonomics professor David Rempel, M.D., agrees this is a good estimate and says that dozing off is more likely to happen when a chair is reclined too much. Being too comfortable in an upright posture, however, isn't usually a problem, he says.

The ability to adjust the backrest angle means that some upper-body weight is transferred to the chair backrest, lightening the load on the lower back's intervertebral discs, according to F-One Ergonomics, an Ann Arbor, Mich.-based training institute named after the F-1 ("Help") key on many computers. Adjusting a chair back also increases the angle between the torso and the thighs, causing the lower back to curve inward, thereby placing less pressure on the discs than a flat, spinal shape.

In fact, some experts say that the seated position itself is one for which the human body isn't designed since it affects the dorsal muscles, backbone (especially intervertebral discs), blood circulation and nerve connections, especially in the lower limbs. In many cases, a person does not realize how unnatural this

position is until after a couple of hours on a poorly designed seat, according to India-based Cine Chair Works, a specialist in commercial seating. In response, the company began to offer low, medium and high back options.

But experts say recline and lumbar support are both moot points if a user slouches in a chair.

“One of the golden rules of sitting is to sit all the way back in your seat,” Burt explains. “Couch potatoes do not demonstrate good posture most of the time. However, I don’t believe in the philosophy that people pay more attention when they aren’t too comfortable.”

Seat pan width is another key design factor. Although Lloyd recommends that a seat be able to accommodate 95 percent of the church membership, how does one know if a chair “fits?” According to the Cornell Univ. Ergonomics Dept., it means that the seat pan is at least one inch wider on either side than the hips and thighs of the sitting person. Insufficient hip room can make the user sit too far forward on the seat pan, which does not offer sufficient thigh support.

Some chairs also feature seat height and depth adjustability. Using these functions, it can be adjusted so that that the sitting person’s feet are on the floor. The front-to-back depth of the seat can be lengthened or shortened as well. A shorter seat pan lets small people use a chair’s backrest, while a deeper one feels more stable to taller individuals, according to FOne. Users can also

change the forwardback angle of the seat with seat pan angle adjustability, which slopes thighs downward. The main purpose of forward tilt, according to the institute, is to open the angle between the trunk and thighs, reducing disc pressure.

Keep all of these adjustable features in check, however, Burt warns. "If the chair takes time to adjust – with multiple, difficult controls – then people won't use them."

Accessories Make All the Difference

At this point, it's time to customize. Of course, the right finishing touches will depend upon a facility's intended use. Today, a room might be a sanctuary. By tomorrow, it might function as a lecture hall, by Saturday a theater, and by the next morning, it could be a sanctuary again. As such, technological accessories that "set the mood" – no matter which that is—are gaining popularity.

During seminars and lectures, for example, electrical and data port systems that attach to seat bottoms might be worth looking into, suggests Jennifer Patten, corporate communications representative for American Seating in Grand Rapids, Mich. These systems provide computer data/Internet access for a new level of interactivity. Plus, they slip easily out of the way when not in use. Then, for an ideal learning environment, some churches add folding-tablet arms for writing surfaces.

Meanwhile, churches hosting Broadway-caliber performances have raised the drama bar for everyone else. Fortunately, with the

right seats, now any church can incorporate theater quality into their space without sacrificing a sanctuary feel to do it. Since a church might draw thousands of visitors to a show, auditorium seats are sometimes numbered or lettered to accommodate the masses. During a performance, aisle lighting ensures safety while exiting and entering. Adding bookracks, envelope holders and Communion cup holders to these same chairs, however, reminds whomever is sitting in them that the space around them is first and foremost a church, whether the house lights are up or down.

Special-Needs Seating

Wheelchair users are of great concern to seating manufacturers and architects, so a wide range of solutions are available to accommodate them. For example, if a church's goal is to sustain an overall auditorium effect, movable end standards called "transfer-ins" are one way to do it, Patten suggests. In this case, armrests easily slide, or are hinged, enabling easy transfer into the seat. Wider aisles mean a wheelchair can remain next to the congregant.

