

Design is the Key

Marc Miller Graham

Bachelor of Science in Mechanical Engineering
Massachusetts Institute of Technology
June 1995

Submitted to the Department of Mechanical Engineering
in Partial Fulfillment of the Requirements for the Degree of

Master of Science

at the
Massachusetts Institute of Technology

September 1996
[Stamp]

© Massachusetts Institute of Technology 1996
All Rights Reserved

Signature of Author _____ Department of Mechanical Engineering

Certified by _____ Professor Alexander H. Slocum
Thesis Supervisor

Accepted by _____ Professor Ain A. Sonin
Chairman, Graduate Committee

ENG.
MASSACHUSETTS INSTITUTE
OF TECHNOLOGY

DEC 03 1996

Design is the Key

Marc Miller Graham

Submitted to the Department of Mechanical Engineering in Partial Fulfillment of the
Requirements for the Degree of Master of Science

Abstract

This thesis presents design as the solution to a number of problematic situations that affect our everyday lives. It gives an explanation of the design process and defines design as being a way to solve problems. The major problem that is focused on is how people are currently not in control of their own fate. Developing design skills empowers people to utilize the creativity we are all born with to take control of their fate. In this thesis, the overall problem is outlined, a solution strategy is developed, and fundamental elements that can be used to implement the solution are discussed.

The problem stressed is how lots of youngsters are not being encouraged to be creative. The solution is teaching design at an early age, so one can master it before too late; "you can't teach an old dog new tricks, but you can teach a baby to swim." Several areas of design are discussed as examples of ways to develop the creativity of youngsters. Lastly there is a section discussing fundamental elements that can be used to implement the solution. In this section programs, which I have developed, are mentioned as steps to be taken in improving current situations to be remedied through the implementation of design.

Thesis Supervisor: Dr. Alexander H. Slocum

Title: Alex and Brit d'Arbeloff Associate Professor of Mechanical Engineering

Acknowledgments

First I would like to thank Alex and Brit d'Arbeloff for providing me with the Alex and Brit d'Arbeloff fellowship, which made this project possible. Without their support, I would not have been able to further my education, nor complete this project. I know many people who would love to have the opportunity I had and I am truly grateful to the d'Arbeloffs for their generosity.

I would also like to thank my thesis advisor, Professor Alexander H. Slocum. Professor Slocum was also my thesis advisor for my Bachelor's thesis and in less than two years, he has given me a life time of support. He has guided me through times when I saw no way out. Through Professor Slocum, I have gained the confidence needed to pursue my dreams and achieve the things I want to achieve in life, allowing me to be the person I want to be. I can not explain how wonderful a friend he is.

Finally, I would like to dedicate this thesis to my mother, Sandra Louise Graham. She has always encouraged me to do my best and has been by my side in everything I have done. She believes that I can achieve anything I set my mind to doing. This belief in me has been the backbone of many of my accomplishments. I thank my mother for being the most inspirational person in my life.

Table of Contents

1.	Introduction.....	5
2.	The Problem.....	7
3.	The Solution.....	9
	3.1. Art-Based Products.....	9
	3.2 Game-Based Products.....	11
	3.3 Product Designs.....	13
	3.4 Music-Based Products.....	34
4.	Fundamental Elements.....	82
5.	Conclusion.....	82
	Appendix A: Second Summer Program- Projects.....	84
	Appendix B: Urban Design Corps Project: Motivational Music.....	108
	Appendix C: Urban City Development: Program #1- Student Studio and Design Park.....	112
	Appendix D: Executive Summary for the Urban Design Corps.....	126

Introduction: The Key to the Solution: The Essence of Design

The thought process that one goes through to design is unique. To design, one must be extremely focused, but at the same time have an open mind for random thoughts. One must have an idea of what one wants to design, but must be willing to explore all possible options to achieve the design. Keep your eyes open and you'll find what you're looking for; continue to try until you succeed; be aggressive and your competition will ease.

There are many ways that one comes up with a design. One may just wake up with an innovative idea one day; one may notice a way to improve an item and design to optimize its usage; one may have a particular need and design to satisfy it. What ever the incentive to design is, the outcome is usually the same, a new, or improved product.

Design can be thought of as a way to solve problems. If one needs to lift something to a certain level that weighs more than one is capable of lifting without assistance, one must come up with some form of assistance that allows him/her to do so (e.g. a pulley, an incline, or an elevator). What allows one to come up with these forms of assistance is knowing 1) what task is needed to achieve and 2) the resources that one has to assist him/her in doing so. Knowing these two things, one has completed a large portion of the design process for any project. The greater the breadth to which one knows these two things, the further along he/she is in the design process. Understanding the importance of these two things can be vital to determining one's chance of being successful in many situations.

Every day millions of people are faced with challenging issues where if they know 1) what they need to achieve and 2) the resources available to assist them in creating they can more readily achieve the tasks they face. Even better, if they pay attention to the areas in which they have talent and work to develop these talents to their maximum potential, they will build up the resources needed to assist them in becoming successful. All that is left is for them to determine what task they want to accomplish. In such a way, design is used in all areas.

Many people, at some point in time, get sidetracked to a path of maintenance. They lose the will to get ahead and soon feel as if they have to fight to keep their head above water. Once this happens, they tend to get on a daily schedule which allows for no other options than the work that is at hand. To be creative, one must be able to think freely and absorb their environment.

It is easiest to design for which one is familiar. For one who finds himself/herself on a daily schedule, it is important to pay close attention to his/her work patterns. They must notice what comes easily and what is difficult. Once they have figured out the simplicities and difficulties, they can further determine what makes certain tasks simple, while others are not so easily achieved. In doing this, they will obtain full knowledge of their resources/talents. These resources/talents can be used to design other situations in which they can be used.

My advisor says all humans are designers to some degree. Every morning, we face a closet of clothes from which we have to select and design our outfit for the day. It's the same thing with our refrigerator and breakfast. The problem is, society has conditioned us to march and regurgitate. Starting with a rigid structure in school and ending with a social

system that teaches us that we are not responsible for our actions and that we should expect to be taken care of. The net effect is that the vast majority of people are not in control of their own fate.

This is a sad state that can be remedied by empowering people to utilize the creativity that we are all born with. This thesis is start designing designers! Like design itself, this thesis will outline the overall problem, develop a solution strategy, and discuss fundamental elements that can be used to implement the solution.

Furthermore, because this thesis is about design, it will demonstrate these principles with real design products, because if the pen is mightier than the sword, and if a picture is worth a thousand words, then design is the answer.

The Problem

I am studying Mechanical Design as a graduate student at M.I.T. Last year, I received my Bachelor's degree in Mechanical Engineering from M.I.T. While I have had the opportunity to study at one of the finest institutions in the world for over four years, I have not always been this fortunate. The high school from which I graduated was and is ranked last academically in the state of Ohio. If it had not been for my diversity as a student, an athlete, and for a summer program I attended in Andover, Massachusetts, I would never have had the chance to attend M.I.T. Furthermore, there are many students with my potential that may never have the chance to attend a school such as M.I.T.

For as far back as I can remember, I have always enjoyed making toys, machines and interesting gadgets. Whether it be the sling shots I used to make out of a 2X4, a rubber band, and a nail when I was younger, or machines that carried out ten step processes at the flick of a switch when I got older, I was always motivated to create. Raising us in a single parent home, my mother wasn't able to buy my older brother and me lots of toys, or take us places to provide us with entertainment. My father whom I rarely saw was even less capable of treating my brother and me to things with an expense attached to them. But, while unable to shower me with expensive items and outings, both of my parents were able to instill in me a will to create.

If I would not have learned to design at such an early age, chances are I would have failed in a number of past situations. Projects I have done in school, because of their originality, have always received special attention when it came time to grade them; I became a championship wrestler, with a style that is referred to as being unorthodox; and whenever I am faced with problems unlike any other I have faced, I use my design skills to come up with a route to success. Since I was able to design, I was not only able to succeed, but I received special attention for being different.

The problem is lots of kids are not being encouraged to be creative. On the average, children are told to learn what is being taught and be prepared to be tested on it. While it is important to learn, this method of teaching is not necessarily the best. If design is not learned, then it is difficult to deal with unfamiliar situations. On the other hand, if one learns how to design, they are prepared to deal with any situation.

The Solution

Society evolved from antiquity because people created an economy by designing things. So it is proposed to start again with only our wits and create a new structure for society by designing. Capitalism is not zero net sum, the universe is boundless. If we all create, we all get more.

Design should be the first thing that students learn. The sooner students learn design, or problem solving skills, the sooner they can deal with tough situations. Currently, the average student doesn't learn how to solve complex problems until junior, or senior high school; by that time this skill should already be developed. And because design is taught so late, one rarely reaches his/her full design potential. You can't teach an old dog new tricks, but you can teach a baby to swim. Start kids designing at an early age and society will benefit greatly from it in the future.

The following sections describe many of the areas that kids can focus on to create new products.

Art-based products

The look of an atmosphere often times creates the mood of that atmosphere. When one is in a "haunted house," one tends to feel afraid; when in a green house, one may feel refreshed; when on a playground, one feels active. This appears to be the same situation in cities. When one is in the suburbs, one can feel relaxed and enjoy the appealing scenery of trees, nice houses and cars. When in the city, one usually feels in a rush, not at ease and

not able to enjoy the surrounding environment. Each of these situations is a catalyst to the actions of the people to whom they are presented.

In the suburbs, people tend to treat the environment with respect. In the city, people tend to pay little attention to their treatment of their surrounding environment. If someone causes destruction to an area of the suburbs, it "sticks out like a sore thumb," and is taken care of immediately. However, when someone destroys a part of the city, it doesn't stand out as much and may not be acted on rapidly. This gives time for more destruction to take place and soon it is too much to handle.

If the city was made to look more appealing, the mood of the city would coincide. Structures of the inner city tend to be plain and unexciting. Park benches are nothing out of the ordinary, swings simply fulfill the objective of simple harmonic motion, and basketball courts are no more than a couple of hoops and backboards enclosed by a rusty fence. If some creativity was used in the building of city attractions, more constructive creativity would come from the city. If there is no artistic value attached to the city, then the city will not influence a pleasant attitude.

Making the city more appealing is a quite simple process. For example, it can be achieved by making more appealing the shape of park structures, playgrounds, bike racks, etc. Furthermore, this process can be used to build pride in the youth of the city, by having the construction of these structures take place as art class products. In doing so, these products will be less likely to be vandalized and will be treated with respect. This will also give students an opportunity to deal with design and manufacturing first hand. These art-based products are one step that can be taken in the direction of improving the mood of cities.

By making this program available to students, valuable lessons can be learned; art now merges with structure. Students will learn things about the material properties of metals, through dealing first hand with projects that involve steel bending, for example. Much can be learned about the math of engineering, by calculating dimensions and tolerances for product parts. And if nothing else, through introducing art-based products, students will at least learn how to draw and work with engineers.

Designs that will be pursued include: rack animals and teach grounds. Rack animals are bike racks, park benches and things of the sort, designed in the shape of animals. Teach grounds are playgrounds that are designed to give kids an understanding of how mechanical things work.