The only drawback to transfer-ins, however, is that they force wheelchair users to sit in a designated location in the sanctuary, Patten points out. Ideally, churches should offer a choice, she adds, so removable chairs are another good option. However, while these might be an excellent solution aesthetically, removable chairs are heavy — up to 130 pounds each—and are therefore difficult to move. Also, to move them, ushers need to

disconnect the seats from their secured positions and then cart them to another location, which is a time-consuming process.

One happy medium is to fill empty space at the rear of the auditorium with portable stacking chairs, since these areas offer the easiest wheelchair access,

Keep Things Interesting

It goes without saying that ergonomics experts certainly know ergonomics, but some know a thing or two about going to church, too. Case in point: Hedge says the main design characteristics to look for in a chair are a quality seat cushion and a good backrest, both of which lend to user comfort.

Getting a comfortable seat is important, he says, but the real way to stop people from snoozing as a result is to keep worship time and activities interesting. So, it's perhaps more important that pastors think about how worship service time is organized.

"Keep changing the posture of the churchgoers," he says. "Have them stand, then sit, then perhaps lean forward to pray, maybe even kneel. It's important for the pastor to keep folks moving so that they don't spend too long in any one posture."

4. BOSP to open in Madrid

Starting in the winter, students will finally be able to study abroad in Spain

May 1, 2007

By Georgina Blackett

Four years after the Bing Overseas Studies Program (BOSP) announced the possibility of launching a program in Spain, Mexico or India, one of the three has finally become a reality. On Friday, BOSP announced the long-awaited opening of a new program in Madrid, Spain's capital city.

"Substantial numbers of Stanford students study in Spain now with other universities," BOSP Director Norman Naimark said in an email to The Daily. "[The Madrid program is for] those many students who asked us for one."

The program will be open to students beginning next winter. Applications will be available starting today and will be due May 25. The Madrid program will operate in autumn, winter and spring quarters starting academic year 2008-2009.

University Spanish faculty and members of the Madrid academic community will teach the program's courses. All classes will be taught primarily in Spanish and will offer academic credit from appropriate Stanford departments, in addition to fulfilling various General Education Requirements (GERs). Required Spanish courses will also be offered at different levels to accommodate students' varying degrees of language proficiency.

The program — which mandates satisfactory completion of the University's first-year Spanish curriculum or equivalent proficiency for enrollees — "will offer courses in Iberian Studies, political science, economics, history, Spanish language and

literature, among other fields,” BOSP Outreach and Student Relations Manager David John Boyer said in a release last week.

“The courses given in Spain will undoubtedly be located primarily in the social sciences and humanities,” Naimark said, “but we have also had success in other programs teaching courses in HumBio and other science and engineering disciplines.”

Science and engineering students hope the program will be more “techie”-friendly than other BOSP programs. Due to the high number of classes required for many science and engineering majors, “techies” often do not have time to study abroad.

“I always wanted to study abroad in Europe,” said engineering student Mario Madrigal ‘09. “But with product design, I just can’t fit in any language classes and so can’t make the language requirement.”

“Since I already speak Spanish fluently, I think Madrid will be perfect,” he said. “I just hope they offer art classes so I can fulfill that part of my major while abroad.”

Unlike other overseas centers, the Madrid program will not be housed in a Stanford-run complex. Instead, the program will be located at the International Institute in Madrid. While there, students will be able to participate in a voluntary language partner program; they will also have access to the Institute’s vast library collections and will be able to participate in all of the Institute’s events.

While Naimark acknowledged the possibility of moving the program to a Stanford-run center in the future, he said he supported the choice of the International Institute.

“The International Institute, which has a long and distinguished history of educating Americans in Madrid, is a very good way to start out our Madrid program,” he said. “It is possible that once we get our feet on the ground in Madrid, we could move to our own facility. But we felt it was important to get started, and this was an excellent way to do so.”

5. Param leap

ANAND PARTHASARATHY

C-DAC 's Param programme sets to touch 10 teraflops by late 2007 and a petaflop by 2010.



Param 10000, a member of the Param supercomputing family. THE Centre for Development of Advanced Computing (C-DAC), headquartered in Pune, has put India on the global supercomputing map. Alone among the multiple high-

performance computing initiatives undertaken in India in the mid-1980s by scientific arms of the Central government (including the Council of Scientific and Industrial Research, and the Defence and Atomic Energy departments), C-DAC's Param project had a definite techno-commercial road map - and the centre managed to sell about half a dozen machines outside the country - and an equal number within it.

C-DAC developed the Param series of supercomputers as part of successive "missions" that culminated in the machine's entry into the global "Top 500" list of the world's most powerful computing platforms, in May 2003, with Param Padma, which was just shy of 1 teraflop (one trillion mathematical operations per second). In subsequent years, C-DAC went missing from the Top 500 list: the ever-shifting goal post of supercomputing ensured that a teraflop was no longer fast enough to make it to the supercomputing club. The changing hardware scenario dictated that such number-crunching behemoths were replaced by large numbers of personal computers working in clusters to deliver the required performance. So instead of resting on its (teraflop) laurels, C-DAC swiftly readjusted its road map to the new hard reality of supercomputing: Grid computing was the new name of the game and the centre became the nodal agency for an ambitious countrywide grid linking all its own Param Padma platforms as well as some other computers in academia.

Garuda, the emerging network, is up and running - linking 15 powerful computers to the 1-teraflop mother machine housed in

CDAC's National Param Supercomputing Facility in Bangalore, with a fast 100-megabits-per-second backbone.

The newest member of the supercomputing family is Param Sarita, a canny reworking of the basic computational punch to address the booming market for multimedia applications such as video-on-demand and interactive TV. All contemporary High Performance Computing (HPC) systems are scalable clusters of, typically, eight nodes, each fuelled by a state-of-the-art Intel Xeon chip.

The huge growth in bioinformatics - the harnessing of computers for drug discovery, protein modelling, deoxyribonucleic acid (DNA) studies - as well as the emergence of areas such as computational atmospheric sciences has created another opportunity for C-DAC's number crunchers.

Weather-wise, in real time

The Computational Atmospheric Sciences (CAS) team at C-DAC is a key `customer' for Param's computational muscle. It engages in research on the application of high-performance computing to atmospheric and environmental science applications.

CAS has recently developed a `Real Time Weather System' (RTWS) capable of generating weather forecasts based on the user's choice. It is a Web-based, fully automated system that handles the complete weather forecasting cycle - from acquiring

the data to its initial processing to simulating a model and intelligent post processing - all without user intervention.

6.

LIVING WITH DISABILITY

IF YOU ARE FORTUNATE ENOUGH TO HEAR, SPEAK AND LEAD A NORMAL LIFE, BE KIND TO THE SPECIAL PEOPLE WHO ARE MAKING AN EFFORT TO GIVE LIFE A NEW MEANING.

SRCC student finds herself among friends

Jaya Shroff
New Delhi, May 8

AFTER FACING harassment at Pune's Symbiosis Law College for being physically disabled, Pooja Sharma moved to Delhi last year. With an 84 per cent aggregate, this wheelchair-ridden girl got admission in Sheraton College of Commerce but failed to get a berth in the hostel. This reporter visited the campus to assess the magnitude of problems she refused to divulge.

"We have only one room that is disabled-friendly. It was already occupied by the time she approached us. We have plans to create more rooms," said Principal K.C. Jain.

Initially, Pooja lived in a private hostel that promised her the basic commute to college and back. But when residents of the hostel, including the owner, mocked her and made life difficult for her, she moved out. Pooja now lives in Ghazababad with her mother. She is driven to college, which has let her take the car inside the premises till the ramp at the rear. "The college constructed this ramp after they realised I would need one," says Pooja.

"Teachers and students are also accommodating and volunteer to help the moment they see me," she adds.