Some work is being done in this area as part of a part of a program at M.I.T. (see “Second Summer Program”- Projects **Appendix A**), which prepares college freshmen for an internship. As an instructor for this program, I have assisted in making the designs of teach grounds a part of the group work curriculum. Work on rack animals is currently being conducted by my brother, who is also working on game-based and music-based products.

Game-based products

Board games can be fun and at the same time teach a lesson. Educational games are an extremely effective way of teaching a lesson. Repetition develops an understanding that brings one as close to instinct as one can be. If a lesson can be put in the form of a fun game, it will not be as painful and as tedious as lectures to be followed by homework

assignments, eventually leading to a quiz. Furthermore, one will be more enthused to learn the lesson the game teaches because it will be essentially effortless.

I am currently working on a project with my brother called "Life, The Real Game," available as a board game, and for home video game systems. This game is a spin off of the game "Life" by Milton Bradley. The difference is this new game deals with life in an urban city and all the problems that one faces growing up in this environment. Many kids will be able to relate to this game and the situations it presents to them. The good thing about it is this is a game and they will be able to first see the consequences of their decisions in the form of a game, as opposed to real life. After learning a lesson from the game, they are less likely to make the same mistake in "real life."

It is a good thing for someone from the inner-city to design a game for kids from the inner-city. Kids create new games all the time. There is no mind more open to new ideas, or as random as a kids. I can remember playing games as a kid like "that's my car" (a game that is carried out by being the first one to say "that's my car" once noticing a desired car; the person who calls the car first, becomes the imaginary owner of the car). Another game I can remember playing is "stare." This is a game when two people stare each other in the eyes until one of the two laughs. The one who laughs is the loser. These are two examples of simple games developed by kids and so many kids love them. As adults, we should encourage kids to come up with new games and ideas, and reward their successfully doing so. "That's my car" and "stare" can both be made into games for sale, by adding a few complexities and strategies to them.

I do not suggest that only inner-city kids be taught design, but I do stress that inner-city kids should especially have design as a major part of their curriculum. When resources

are limited, it is of utmost importance to be extremely familiar with one's tools and their multiple capabilities. Sometimes one may need to hammer with a rock and remove bent nails with a pair of pliers. It is not as important to have the suggested tools for doing a job, as it is to know which ones will get the job done.

Product Designs

Inventions by Marc Graham include designs of toys, exercise equipment and several other consumer products. The following are descriptions of several products developed by Marc Graham and associates.

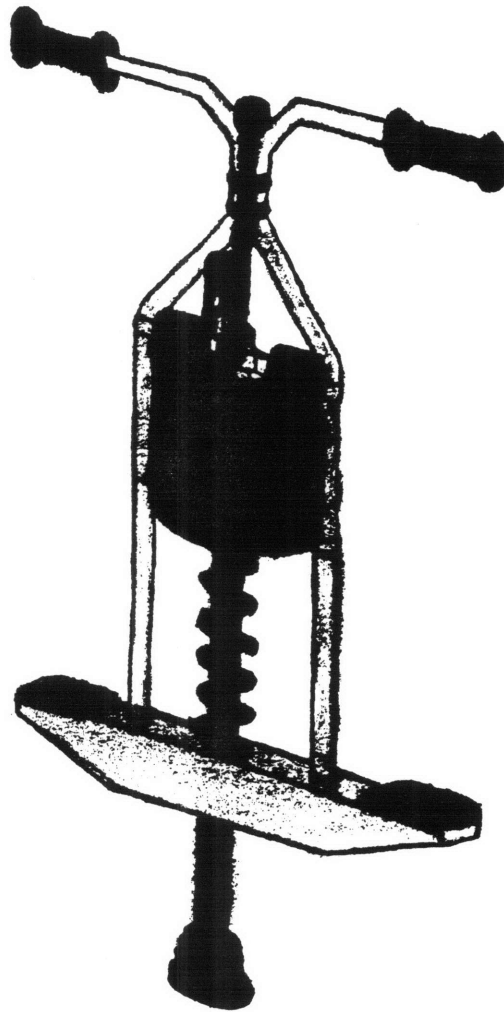
The Pogosquirt™ ©1996

Inventor:

Marc Graham

WHAT IS THE INVENTION

The basic design of the POGOSQUIRT entails a pogostick with an attached water reservoir, an integrated air pressure pump, and a trigger-activated firing mechanism. To operate the device, a user would 1) fill the reservoir with fluid, 2) jump on the pogostick, while it chassis to build up pressure using the pump, then 3) fire a stream of fluid at a target by engaging the trigger, or by setting the trigger switch to fire with each jump (the function control on the trigger is to allow beginners to learn to use the POGOSQUIRT in stages). This sends a strong, precise stream of fluid, pressured by the stored air, out of the firing mechanism towards the target.



BACKGROUND

The problem with previous pogo sticks is that they have provided a minimal source of excitement by only offering the user one function and were focused towards entertaining one person at a time. The one function provides a limited source of entertainment and can cause a user to bore quickly. This lack of interest may be caused even sooner by the fact that the entertainment value can only be experienced by one person at a time. The squirt gun serves the sole purpose of shooting to wet a target. This can also make for a dull time if there is no moving target available, making this a toy which requires more than one user

to provide substantial entertainment. What is to be realized is that the previous design of the pogostick is only good for entertaining one user and the previous design for the squirt gun plays little, or no part in entertaining one user.

The Horse™ ©1996

Inventors:

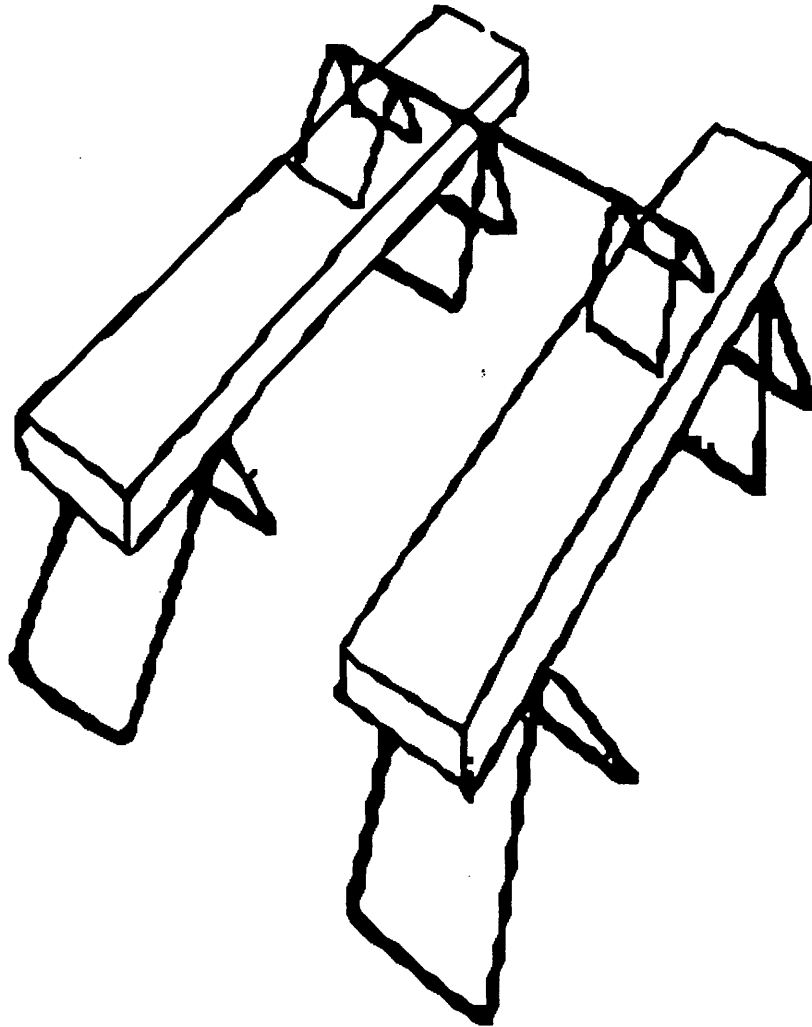
Jerry Morgan

Marc Graham

WHAT IS THE INVENTION

There are many instances where it is necessary to have agility and coordination. This can be developed with great effectiveness with the use of a device that has the orientation of an small stationary obstacle course. This is achieved with a set of two benches with grooves carved across their top surface placed side by side, in which the groove elements have a connecting bar placed from one bench to the other in symmetric positions on the two benches that allow the user to use the bar in stability for various workout activities. A key element of the design being the adjustable location of the bar such that the forces experienced by the user focus on different locations depending on the position of the bar.

This invention is concerned with the area of isometric workouts, or external resistance, weight free body building workouts. The design consists of two benches set up side by side, with an optional pull up bar that can be placed from bench to bench at several positions along the two benches. This is a lightweight design that can be easily transported, if necessary. Unlike traditional workout benches, "The Horse" does not come with weights, instead it comes with a series of workout plans to be performed in parallel with levels of personal development.



BACKGROUND

The problem with previous workout benches is that they have been geared towards workouts involving lifting weights. While weightlifting may be important for building strength needed to lift objects one might encounter on a daily basis, it does not provide the muscle control and agility that is gained from isometric workouts. This muscle control and

agility can prove to be far more important and useful than strength needed for lifting extremely heavy objects. Previous benches have also focused on particular muscle groups, not providing a full body workout. Because of this previous workout benches have not been known to provide full body development.

The Subject Bag™ ©1996

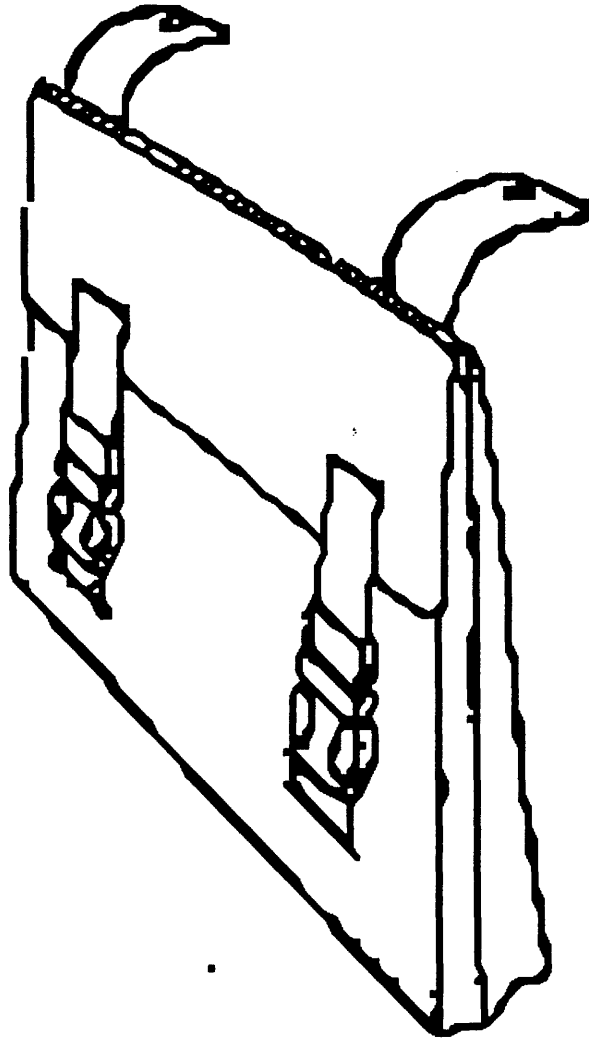
Inventor:

Marc Graham

WHAT IS THE INVENTION

There are many instances in transporting materials where it is necessary to have a system of filing, or separating certain items. In the case of a back pack, this can be achieved by equipping it with compartments that can be used to store materials according to subject matter. A key element of the design being adjustable location of the compartments such that the number of compartments and amount of subject space needed in each can be varied as needed.