While seminars are held upstairs, she discusses issues with a handful of students downstairs. "It is important for her development to be exposed to lectures and seminars. Unless she gets an opportunity to grow beyond books, she will be cocooned when she steps out to a bigger, wider world," said her worried father, R.K. Sharma.

"Changes cannot happen overnight. It will take some time. She was the first student on a wheelchair in 80 years of SRCC's existence, but accommodations were made," said Jain.

It is not just seminars that Pooja misses. This soft-spoken and shy student also sits out on the fun and gossip that take place inside the first floor canteen. The one on the ground floor lacks a ramp. But Pooja diplomatically asks the reporter to skip the canteen and says, "I have access to the library and my wheelchair goes inside too."

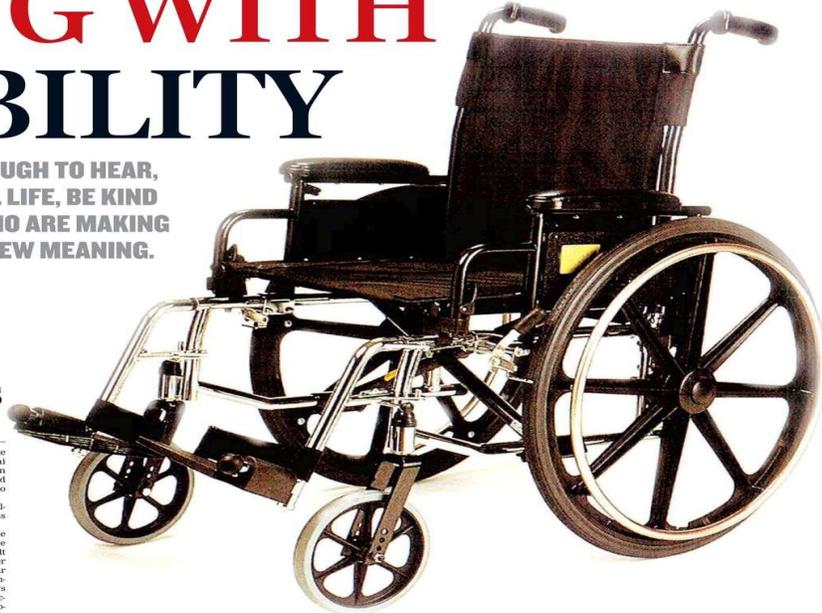
"Canteen is not as essential as classes and the auditorium, which are on the ground floor. The canteen is the only thing I have not been able to work out as there are no rooms available," said the Principal.

Like her peers, Pooja loves to go to 'Uncle Tom's Mugul Point', located a few metres from the college. But because there are no ramps to connect the road and the pedestrian way, Pooja sits inside the car with the door open while others eat in the makeshift food joint.

Ask her about essential things like banking, and she replies, "My parents usually take care of my monetary demands." Even with modern banking making inroads all over the country, little has been done to help the disabled. Most ATM counters do not have ramps, or the machines are too high for people like Pooja to access. Her dreams of becoming a lawyer shattered long before she could even breathe life into them. With little access to banks and offices, it will be a pity if her MBA dream also faces an untimely death. "I still have two years to go before I decide my next course of action, but I see myself working and independent," said Pooja, all of 24. "Her real challenge will be the day she moves into the wider world," said her father.

jaya.shroff@rediffmail.com

BANKING HAS MADE INROADS ALL OVER THE COUNTRY. BUT LITTLE HAS BEEN DONE TO HELP THE DISABLED. MOST ATMs DO NOT HAVE RAMPS, OR THE MACHINES ARE TOO HIGH.



SCOPE FOR MORE DEFS

Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act was enacted 10 years ago. Very little has been done for uplift of the disabled.

Javed Abidi, disability activist

We hope disabled-friendly bus stops will come up soon. Lalu Prasad has promised disabled-friendly coaches even if it means a revenue loss for the Railways.

Sanjiv Sachdeva, social activist and director, Samarithya

Disability is no longer a social stigma. Today, there is a greater awareness and acceptance in the employment sector. Even if the process is slow, it's there."

Dr. Uma Tuli, former chief commissioner (disabilities)



Do you think Delhi extends a helping hand to persons with disabilities, or is more required?

Send an email at feedback@hindustantimes.com you can also message us by typing #HTalk <space> followed by your message at: 4242

This man has a vision for the blind



JASJEET PLAHA/HT

Professor C.D. Tamboli works on his Braille machine.

BEING VISUALLY challenged was never a handicap for Professor C.D. Tamboli. Rather, he has devoted his life to the cause of educating the blind. With a perfect diction and sense of direction, Tamboli guided this reporter to his office — the National Association for the Blind in R.K. Puram

When this reporter arrived at his office, Tamboli was working on a Braille machine. He is no different from any normal person, except that he looks in a slightly awkward direction while talking. “We can do the same jobs as normal people, just that our movements are different,” Tamboli said in lighter vein. “Blind people are the most fortunate among the disabled. Unlike the mentally challenged, or people with multiple disorders, we can make it to the top with our general level of intelligence,” he said.

“My mother wanted me to study in a normal school, so she sent me to an all girls’ school as the other schools would not admit a blind boy,” he said, admitting that he is uncomfortable talking about this as-

pect of his life. After class VIII, when classmates started behaving in an awkward manner, his father admitted him to a blind school in Kolkata, he said.

During the interview, his mobile phone rang and a voice announced the number. After fixing an appointment for the evening, he said, pointing to his phone and Braille watch, “These electronic gadgets never let us feel handicapped. I could choose not to answer the phone like you people, after listening to the number.”

“JAWS, a software for the blind, has made life so much easier for us,” says Tamboli, who regularly surfs the Net. “The voice chat enables me to talk to my daughter who is in the US... We have come a long way and still have a longer path to tread but life is certainly easier and brighter. The government has opened jobs for the disabled but there has to be corporate responsibility as well. If the social stigma attached to the blind is erased, my students and others will go places,” he said. — JS

8. Made in the Global Workplace

It's not made in Korea, nor is it made in India. Rather, it should be labeled "made in the global workplace." We're talking about LG Electronics' new KG110 entry-level phone, which is quickly becoming one of the more popular handsets in India. Despite its Korean brand name, this phone is made from components sourced from all over the world.

Let's look inside this gadget. It was jointly designed by LG Electronics Design Research Institute in Seoul and the LG Electronics Mobile Research Center in Yantai, Shandong, China. Its flash memory chip, a key component, is supplied by Spansion, a U.S.-Japanese joint venture located in China. The LCD comes from Toppoly Optoelectronics, a Taiwanese company. The chipset, another key component, is produced by ADI, an American company. Finally all these parts are collected and assembled into the finished product at LG's second plant in Pooona in western India. All the other parts also come from diverse sources.

What's the reason behind this complicated globalized division of labor? It's not because there's a shortage of Korean-made parts. On the contrary, there's an abundance of them available. The reason is that Korean companies have to work like this to survive in the global market. It just shows how harsh the situation really is. Businessmen have to source parts from every nook and corner around the world to make their products cheaper and better.

LG sells about 200,000 KG110 phones a month in India, for about W48,000 each (US\$1=W923). It's difficult to find a phone that

cheap in Korea. The number of Indian cell phone subscribers increases by 6 million every month, the highest rate in the world. Mobile phones that cost less than W60,000 account for 70 percent in the Indian market, and the prices of new handsets just keeps dropping. In these circumstances, it's very hard for any mobile phone maker to remain price-competitive. "We're suffering because we're still lagging behind Nokia, the world's top mobile phone maker, in cost competitiveness," said Shin Moon-bum, the vice president of LG Electronics India. LG's not the only case. LG's rivals in the phone market, Samsung and Nokia, are also under a lot of pressure, as is the automotive industry and other manufacturers.

And what of the small- and medium-size enterprises (SMEs) in Korea? How many of them can turn out products "made in the global workplace"? Companies around the world are competing to advance into new markets, while those that only make products for domestic consumption are quickly losing ground. SMEs are becoming more rapidly exposed to global competition, and it's not just manufacturing that is facing this stress.