This invention is concerned with the area of transporting materials in the same package with adequate separation and organization. The design consists of a back pack of adjustable volume with a number of compartments which can be enlarged, or made smaller as needed. This is a lightweight and durable design that can be easily transported. Unlike traditional back packs, the "Subject Bag" is not solely for the transporting of materials, but also allows one to file materials for quick reference in any situation.



(straps can be complete backpack straps, or snap on to “Deep Pockets”™ ©1996 “Snap Pack”™ ©1996 design)

BACKGROUND

The problem with previous back packs is that they get unorganized and stuffed very easily. While their durability may be important for security of materials being transported, it is not the only important feature that a good back pack should possess. Often times back packs are used to carry materials from an abundance of subject areas. Previous back packs

have not focused on separation of subject materials, not providing a the convenience of organization. Because of this previous back packs have not allowed for minimal time in retrieving materials for usage.

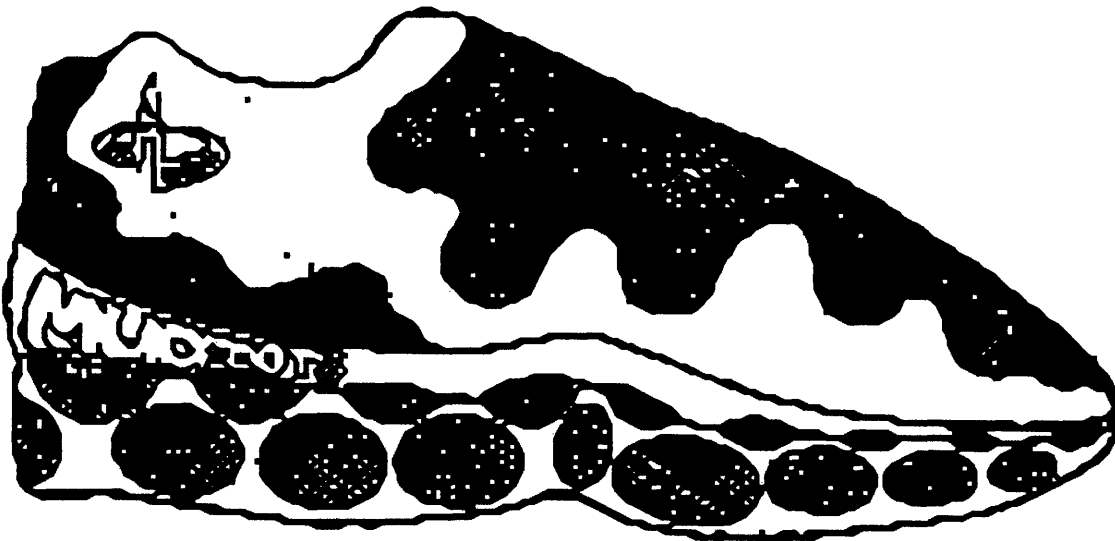
Mudfoots™ ©1996

Inventor:

Marc Graham

WHAT IS THE INVENTION

The basic design of MUDFOOTS entails a walking shoe with a gel like inner padding, which supports the foot. The purpose of the gel is to provide extreme comfort and support to the user. This is accomplished through the MUDFOOTS design of allowing the inner padding of the shoe to fit to the shape of the user's foot.



BACKGROUND

The problem with previous walking shoes is that they have provided a satisfactory source of comfort by only offering the user a sturdy sole which provided excellent support, but paid little attention all of the foot's curves. The sole provides a limited source of comfort and can leave the user looking for more. The MUDFOOTS sole serves the purpose of providing maximum support and comfort. What is to be realized is that the previous design of walking shoes is good for providing excellent support and satisfactory comfort; the MUDFOOTS design not only provides excellent support, but also provides extreme comfort.

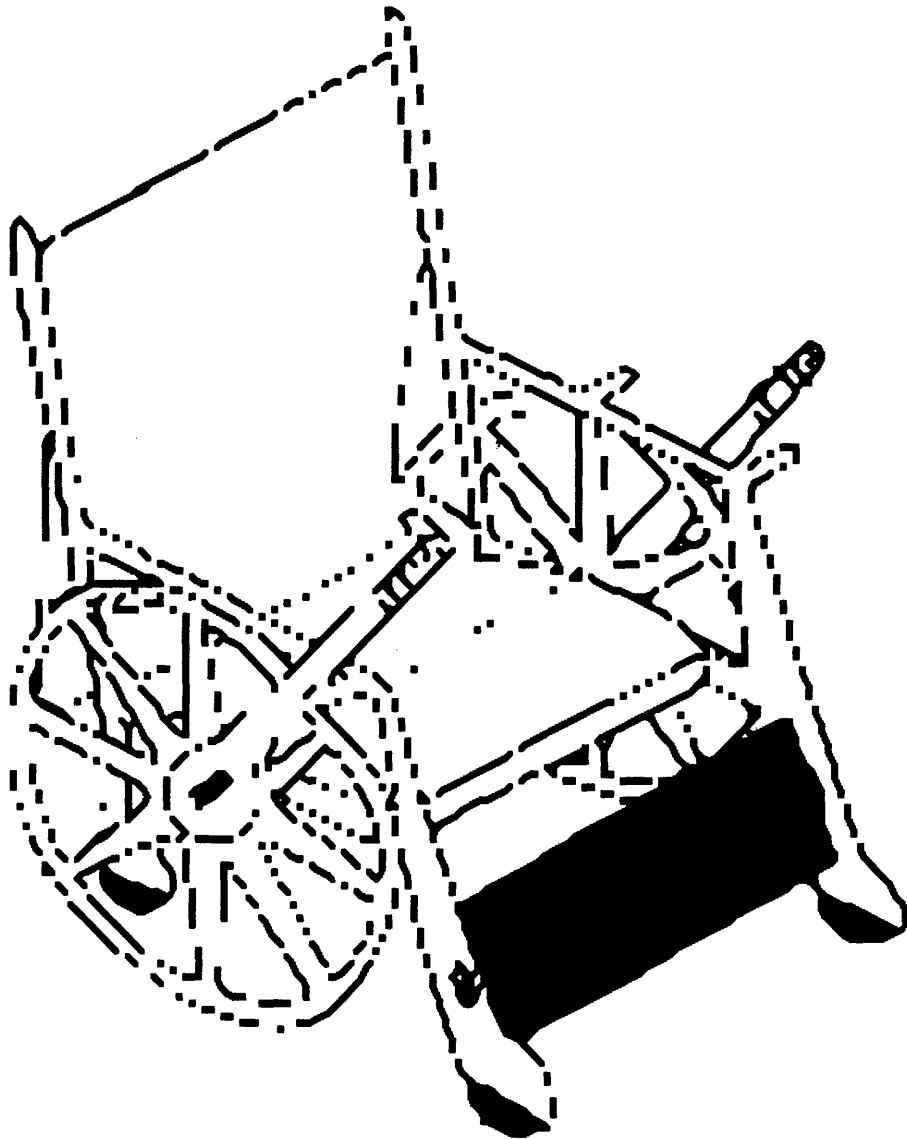
The Ratchet Wheelchair™ ©1996

Inventor:

Marc Graham

WHAT IS THE INVENTION

The basic design of the RATCHET WHEELCHAIR entails a manually operated wheelchair with ratchets attached to levers, attached to the axis of the wheels. To operate the device, a user would pump the levers which would in turn rotate the wheels. Following each stroke of the levers, they are returned to their top position, while the wheels continue to spin in their current direction. This process is repeated as long as the user wishes to continue motion.



BACKGROUND

The problem with previous manual wheelchairs is that they have provided minimal operational ease. Having to operate the wheelchair by manually turning the wheels takes an enormous amount of strength to continue over an extended period of time. It is much easier to move the load of the wheelchair if the force used to turn the wheels is exerted to

the levers connected to them, rather than at the wheels themselves. What is to be realized is that the previous design of the manual wheelchair called for too much strength to operate. The RATCHET WHEELCHAIR calls for much less force to operate, which provides for a much larger range of users.

The Socball™ ©1996

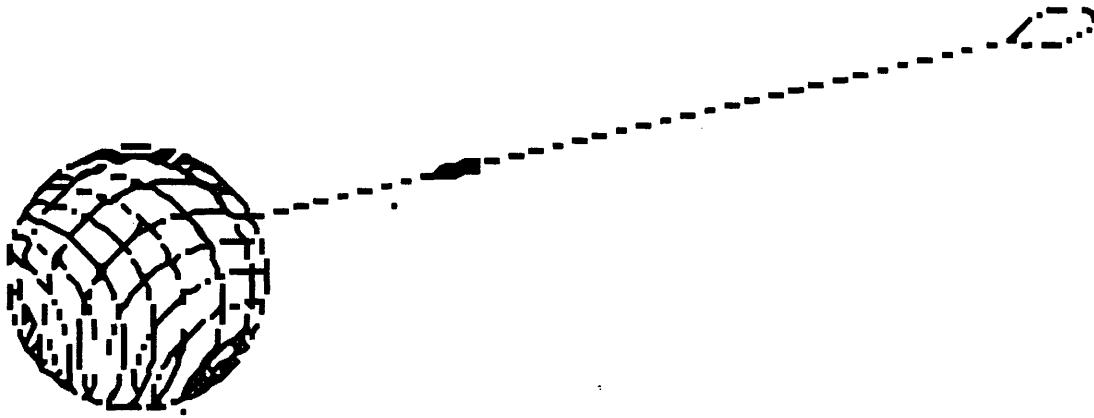
Inventors:

Marc Graham

Amechi Nwachuku

WHAT IS THE INVENTION

There are many instances in playing soccer where it is necessary to be able to handle the ball with extreme expertise. In developing this skill, there are few established methods. The SOCBALL which consists of a net bag, in which a soccer ball is to be placed, attached to a rope-like device which connects to the foot of the user. This device is used to keep the ball in the range of the user, while their skills are developed using this control device. A key element of the design being adjustable length of the rope-like device allowing for the range of operation to be varied as needed. There are not current devices which attach to the foot of the user as a means of developing skills.