Let's look at E-Mart, Korea's largest discount store. It has a special team in charge of global sourcing. Team members visit more than 20 countries including China, Vietnam, and Indonesia, as well as advanced nations like Germany and France, to find products to suit Korean tastes. They spend more than W200 billion annually, and that figure will likely double this year. They don't necessarily buy products just because they're cheap. They'll buy expensive goods if they have a good reason. The key word is

competitiveness. Each branch of E-Mart is now operating a global sourcing team.

The time when SMEs could survive under the government's industrial protection policies is ending. Korean companies once grew based on their domestic competitiveness, proudly making goods labeled "made in Korea." They should now concentrate on maintaining global competitiveness, manufacturing products from components sourced from around the world. The future looks stark and there's no easy alternative in sight. The era of goods "made in the global workplace" is arriving fast.

This column was contributed by Lee In-yul, the Chosun Ilbo's correspondent in New Delhi.

9. Ticket Design clinches Silver at International Appliance Design Awards 2007, USA

Press release from: Ticket Design



(openPR) - Advanced Telematics, a design innovation by Ticket Design, a Pune, India based Design firm has been awarded a Silver at the 20th International Appliance Design Excellence in Design Award 2007 USA. Advanced Telematics – A vehicle tracking device designed by the company for Tata Motors was declared a silver winner amongst worldwide entries received in the electronics category beating international competition such as Fujitsu Lifebook A6010 Notebook Computer and Globalstar GSP 1700 Satellite Phone for this position.

"The purpose of Appliance Design's annual design competition is to honor those designers who have excelled in meeting the modern challenge of harmoniously melding technology and industrial design," said Larry Adams, editor in an email to the Founder, Ticket Design, Balkrishna Mahajan and his team. This is the first time an Indian Company has won this award.

An independent panel of three industrial design experts performed judging of the entries. Evaluation of the entries was based on four criteria: appearance, human factors, innovation.

It is noteworthy that, last year Silver Award was won by Sony Ericsson for its W600 Walkman Cell Phone. Other winners in the competition include iPod Alarm Clock, Kitchen Aid, Bosch, Maytag, and Sharp for their respective products.

This recognition for the Ticket team comes in the wake of already booming design industry whilst young teams like Ticket Design have already exhibited their expertise in competing with the best

in the world.

The judges noted that the winners demonstrated that they are serious about industrial design and showed their seriousness by attention to detail and an innovative approach that sharply differentiated its product from competitors. A common element found among the winning products was the ability to make technology more accessible to the user

Using the telematics system a consignor/ truck owners can track their trucks anywhere in India on a map from any internet connected computer. The device uses the global positioning satellite and the mobile phone network to achieve this.

Nishma Pandit, Founder, ID Specialist, added "... as technology gets all pervasive and complicated it is even more imperative that products become simpler to use". The telematics product has already been awarded the Business World - National Institute of Design (NID) Excellence in Design Award 2006 earlier this year in January giving it a national recognition, but " an Indian product getting international attention is surely good news for the Indian Design Industry", Bala added.

The Advanced Telematics product was designed by Ticket Design (ID) for while electronics design and manufacturing was done by Tata Motors Ltd. This device is an advanced vehicle tracking system launched by Tata Motors in their Novus Heavy duty trucks.

Ticket Design is a tiger design firm based in Pune, offering

Product Design, Graphics and Branding solutions. A provider of design services to a variety of industries including multinationals with global manufacturing like Whirlpool, Siemens and GE, Ticket Design has developed the expertise of providing manufacture-ready innovative design solutions. Ticket Design has built successful products for startups, entrepreneurs and SME's as well as large organisations with a million plus production volume.