BACKGROUND

The problem with previous dribbling development devices is that do not accurately imitate the actual reaction of the ball to the users input. Often times players are faced with situations where they need to know how the ball is going to react to a certain type of kick. The SOCBALL, unlike previous devices prepares the user to deal with these types of situations. Previous dribbling development devices have focused solely improving dribbling skills and not imitating the actual reaction of the ball to the user's input. Because of this previous dribbling improvement devices have not allowed for maximum development of the users skills.

Comfortable Clothing ©1996

Inventors:

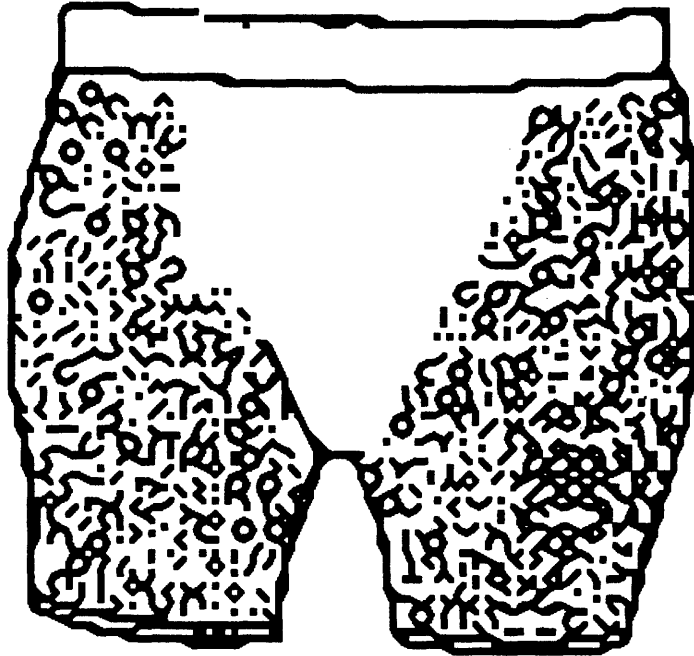
Marc Graham

Amechi Nwachuku

WHAT IS THE INVENTION

There are many instances when physical activities such as working out can lead to one pulling, or straining a muscle. In the case of COMFORTABLE CLOTHING, this can be prevented through the key element of the design being massaging ball like structures placed in the inner lining of the clothing.

This invention is concerned with the area of overworking muscles. The design consists of workout clothing which fits snugly on muscles and has an inner lining which acts as a massaging surface. This is a comfortable and durable design that can come in handy in many physical instances. Unlike traditional workout clothes, COMFORTABLE CLOTHING is not solely for providing a relaxed fit, but also for massaging muscles as they flex.



BACKGROUND

The problem with previous workout clothes is that they do nothing more than provide a relaxed fit with durable material. While their durability may be important to survive rigorous workouts, it is not the only important feature that good workout clothes should possess. Often times users do not warm up efficiently before working out. Previous workout clothes have not focused on relaxing muscles, not providing a back up system for an user who has not adequately warmed up and may be liable to pull, or strain a muscle. Because of this previous workout clothes have not fully prepared muscles for workouts.

Deep Pockets™ ©1996

Inventor:

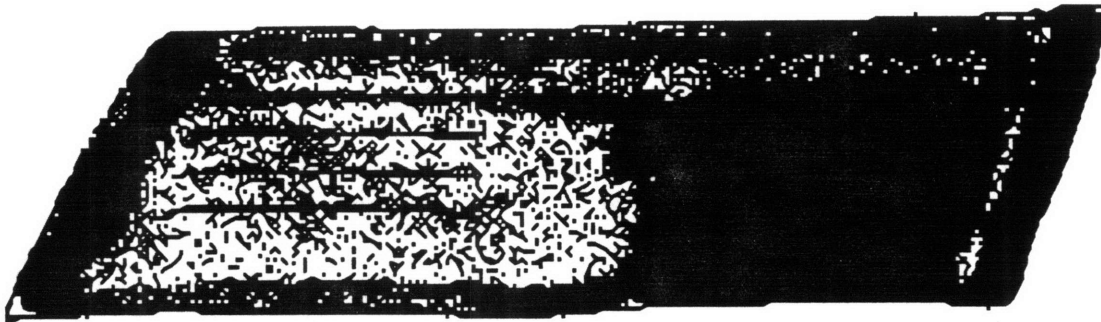
Marc Graham

WHAT IS THE INVENTION

The basic design of DEEP POCKETS¹ entails a detachable pocket with compartments. The purpose of the pocket being detachable is to allow for easy access to materials. This is accomplished by attaching the DEEP POCKETS pockets to the pockets of pants of the user (for maximum effectiveness, it is best to use DEEP POCKETS pants).



¹ For more information contact **Anga Athletix®** @ (617) 625-3708



("Deep Pockets"™ ©1996 attach inside clothing, "Snap Packs"™ ©1996 is a similar design which attaches on the outside of clothing)

BACKGROUND

The problem with previous pockets is that they have bunched all materials in the same compartment, not allowing for easy access to desired materials. The DEEP POCKETS pocket provides a wallet like pocket, which allows all materials to be easily attained. The DEEP POCKETS pocket serves the purpose of providing maximum ease in attainment of materials. What is to be realized is that the previous design of pockets is good for providing a storage place for materials, but not easy retrieval of these materials; the DEEP POCKETS design not only provides excellent storage, but also provides extreme ease in retrieval of materials.

Music-based products

The attention of a person is easy to catch with music. Music-based products can be used to initiate a thought process in a listener. Not many things are as easily remembered as lyrics to a song. These lyrics can be used for a number of purposes; to entertain, to soothe, to get one thinking. A song relaying a strong message can often times be more effective than a speech, or a publication. This is because if the song is entertaining, it will be listened to over and over again, each time with the message it relays becoming stronger.

If you want to topple a building, you can knock it down by brute force, or you can excite its structural resonance and shake it apart. Music can be a most powerful tool. It can incite riots, or it can pacify the beast. Yet despite its power, few appreciate it. What would happen if instead of building prisons, musical instrument factories were built, and musical literacy was required? This would provide people with an emotional outlet. Those who are active in music are aware of how relieved one feels after writing a song, or completing a recording. Not only will making musical literacy a requirement help people out emotionally, it will create a new economy.

The project here will be Design Rap. Design rap is a program that works with kids of all ages to build their literary and musical talents. Younger kids will work on projects such as "Dr. Seuss" raps, while older kids will write creatively about personal experiences. In doing this, kids will be able to identify some of their problem areas and work towards a solution (see Urban Design Corps Project: Motivational Music **Appendix B**).

Design For The Future

By Marc Graham © 1995

I wish that I could build
A world of my own
A place to be alone
A private twilight zone
A home that is open
To those who think just like me
And we can make the mold to be
Used by everybody.

The killing and the dying
Has got so many crying
But nobody is trying
To roar like a lion
'Cause heroes are puddles
Of red caused by lead
So many do not stroll
And walk about the ledge.
But it's not necessary
To end up in a cemetery
Only strive to push along
And do not drift to doing wrong.

A choir sings the sad song

Let's cut it to a solo

And later to a memory

Left to sing by zero.

Young people, it's possible

So find the right direction

Use the mind that you've been given

Read and follow every lesson.

It's a blessing and a weapon

Thank God for your mental state

And show appreciation

Do not kill, create.

Don't stagnate, Awake!

And see the path that can and will be

Not the streets of death

The lives of sorrow

And the penitentiaries.

It Never Ends

By Marc Graham © 1995

You can't hold me back, I'm a maniac
Mindstien genius I design like a brainiac.
Learned in the fifth grade the world was against me
Teacher must have hated me, placed me in L.D.
Learning disability, please check my IQ
You'll find that it's higher than the stars in the night blue
Moved to my true spot, then I got straight A's
Mom short of cash had to move in the better days.
Back to the drawing board, problems at another school
This one said I got good grades, 'cause teacher thought that I was cute.
Tried to give me C's and D's, Mama wasn't having it
Came up to the school and said you better cut it out quick.
Set off to the right spot, I'm off to junior high school
Placed in accelerated classes, junior high was cool.
Time for us to move again, back to short of dividend
Down to East Cleveland, no doubt it was the bottom end.
Had to spend my seventh grade year in elementary
because the middle school did not have the capacity.
A whole year wasted now I'm on to the eighth grade
At Kirk Middle school, Honor Roll, three sports played.

Triathlete with the brains and the talent raw
But some how I wasn't recommended for the honor classes at Shaw.
Passing with the highest grades, A's everywhere
And the captain of the wrestling team, but no one seemed to care
'Till my junior year, honor physics, pre-calc, etc.
And ranked in the state as the number one wrestler.
And summers I spent in Andover at Academy
Of Phillips, with courses to better me.
College applications rolling in as a senior
But the councilors words in my head linger.
Take the offer from Yale that's the best it's gonna be
You haven't got a chance of being let into M.I.T.
But surprise, I'm accepted, sorry but you've been corrected
See me at the graduation, all respected.
Four years of college at the number one school
In the nation -slash- the world, guess I broke all the rules.
Got my bachelor's, onto the master's still at M.I.T.
Designing things for companies that the average mind can't see.
But the jealousy is funny, though it's not from my peers
It's from the people not content in their elder years.
Roll to my high school to see the teachers I consider friends
But I'm knocking on the door and Mr. Holt won't let me in.
It never ends.

Journey Of The Lost Souls

By Marc Graham © 1995

Traders stalk amongst the presence of invaders
That infiltrate the essence, victims to the raiders
Who capture the bodies, triangles of Bermuda
Take dices of spices, tobacco to chew up
"Swing Low" about a century or so,
No where else to go,
No one else I know,
Looking to the moon to assume
Will it bring back the ways of the life in the Motherland soon.
No chance, so I sing and dance
Create some more spirituals to preserve the soul.
"Chariot" quarters far from the Marriott
Whips rip when they hit, my skin, they wear it
And tear it up, beat down to the bone
Now they're "Comin for to carry me home"
On and over again, suddenly we're equal,
But pieces are separated by colors of the people
Try to move forward and get hit by the back hand
Shot from a balcony, peace to the Black man.
In time it declines, but the ball still rolls
Return for the next trip, the journey of the lost souls.

People are gathering and willing to represent
Won't be irrelevant, rather be militant
Black and strapped with gats and ready to act upon the powers that be
Minds heated like a chimney
Penalty, the FBI Investigates and takes away
Everything but crime it's left to stay
I see a crackhead and wonder where she came from
Slaves never smoked rocks, tell me why she needs one
Little kids with fat knots,
Jordan's now replace Jox,
Glocs for their sling shots,
The list goes non-stop.
Parents unemployed, happy families destroyed
All potential seen as void and the cities got me paranoid.
I sleep on the floor, dead bolts on the door
For the hearts that fell apart now rotten to the core.
Every day I want more, so I strive to meet my goals
See me as a passenger on Journey Of The Lost Souls

The Present Is Our Future

By Marc Graham © 1995

Too many brothers that I know are complaining
About their situation and they claim their education
Is time spent and wasted in a spot where they won't make knots
So they rather hit the corner with the rocks.
The jocks wanna play but they don't wanna pay the cost
You can get the coach to fix your grades but you take a loss
Sisters think their looks can replace text books
And they end up with a heavy handed man getting shook.
If you took, the time that your mind needs
And pulled it off the sack of weed
Long enough to smooth the rough
And do yourself a deed
You would see how the top feels and what it looks like
No longer dreaming of being Mike.
And teachers take the job because it's all that they could get
Don't care about the youth so the students take a hit.
And parents just the same having babies that they never tried to tame
And they wonder how they end up in a gang.
Place the blame to whoever, but it doesn't change the outcome
Plenty fingers pointing and nothing's getting done.

We run from the pressure when the stress hits, everybody quits
And collectively we aint done a bit.

Back in the days we died in slavery,
But nowadays, brothers spend their lives in penitentiaries.
The past is the present and the present is the future
If you don't let the lesson in the text get through to ya.

Only The Good

By Marc Graham © 1995

Evil people live forever,
That's how I know that the world is hell.
And all the good people die and go to heaven,
But some believe it's all a tall tale.

I got to know what I'm meant to be fighting for,
So I can choose my battle side, in this war.
I'm sure, that I'm not destined to be doing dirt,
But growls at night magnify my famished stomach hurt.
Set me to sleep by the sounds of the slave ships,
Pain out to my fingertips, hunger stickin to my lips.

Rips, in the seams of my trousers,
Dreams of having power rain my brain like a shower.
The window, personifies the motion picture,
A shot denies the lives of a brother and his sister.
They're gone, but the shooter lives on,
With his mind set on getting by and ending happy homes.

My bones feel brittle as I trickle from,
The sights of blood on the pavement and no place to run.

Ask why? I don't want to cry, but can't contain my eyes,
Saying bye to many friends of mine, the evil multiply.
Will I die soon? I do not doubt the day is coming,
I'm awaiting on the verge of being hunted.

I wondered, a long time do white lights really flash,
Angels swoop down replaying life in the past.
I'm a ball of confused cells, wall of wood and rusty nails,
Hoping that I'll fall and start my journey out of hell.
Remember show and tell as a child I loved it so,
But now I'm grown and left with noting else to show.

It's time for me to go, I know I'm young,
 but wonder if my soul is worthy,
And if so, I'm in the clouds, cause the good die (early)

Evil people live forever,
That's how I know that the world is hell.
And all the good people die and go to heaven,
But some believe it's all a tall tale.

Decisions

By Marc Graham © 1995

I can feel the pain, but my question is this,
If it was me in that box, would my presence be missed?
I give his mama a kiss, and wish the family the best,
Toss a rose in the hole, as his soul is put to rest.

Count the days going by, realize that time here is limited,
Just because you start, doesn't mean you will finish it.
So what have I got, I'm at the fork in the road,
Should I break the code, or stick to what I've been told.

I watch the pieces unfold, fall into separate situations,
The code of operations, for these different occasions.
I feel the persuasion, but remember the lessons,
The voices in my ears, saying count all the blessings.

I'm stressing, falling in a pressure funnel,
Torture tunnel, walk of death,
My cardiac is pushing right,
But my mental says left.
I'm losing breath, panting frantic with my hand on my chest,
Will I make the right decision, will I pass the test.

As the dirt begins to stack, I'm being pulled back,
Seeing all the handkerchiefs wiping, and the tilted hats.
I feel the pain, but my question is this,
If it was me in that box, would my presence be missed?

My Way Or The Highway

By Marc Graham © 1995

Days could be better
so what's new Einstein,
hard times aint hard to find
I never lose mine
why can't I control my destiny,
it's getting the best of me,
steadily testing me.

I need room to breathe
I can't believe what's going on,
picking up the phone
and can't get past the dial tone,
flashbacks,
of the last sidetrack,
trying to get my hope back,
trying to come exact.

see,

I don't need a job
with a sing in the window,

"Hiring Now,"
or to be pushing a pencil
no more,
oh no,
that's not for me,
past experiences tell me that I
need to be
on top of my path
and not working for anyone,
but this resort only
leaves me stunned.

I take a look in the mirror
for a more clear view,
stare deep into my eyes
and try to see into
my mind,
and find myself
and not the job application
description for a position,
Who else is gonna let me
break through the glass ceiling,
corporate looks like mine are not appealing.

I'm just another brother whose been
pushed into the intersection
sent off in the wrong direction
looking for correction
hoping not to get hit,
although I've been led astray,
stand up for myself
and end up on the highway.

Blues

By Marc Graham © 1995

Why do I do my best and still finish last
Try for class ave. and don't even pass
Pull all-nighters night after night
And not a problem I do is ever done right

Maybe I'm a loser, not meant to succeed
My type finishes last in a world of greed
The valley's what I know and have always known
Company I have is no other than my own

Misery follows me like a younger brother
Bad luck clings to me like a lover
I'm certain I'll never reach the top
If the bottom fell, I'd be the first to drop

What's it like on the other side
How does it feel to have pride
Being able to ride the tide
Without having thoughts of suicide

Effort, I find, is a waste of time
No room for my kind on cloud number nine
Betrayed, no, I've never been considered
Though used like litter in a world that's bitter

Wiped from shoe soles like a passing fad
Gan is the only grene I've ever had
Won't show up if no one invites me
It's likely that they'll all want to fight me

Don't show pity, especially since
The pity you'd show wouldn't make a difference
Because even if I could trade places with you
I'd only ruin your life too.

Wassup Wit' Calvin?

By Marc Graham © 1995

Calvin been at McDonalds way too long

I can't remember The "C" before Mickey "D"'s

Week one through year two, he

 pushed a broom and mopped the bathroom

 By month twenty-eight,

 with no days late,

 Surprised,

 he was finally workin' fries

 Movin' on up

 Stank Street to Potato Lane

The load was eased, but

 the pay was still the same

 He held that down for about three more semesters,

then went to burgers,

 and finally the cash register...

Saved up his ends and bought himself some clothes,

 but he never got to sport `em,

 he worked open to close.

I thought they was gon' give `em a scholarship

to college,

`cause he had more upstairs than

just street knowledge

After all, he did get that job.

Even put down his b-ball and

left his friends at the mall.

All they could do is talk about Calvin

and the times they'd spend

in the days of back when...

But he was through chillin' wit' the crew

The workin' man had more important things to do.

Plus, his mind was set on manager.

The man he could see, but never be.

Now he's workin' and takin' night classes.

Mr. Calvin...

I hope he passes.

Stand Still

By Marc Graham © 1995

Why can't I sell a Ki?

These sorry suckas I grew up with livin' betta than me.

They spend an hour on the corner, while I work all day.

I try to sleep at night and they got time to play.

But can I blame them, at least they make big money,

while I bust forty a five and dress real bummy.

I spent twelve years in school and then I went to college

when I could've done better off of street knowledge.

Back in the days perfect attendance got me recognition,

but the brothas who was cuttin' got a three day suspension.

Some time to chill, and really feel reality,

while I'm workin' lookin' forward to a salary.

Bustin' my but like a bubble for some troublesome times.

Ten dimes to a dollar and aint none of them mine.

I'm stuck between a lie and the truth;

back in my youth I thought hard work payed off, but livin's the proof.

Tough times I fight, try to live right, but now I feel

like my life is headed no where and I'm stuck at a stand still.

Life is real, nobody lives a rough draft,

and it's a shame that I'm caught up on a war path.

Wake up to a blood bath, people are crazy and act shady.
Got babies havin' babies, brothas disrespectin' ladies.
People buyin' up my neighborhood, you know they up to no good;
houses wit' the windows made of ply wood.
If I could then I would change my situation,
but as for now, what's the meanin' of a paid vacation,
because I work from nine to five for the lowest pay
and the boss jumps on my back about a sick day.
I'm lookin' at the corner, each day it starts to look much better,
but I don't want to end up with bloody holes in my sweater.
I find a letter in my box, well I'm laid-off.
One month later, now my lights and my phone are off.
I try to sell weed, but it aint for me.
I'm stuck livnin' in poverty.
My life is without happiness,
so what good is this liberty.
That constitution aint real,
I abide by the laws and remain stuck at a stand still.

I'd like to chill but a brotha don't have time to.
Job Weekly and the classifieds, I gotta thumb through.
Livin' in a stage of minimum wage,
puts me in a rage, but I'm stuck in a cage
like an animal.

Freedom of speech will lose you job for you.
Keep your mouth shut and the boss may ignore you.
Which is better than when you get noticed,
`cause they don't promote brothas,
they just put you on the hit list.
Watchin' all over you like a hawk,
bosses stalk, talk the talk,
but you the one that takes the walk
to the welfare line, for the umpteenth time.
Tryin'a find some sympathy in a bottle of wine.
Hard times is too much of an understatement,
more like your head gettin' busted on the pavement.
Livin' in a land of total justice and equality,
I got hourly wages, boss is bustin' out a salary,
drivin' an Infinity, just a technicality
of bein' at the top and pissin' down on me.
I need a rest, cain't make no progress.
Aint budged an inch, and I'm doin' my best.
Sometimes I think it would be better just to steal,
`cause I could work forever and remain stuck at a stand still.

A Brutha Neva Had Much

By Marc Graham © 1995

Growin' up,
a brutha neva had much.
Nobody else for that matta,
so I really didn't even have a crutch.
Call it a pimp scroll if you wanna,
but a brotha cain't afford to drop a
quarter on the corna.
Straight hopin' that the
king of good fortune would be nice
shakin' up tryin'a roll
seven dots on the dice.
I had to sacrifice,
spendin' long nights without a meal,
waitin' till the morning time
for some grub to steal.
Sometimes I wish that I was
still back in high school,
`cause a meal ticket lunch right now
would be cool.

I live reality, smearin' all fantasies.

Peace to that.

You may not survive without a gat,
so I'm strapped

like a shell shocked

Vietnam veteran Marine,

I come clean,

but I'll empty out a magazine.

Don't make me shoot,

because I'd hate to prove a point

with my piece.

Cancellin' contracts,

leavin' bodies deceased.

And it's a shame what I have to give up

to live untouched,

but it don't matta

growin' up I neva had much.

When I was young,

I used to say What up! to the police.

Thinkin' they was here to

preserve the peace.

But growin' older they got colder
and I came to see,
That them laws aint neva
did nothin' for me.
Wavin' they badge and
pointin' they gun to kill a brotha,
settin' up Black fathas
and harrassin' single mothas.
The justice of the peace
is "just us" tryin'a get a "piece"
of the pie as we watch each other die.
Now I try
to relax my mind,
think of the good old day,
the Slave days, Civil Rights days,
Political Crime Wave of today.
We aint neva
had no good times,
half the brothas in my hood
aint got change for a dime.
Ten brown Abrahams,
thank you very much Uncle Sam
for this jam you put us in
to show you don't give a damn

about my people.

Equal? No equality

you gotta be kiddin' me

take a look at my city.

A place that AT&T

don't even reach out and touch.

A brutha neva had much.