Founded in the year 2000 Ticket design has worked extensively in consumer electronics, medical products and appliances sector. Its product design services, which include industrial design and mechanical engineering, have been used by such companies as Whirlpool (Sixth Sense refrigerator), Tata Motors (Advanced telematics), Blue Star (Air conditioners) and Siemens (X Ray machine) www.designticket.com

Chittaranjan Dasgupta

Ticket Design

Unit 2, Garuda Heritage B,

Hotel Sarja Lane, Aundh, Pune 411007, INDIA

Phone: 020- 27297985, Fax 27298168

Email: info@ticketdesign.com

www.ticketdesign.com

10. India : Government likely to establish 4 NIDs

May 15, 2007

Strategic importance of design for National and industrial competitiveness is now universally recognised. Value addition through innovations in designs can play a pivotal role in enhancing competitiveness of both; manufacturing and service industries.

Realising the increasing importance of design in economic, industrial and societal development, and in improving quality of products and services, the Government of India had initiated a consultative process with industry, designers and other stakeholders to develop broad contours of a National Design Policy.

Pursuant to this policy, National Institute of Design, along with NIFT, industry and trade bodies, textile industry and academicians also put forward its suggestions to Department of Industrial Policy & Promotion.

Moreover, he added that Government may establish four NIDs in the country with public-private partnership.

Drawing an anomaly, he said that there can be only one Harvard and in the same manner, it's not easy to set up NIDs all over as it requires finance and land, besides trained and qualified faculty.

Designers welcomed the movement to set up India Design Council and Chartered Society for Designers.

JOB OPENING:

1. You'd have read my previous post on Second Life and virtual worlds. VR1 is looking for either trainees or graduates interested in working with us for development services for second life projects.

I am also open to Diploma project students who would like to do a completely virtual dip :) Well... almost virtual. You'll get paid, there will be a number of projects you can display, and you get expert training in the fastest-growing area on the net.

What does this involve? Well, a number of things. Designing a virtual space is about an order of magnitude above designing a website, as far as complexity is concerned. One would be involved in space design and management, 3D modelling, lighting, streaming content, scripting behaviours into objects, event design and planning, product/graphic and fashion design, as well as a whole range of coordinating activities. Doesn't sound very easy, but we'll give all the training that is required.

To those who are interested in working with us, it's even simpler. Just get a Second Life account, take the basic orientation, as well as the various building classes and on-project tasks that keep coming, and very soon you'll be in free flow! Best thing about

working in a virtual office is that you don't even have to come and meet us in the real world! We are already employing a number of people from all over the world for our services, and in some respects the virtual office paradigm works even better it's real-world counterpart. Of course, if you'd rather commute to Gurgaon every day, our real-world office is available as well.

Now, the only drawback here is that if you're looking for a regular 9-to-5 where you have to dress up and commute to office every day, this is definitely not the place for you! This is a very experimental concept at this stage, and does require a much higher level of self-discipline and personal initiative than a 'regular' job does. There are very definite performance and efficiency requirements as well, since these are real projects we are working on for clients. Lastly, you'd need to be on a broadband connection with a fairly good machine (a graphics card and 1 GB of RAM is recommended) , and occasionally the working hours go into overseas time.

Anyone who is interested can mail me at rahul@vr1world.net , and we can take it from there. In case you have a Second Life account, please do a search for 'Rowl Electricteeth' and IM me, we'll get in touch asap.

2.

There's a vacancy for Interaction Designers at MSC software, Pune.

Given below are the details -

MSC software is looking for experienced Interaction Designers to work on Desktop and Web applications.

About Us

MSC Software Corporation is a 40yr old leading global provider of integrated enterprise simulation solutions that enable radical improvement in the time and costs associated with designing and testing manufactured products.

Check <http://www.mscsoftware.com>

MSC User Experience Group

Totally driven from India , MSC User Experience group drives global requirements on usability of MSC products. We work on web based data management application and number of desktop based Simulation applications.