Back in the days I neva knew

that my family was in poverty,

Or anyone around me,

I just thought that it was meant to be

like that,

had nothin' to do with bein' Black,

matta fact I thought the whole damn

world was Black.

Until I stepped my first steps

of elementary school

Where the students was Black,

but a white lady gave the rules

in the classroom. Young and ignorant

I trusted her,

but I bet I'm in the state I'm in now

just because of her.

Showin' up to school dressed in
rags that sag,
and she had the nerve to teach me
how to pledge the flag.
How out of place can you get,
she should've taught me my history
and came exact,
that way there wouldn't've been
no mystery.
But in my elementary school,
I aint see such.
Growin' up,
A brutha neva had much.

Mommy please,
can we have ice cream for desert.
When she cain't afford to feed us
now its gotta hurt.
Sayin' maybe next time
when next time may not get here
and Santa Clause aint even
bring a tree this year.

We live on welfare.
Runnin' around spendin' them food stamps.
Not knowin' it's a badge,
to degrade and cramp
my mother's pride,
she keeps it on the inside though,
because it does us no good
for her to let the pain show
and let us know that our life
aint as good as we think it is.
So she decides to hide it
and just let us be kids.
Workin' to pay her dues,
savin' up money to get us new shoes.
Hopin' we'll be happy
while she's singin' the blues.
Now that's love.
We aint have much, but we had that.
And in return for that
I'm gonna pay my mother back
By not buckin' when the time comes down
to the clutch and so what if growin' up
I neva had much.

I Cain't Wait Until The Sun Goes Down

By Marc Graham © 1995

Work day after work day

with inaccurate pay.

What do you know bro?

And what do you say?

If you complain then you won't remain

face the facts.

Companies replace Blacks

like a new coat of wax.

To get the gleamy, glossy finish

better show those teeth.

Before your hand gets filled

with a slip that says released.

Now how do you spell relief?

R-O-L-A-I-D-S,

or with a fully loaded piece?

Neither way seems to be enough

to turn your life around,

but the minimum comes when

the sun goes down.

Each day nine to five
for four twenty-five.
Tears in my eyes,
Yes a grown man cries
from these lies. Call it a rumor
there's been talk of a raise,
but I aint the one to get it
I'm looked at as a slave.
Work myself to the grave
and I die with nothin'.
Some say there is no racism,
now that's tellin' me somethin'
As if I didn't know already
that my steady income
is missin' benefits
everything and then some.
You may think that I'm dumb
because I hang around.
No place to go.
I can't wait
until the sun goes down.

Life Is Hard

By Marc Graham © 1995

I grew up a boy, his bigger brother and his mother in the city.
Like many other families so nobody pittied
the hard times, times without food without new clothes.
Moms helped us grow while she carried three loads.
Place to place, apartment to apartment.
Time spent at work Tryin'a earn the rent.
They say a penny saved is a penny earned.
But who can save pennies while the world still turns
and never will stop for your sorrows.
Pause for a breath and the load quickly doubles.
You know and I know that everybody knows how it goes.
People got it bad in the ghetto. No role models, shatter proof
windows on the first flo' Trash cans tipped over
every place you go. So what's there to look forward to
when you never know who's gonna try and hurt, or who
will be there to help you. When you need
someone to lean on. `Cause someone that you depended on
could one day be gone. And that could be the day
you needed most. Grow up real close,
but friends end up ghosts. That's the way it is, straight truth
there's no lie. Life is hard everyday and then you die.

The Madd House

By Marc Graham © 1995

Broken bottles on the ground
Cars sittin' on bricks
Fiends walkin' the streets
Bodies built like sticks
Dreams of bein' successful
But that's just wishin'
Little girls on the corner
Tryin'a be magicians
Why is the E.C. life-style
So crazy
The Madd House of Ohio
But it's home to me
A lot of brothas I grew up with
Either dead or in jail
Some may go to college
The rest decide to sell
They need the big bucks now
The fast life can't wait
Spend four years in college
and get killed the day they graduate

Participate in all
Types of gang violence
The wrong is what gets heard
And the right stays silent
Brothas out on the corner
In the middle of the winter
Nothin' better to do
Because they closed the youth center
Dude tried to live right
He went and got himself a job
But the job was a dead end
And every week he got robbed
Mammas with ten babies
And aint one got a father
`Cause the daddy wants a Caddie
And not to be bothered
Got straight A students
Scared to go to school
You get stomped for tryin'a learn
`Cause bein' smart aint cool
So stayin' fools is what some do
To take the easy way out.
Not knowin' it's a wrong move
Or what it be about

Shout And do it loud
Relieve the pressure
Yeah right That don't work
Because it always seems to catch ya
Right from the blind side
So there's no need for lookin'
Be aware as a gladiator
And still get tooken
Just as fast as a sucka
Who's as scared as a mouse
`Cause everyone's in danger
In the Madd House.

Others who aint brothas
Buyin' up the stores
Another way to keep us locked
Behind closed doors
Don't judge books by their covers
Or people by their colors
Stuff like that aint easy
`Cause we aint equal to each other
Aint even close
Just tryin'a get by
Livin' each day to the fullest
Hopin' I don't die

By gettin' killed
Automatic weapons keep sprayin'
Brothas in blood puddles
Couldn't make it through the day and
Who will be the one
That's gonna tell the family
Not an easy job to do
But it's gotta be me
The mamma cries in hysteria
The daddy just stares
Thinkin' deep about how life
Aint fare
Gangs Takin' over
Every block in the city
And the cops are crooked too
What a pity
Wakin' up each morning
To the sounds of sirens
Nines and MAC-10's
All types of violence
Screams of he's dead
And she aint gonna make it
Tell me what can I do
I cain't take it

But I have to
Or end up a zero
Dead on arrival
Tryin'a be a hero
Life can be short
Or life can be long
But it's guaranteed short
If you live it wrong
And if you live it right
I cain't tell
Hopefully the streets'll
Treat you just as well
I don't know
I keep my head up
And watch my back
`Cause now I'm `bout fed up
With this city
I wish that I could take the bad out
Of the E.C. My home
The Madd House

My Backyard Is A Parking Lot

By Marc Graham © 1995

My backyard is a parking lot, front porch is some steps,
leading up to some more steps and then some more steps,
to the front door of my apartment,
where little time is spent because I gotta pay the rent,
that's high for a guy, that don't got much,
or better yet nothin, I wish I had the Midas Touch,
but aint that a joke, I know I'm gonna stay broke,
take my tail to work, and all the boss do is poke,
pockets carry lint, not mint, and my wallet,
needs ID to prove I'm me, so I got it,
used to ride the bus but now I have an automobile,
which means I have to worry about the people that steal
I don't got a lot, but they'll take what I don't got,
fiends in my spot'll rob you then buy some pot,
times are hard and the heat is just too hot,
move can not, my backyard is a parking lot.

Heat don't work and the windows don't close,
gap in the door, how did I get this runny nose,
clothes are ripped, but I'm not stripped of my pride,
it may get bad, but my heart is still inside,

tickin' like a time bomb about to go pow,
`cause things caint get much worse than they are now,
life's a dead end, that's what all my friends say,
working on the block at the corner, selling rocks every day,
they make big cash and they know it won't last,
but I hope they get caught by the task and not the blast,
`cause the blast don't ask no questions,
they just start bustin', and skip the discussion,
always in a rush and why is it like that,
brothas killin' otha brothas, tell me why we gotta pack,
if you're gonna use a gun then use it with some sense,
and not to go and get, but in straight self-defense,
I'm sittin' in my room on my roll-away cot,
lookin' at my excuse for a backyard,
it aint nothin' but a parking lot.

There goes Mr. Jones as he pulls away,
from the backyard, the parking lot, will he return today,
or will he be just like Ms. Swinn,
who left one morning and never came back again.
I don't know, but it's time for me to creep,
put my key in my ride and let the wheels hit the street,
it seems kind of odd when you're up in the morning,
`cause the city seems boring when the rain aint pouring,

but I don't mind boring, `cause it only gets worse,
once shooters wake up, they sleep in a hearse,
brothas wave good-bye, cry, ask why did he die,
then dry their eyes because they know they won't try,
to stop the killing because they don't think they can,
and if they don't, they won't feel like a man,
I can't understand what's the whole scenario,
on why brothas kill each other just for show,
and it's not far from where I live where they get popped,
it's right in the backyard, my backyard, the parking lot.

Undertaker

By Marc Graham © 1995

Should I lay `em all in a line, side by side, in order of homicide,
six feet down below lies John Doe Negro take it easy take it slow,
rest in peace, as the rev. begins to preach and teach
about the increase in Black boys that are deceased
leaving teenaged mommies to raise babies on their own,
say good-bye to Daddy Dearest now he's gone,
I watch the coffin disappear in the dirt as it piles up,
kinfolk cry it's gotta hurt, look for miles in the cemetery,
ask me what I bury and the scary truth is it is our youth,
what should I do, I could try and comfort you, offer my condolences
to babies underground serving after life sentences,
mention it's a pity in the city, how our kids get slain,
and pointing fingers to give blame don't relieve the pain,
it just remains in the veins flowing through like the blood,
that was splattered on the wall when the boy took the slugs,
but teenagers are not thugs, they are confused
and I'm sick of seeing teenaged Black boys on the news
and not for school, but only for the reason that I see `em here,
rows and rows of those bro's who just lived their last year,
homies come and pour their beer, but all that leaves is empty bottles,
people going on and on about the need for role models,

every time I think all it does is make me mad,
burying Black leaders that this generation could've had,
sad is the ending, 'cause it ends in defeat
and statistics show one less brotha on the streets,
now the heat is on, we're getting beat and they love it,
but I bet I'll lose my sanity, if I keep thinking of it,
try to shove it to the back of my mind, find a way to get my thoughts free
of visions of dead brothas, that look like me,
when everyday I hear the preacher say the words that he must,
as I load on top the dirt "ashes to ashes, dust to dust"
I think my heart may bust if it starts beating any stronger
young men underground I can not take this any longer
I prolong the pain by taking pills, but it feels
like my nights are filled with Ny-Quill and my rest isn't real
and won't be until the day that I RIP
and someone else in my profession has to deal with me,
but I guess that is the load you have to take when you make the
decision in your life, that you wanna be an undertaker

It's Up To Us

By Marc Graham © 1995

So many people and not enough time, I wish that I could reach them all, we gotta find
A way to get us all together, a common cause, a solution that will make that'll make things
better lay down some laws

For the future generations of our families,-not much more than a century, out of slavery.

-We, have achieved so much, but musn't lose the golden touch.

It's time to design, and build minority corporations, and start off with some jobs to solve
the problems that we're facin

Put money in the schools and get kids back in them, get mothers off of welfare and fathers
out of prison.

The system, has not changed, it's the same game, why do we continue to lose, do we
choose to

It's time we stand and say we had enough, -and start taking care of us.

What's the solution, here's my conclusion, Urban City Industrial Revolution.

Look at these charities and all these Black dollars that we spend, but none of this is coming
back in.

I'm askin, do you wanna help yourself, and wondering, are we gonna take the steps.

What's left, for us to do is get all of our money together, and put it in directions for the
better.

The future is in our hands, can't you see that we can do it all, together we can rise and
stand tall.

It's Up To Us

Imagine, if mama worked up the block and daddy did too, would the kids be skippin school, and breakin rules.

Knowing that they're saving up for college, I think that they'd be giving all they got and looking forward to some dollars.

"Knowledge is power, and excellence begins with you" I learned this back in middle school, but now I finally see it's true.

I wish, that we would all give a little bit, together that would be a lot and we could make a difference.

For instance, take a million Black men, let the each put a dollar in and now the ball is rollin
Invest in the mind of a young Black scholar, with product designs that could double up those dollars

Complete this same pattern with a million more men and women, now the ball is growing as it's rolling gaining momentum.

and once it gets a certain size, moving fast, -it's gonna smash what's ever in its path.

It's Up To Us

Those that have may not see the need, but I'm asking that you look with the eyes of the streets

And give so we all can live, like kings and queens, not talking gold chains and diamond rings, but necessary things.

-We, can not all be the richest, but success should be an option for ambition.

The mission's not impossible, it's obvious and up to us, design, combine and start corporations, or we perish.

Embarrassed, we've been in the past, because we've been turned down, looking forward to the day that we could turn it all around,

But it's never gonna happen if we sit and wait, don't waste time, do not hesitate, stand up and participate.

It's your community, your future and your people, we've been stuck in back at second class, but always have been equal.

I pray to God and ask, cause in God I trust, and the answer still remains the same...

It's up to us

The Hood

By Marc Graham © 1995

As I walk the streets I see people getting robbed,
fiends steadily talkin bout they last job,
abandoned buildings and ghetto scarred children,
morality is dropping by the millions,
don't call it a neighborhood, "the hood", no one's a neighbor,
dope men only down for hooking up their blazers,
gotta get the system pumpin, or you aint nothin,
the kill for a bill, so heads keep bustin,
old folks sayin they'll reclaim the streets,
they can kill that dream cause talk is cheap and weak,
this is a battle that they'll never win,
no matter where they start, this'll never end,
why pretend, sometimes you gotta roll with the blow,
cause niggaz'll kill you quick in the ghetto,
so, watch your back and pack what is needed,
stand strong like the Mental Block and you wont be defeated,
by the streets, brothas duckin from a drive-by,
just a check of the reflex, cause yo, I don't wanna die,
big time slangers got to claim their territory,
it's my spot now and I don't care who was here before me,
livin like a time bomb about to explode,

in the hood, nothing is good, it's where the trash unloads,
so grin and bare it, cause you could be starin death in the face,
by being found at the wrong time in the wrong place,
cause it's always too late to run, when starin down the barrel of a gun
and being held up aint nothin fun,
just ask a victim, somebody picked him, he was hit,
and couldn't call a time-out, he couldn't quit,
this aint a game, this is niggas up to no good,
and where else would it happen but the hood?

Abandoned Building

By Marc Graham © 1995

There went the blast,
I saw the structure tumble down,
And roamed around,
My old apartment on the ground,
Kicked through the bricks,
To see what's left in the debris,
The smoke doesn't clear quickly,
I can't see,
Only fiends,
Bodies been drug through the mud,
The water's getting thicker,
Will I drown in the blood,
Windows out of which,
Broken lines used to hang,
Witness the signs of time,
As we wonder why they change,
I'm fighting nightmares,
Stares of the Grim Reaper,
Satan's got a beeper,
Getting pages- it's Major,
Demonic ritual,

Where bricks used to stand,
And the children,
Like the building- Abandoned

Fundamental Elements

Major fundamental elements that can be used to implement the solution come mainly in the forms of programs. Another dominant way is in schooling. I have designed a program guided towards developing the design skills of youngsters by providing them with an area in which to create along side those with experience in design (see Urban City Development: Program #1- "Student Studio and Design Park" **Appendix C**). To follow this program, I have put together an executive summary for an Urban Design Corps, focused on starting companies guided towards providing careers and resources for minorities and underprivileged people (see " Executive Summary for the Urban Design Corps" **Appendix D**).

Through theses and other such programs, a generation of designers capable of creating enormous amounts of new products can be developed, paving the way for a new structure for society. Where ever there are people, there are needs. If one is capable of creating products focused on fulfilling societies needs, he/she will be self-sufficient. The designing of designers is the next step which should be taken by humanity. In doing so, all will benefit.

Conclusion

Every problem has a solution; a number of problems have many solutions. A fundamental skill of a good designer, is knowing which solution is most appropriate for his/her situation. It is important that design be taught at an early age, especially to those faced with real world problems and do not have worldly resources to solve them. Being a

good designer consists of having tremendous problem solving skills and an abundance of creativity. The earlier these skills are introduced, the longer they can be developed. I was taught how to design while still very young. As a result, I was able to design my way out of many situations in which I did not have the tools generally seen as necessary to be successful. If I had not begun to design when I did, I may not have achieved so much as a youth.

It is not difficult to teach someone how to use their resources to achieve their goals. However, it is nearly impossible to guide someone to success on a route which requires resources not available to them. Everyone has the needed tools to design. For some these design tools are their most abundant resources, but many are not taught to use these resources for their highest potential. Design is important for all of us, but for some it is a necessity. We all can not solve every problem the same way, but if we know how to use our resources we all can each solve every problem.

Appendix A

“Second Summer Program” projects

BIOZONE:

A World of Fun in a Body of Education

The BIOZONE sparks children's curiosity and interest by engaging them in the many wonders of the human body. By exploring the rooms which feature parts of the human anatomy, children can personally experience body functions such as brain activity, respiration, and heart pulsation.

Playgrounds generally fail to contribute to the intellectual advancement of children. They only instill motor skills and coordination development. The BIOZONE provides the same physical activities as the playground; however, it also promotes scientific awareness.

The BIOZONE is a playground comprised of human body parts. In each room a different body part is featured.

I. Head

1. Climb up the hair (cargo net) to get to the forehead
2. Go up the ramp into the ear room
 - * blood vessels(blue & red pole) lead to ear room
 - * DNA (staircase) leads to ear room
 - * Down the stairs to brainwaves (slide) that lead to eye room

II. Ear Room

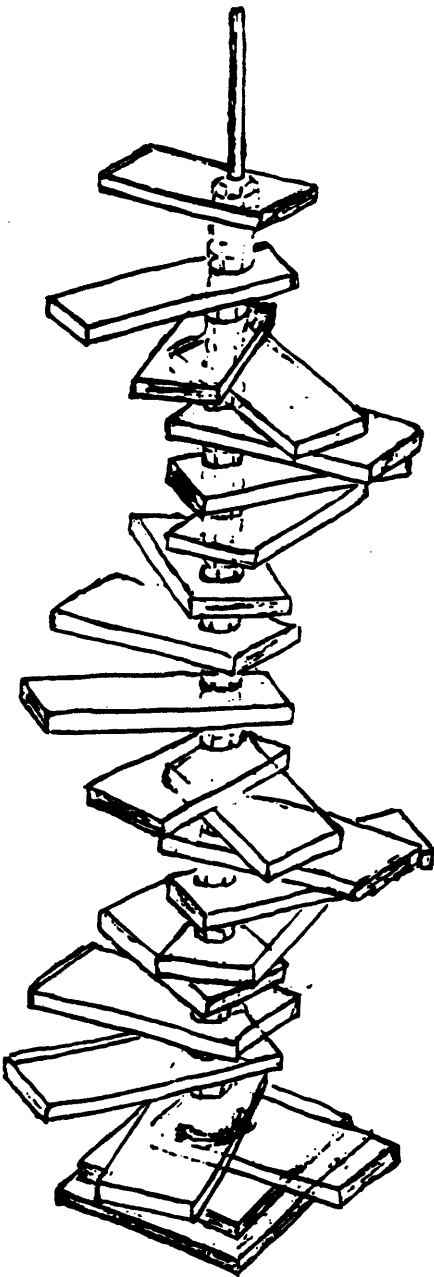
- * cross over the Earie Canal on the bridge
- * little drums and big drum for kids to bang on
- * hallway leading to eye room

III. Eye Room

- * eyes (semi-hemispheres) that can be walked into
- * a magnifying lens that shows how the eye works by inverting objects
- * mirrors that make children look shorter, fatter, deformed etc...
- * three tubes that lead to the tongue

IV. Tongue Room

- * tonsils (punching bags) punch them to get to tongue
- * tongue (floor) when stepped on tells you if you are bitter or sweet
- * teeth are keyboard notes that play music



DNA staircase

- * tongue depressor (slide) to leave mouth

V. Heart

- * includes a large trampoline
- * as children jump, the heart beats with sound corresponding to the time of their jumps
- * tunnel below the heart allows children to walk under the trampoline and see the heart beating from the inside

VI. Lungs

- * room filled with air balloons
- * allows children to jump and tumble safely
- * large fan in ceiling of room alternately blows air in and sucks air out, adding to the real-life atmosphere of room

VII. Stomach

- * there will be a concession stand for families to obtain food
- * the stomach will growl when an order is ready
- * there will be picnic tables so that families can eat their food

VIII. Intestines

A. Small Intestine

- * a tube that will lead to gift shop and then the exit

B. Large Intestine

- * large tube that will lead to restrooms and then connect with small intestine at gift shop

The BIOZONE has several advantages which include the following:

1. Stimulation to the Senses - Children have the opportunity to physically interact with different parts of the body designated by various colors and true-to-life-shapes.
2. Family Orientated - BIOZONE makes the human body a subject for conversation between parents and children. As parents and children go through the maze together, learning about the human body becomes a family affair.
3. Marketable - BIOZONE is an educational playground that can exist in a museum and therefore be funded by the government. This would allow BIOZONE to be financially accessible.
4. Handicapped Accessible

BIOZONE will provide children of all ages with the majestic world of Biology. Not only will children learn about the human body, but also they shall see it with their own hungry eyes.