Location: Hinjwadi, Pune

Employment: Permanent

Designation: Interaction Designer

Key Responsibilities:

*** Contributing to the overall user experience of the MSC Software's SimEnterprise product-line.**

- * Applying user-centered design processes to develop UI standards & Patterns. Apply these guidelines to define interaction design, navigation design and Information design. Successfully communicating conceptual ideas and design rationale**
- * Assisting in setting product direction and UI requirements based on business and user needs**
- * Work closely with a cross-functional team to develop the desired functionality to ensure that product requirements are met, creating prototypes and writing detailed functional specifications**
- * Working with Product Managers, Developers, Documentation and QA to deliver the final product while ensuring that it meets UI specifications**

Education & Experience

- * Masters degree in Industrial Design, Product Design, Architecture**
- * 2-6 yrs of industry experience designing web and desktop applications**

Requirements

- * Well conversant with Windows & Web 2.0 standards.**
- * Knowledge of Usability testing & techniques.**
- * Hands on experience designing user interfaces and page flows of Enterprise applications**
- * Excellent communication skills as well as the ability to work independently and as part of a team required**

- * Must have strong understanding of technical issues as they relate to product development**
- * Knowledge of CAD softwares is added advantages.**

A detail portfolio (online/on CD/ ppt) to demonstrate previous work is a must.

Rush your resumes to [Sameer.chavan@ mscsoftware. com](mailto:Sameer.chavan@mscsoftware.com)

3.

We at Proteans, Bangalore ([http://www.proteans .com](http://www.proteans.com)) have an urgent requirement for a position of web developer. Outlined below are details:

Profile Description:

Job Description :

Design and develop Web pages for a portal.

The web pages will be deployed on top of web server.

Mandatory Qualification:

2 years of programming experience.

Mandatory Skills:

Java scripts.

Data base knowledge is required.

Hands-on with ASP .Net and other web page development

Good in web design.

Good Communication skill.

Share Point knowledge plus deployment.

Desirable skills:

IIS knowledge

Location:

Bangalore

Interested people can reply back with their updated resume or they can mail to [rahul.bhatt@ proteans. com](mailto:rahul.bhatt@proteans.com)

4.

There's a vacancy for a Senior Visualizer at TV18 in Mumbai.

Given below are the details -

Senior Visualizer - Positions 1

Candidate Profile: 2 to 3 years of experience

Job Description:

We are looking for a candidate who can crack visual concepts and has a flair for design.

Experience:

Preferably in reputed advertising agencies.

Educational Background:

Graduate / Post-Graduate from a reputed Art School.

Job Description:

Conceptualizing and designing for print / outdoor / online communication.

He/She should be able to work independently and with a team.

Company: TV18

Location: Mumbai

To apply please send your resumes directly to sayoni.basu@tv18online.com

5

Our company, IBS Software Services, Technopark, Trivandrum has openings for the post of *User Experience Designer* (3 Nos).

***Experience: ***

- 2 to 4 years in UI design with focus in HCI

***Requirements: ***

- Highly proficient in User Experience Design (Web and GUI applications) .

- Knowledge of Software Engineering principles and User Centric Design methodologies

- Experience with tools such as Photoshop, Power Point, Dreamweaver

- Knowledge in CSS, HTML, JavaScript

- Certifications in usability will be advantageous

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Chief-Editor::

Dr .Sunil Kumar Bhatia Faculty Member, 13, Lodhi Institutional Area, Lodhi Road, New Delhi-110 003(INDIA)

Editor:

Shri L .K .Das

Prof& Head Industrial Design Center, Indian Institute of Technology (Delhi), India

Associate Editor:

Shri. Amitav Bhowmick Industrial Designer Small Industries Service Institute. Ministry of Small scale, Government Of India, Delhi (INDIA)

Editorial Board:

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Contributors:

Dr. Sheryl Burgstahler , University of Washington, USA

Ms Vicki L Stoecklin, USA

Dr Scott Rains, USA

Address for Correspondence:

13, Lodhi Institutional Area,

Lodhi Road, New Delhi-110 003India.

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Tel: +91-11-27853470

E-Mail: newsletter@designforall.in

Website: www.designforall.in

Cover Design: Mr. Pudi Ravi (pudiravi@gmail.com)