For inquiries of a Business or Technical nature, contact:

Jennifer Elizondo, Julia Ruiz, Ericka Shelton, Michael Kenneth Dowe, II, Ayanna Muhammad
JJEMA Design Inc.
320 Memorial Dr.
Cambridge, MA 02139

(617)225-1347 e-mail address: jelizond@mit.edu

STAIR-A-WAY

SLIDE-A-WAY TO FUN

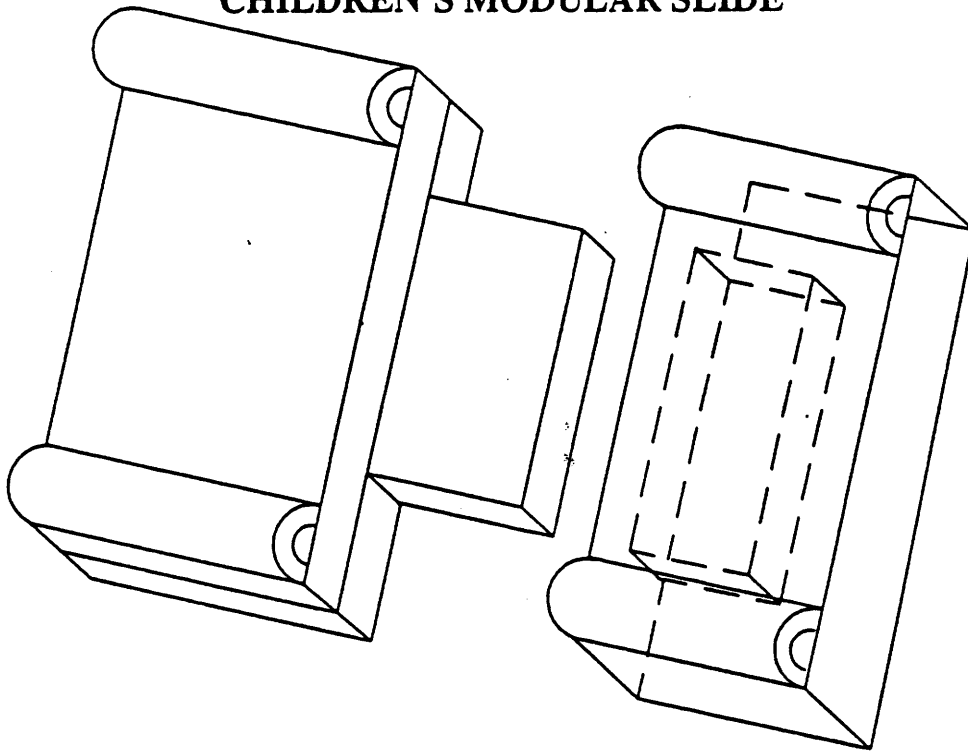
BROUGHT TO YOU BY

HOME PARK

BRINGING THE OUTSIDE IN

STAIR-A-WAY

CHILDREN'S MODULAR SLIDE



STAIR-A-WAY converts any home staircase into a safe, indoor slide for children. STAIR-A-WAY is customized to adjust to any angle staircase due to its spring loaded base. The modular pieces to this affordable slide allows consumers to change the length.

STAIR-A-WAY'S desirable properties include:

- rubber base (to provide friction)
- high side rails
- light weight materials
- flat bottom
- compression spring and hinge for counter torque
- trapezoidal base support
- narrow width allows easy access to top and bottom of staircase

STAIR-A-WAY is designed to overcome varying properties of household staircases such as:

- staircase angles
- different surfaces
- safety Torsion

Advantages of STAIR-A-WAY compared to other children's slides:

- usable during any type of weather
- saves space with the modules
- long lasting
- rugged
- available at any time of day
- adjusts to varying age groups
- side rails prevent falling over edge
- storage
- avoids absorbance of solar heat

The spring loaded base is carefully designed with an extension spring and hinge which is attached to the bottom module of the slide. This minimizes movement and allows the slide to adjust to different angle staircases. The spring is safely hidden inside the base to keep it out of the reach of children.

For questions or comments please contact:

Ms. Annabel Flores
410 Memorial Drive
Cambridge, MA 02139
e-mail: annabel@mit.edu

Ms. Lizabeth A. Montalvo
410 Memorial Drive
Cambridge, MA 02139
e-mail: lizabeth@mit.edu

Mr. Adrian Gomez Velazquez
474 Memorial Drive
Cambridge, MA 02139
e-mail: agomez@mit.edu

Mr. Dennis Rivera
32 Hereford Street
Boston, MA 02115
e-mail: drivera@mit.edu

Ms. Laura A. Montalvo
410 Memorial Drive
Cambridge, MA 02139
e-mail: montalvo@mit.edu

Mr. Denzil Vaughn
450 Memorial Drive
Cambridge, MA 02139
e-mail: plus@mit.edu

SOLO-SAW

Loads of Fun for One

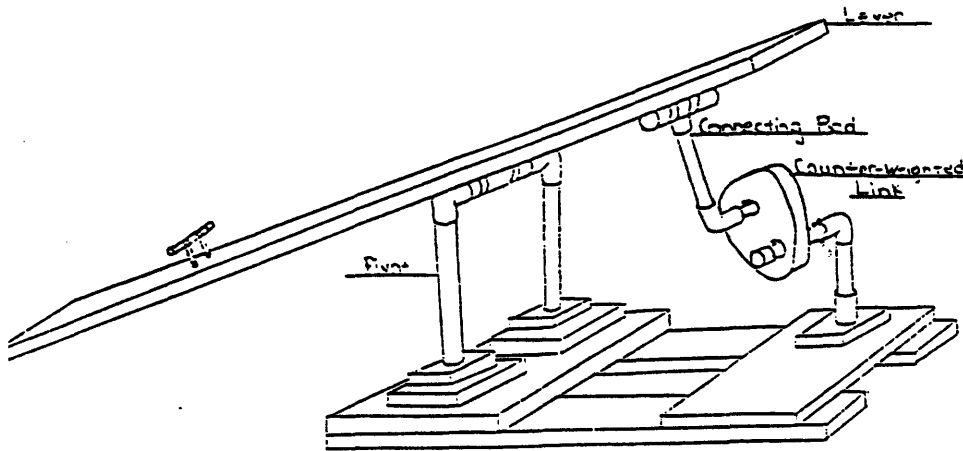


Fig 1

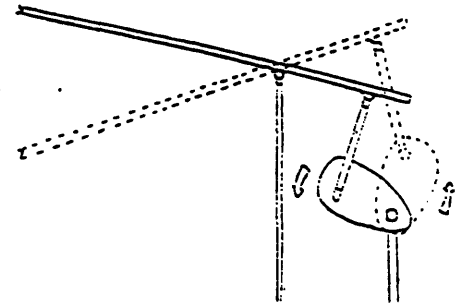


Fig 2

Copyright 1914

The Solo-Saw creates hours of enjoyment by providing one child with the excitement of a safe see-saw ride. This piece of playground equipment permits the unique feeling of weightlessness. Not only does the child experience a thrilling ride, but onlookers can also see the real mechanical workings of this simple machine. With a gentle push off the ground, the child is propelled into the air, and swiftly brought down to the ground to feel the repeated delight of the Solo-Saw.

The Solo-Saw is made up of three mechanisms that act as a whole: the pivot, the counter-weighted link, and the lever. They complement each other as they all work to offer the child a safe, fun-filled ride.

- The Solo-Saw board turns about the pivot causing an up and down motion.
- The counter-weighted link works concurrently with the pivot. When the user is headed in the upward direction the connecting rod is pulled down by the counter-weighted link and pushed down by the force of the user. These forces combined cause the continuous, cyclical rotation of the counter-weighted link. The connecting rod translates the rotational motion into an up and down motion.
- The Solo-Saw board acts as a lever between the user and the connecting rod.

The materials used in constructing the Solo-Saw and their specific applications to

the design are as follows:

- Wood: high density (and thus high strength), shock absorbent, rigid, hard, inexpensive, and accessible
- Steel: inexpensive, strong, and resistant to corrosion
- Polyvinyl Chloride (PVC): high resistance to impact (strength), high stiffness, and easy workability

The Solo-Saw is safe, affordable, and enjoyable. The maximum height that may be obtained during play is only 5 feet, a safe distance. The materials are sturdy, impact resistant, and inexpensive. It offers enjoyment to children from three to ten years of age.

The Solo-Saw offers active participation on a playground ride normally reserved for two. This alternative allows a child to have the same enjoyment and opportunities for fun as multi-user playground equipment.

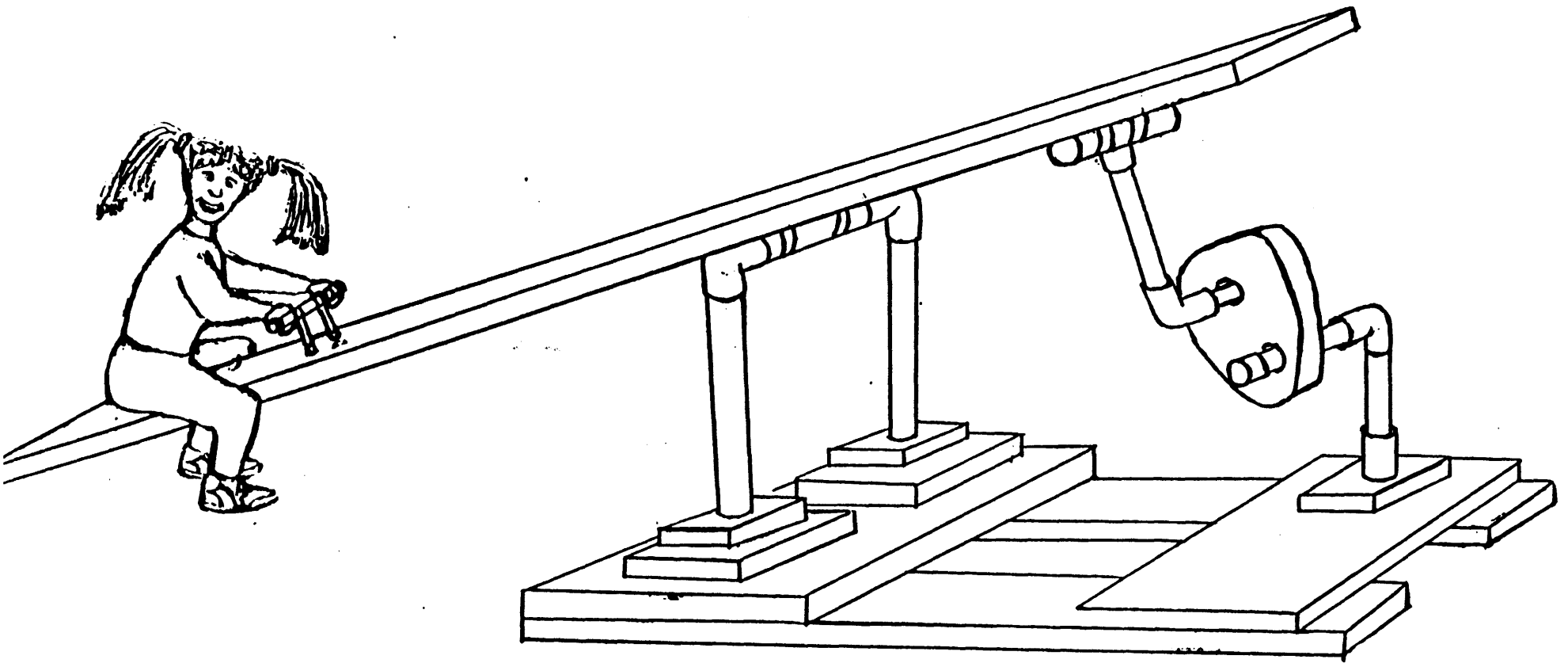
As opposed to other single-rider equipment, which do not allow for a large range of motion, the Solo-Saw provides a swift, swooping movement for the child's entertainment. This reinvented see-saw has the capability to safely amuse one child unlike the traditional see-saw.

The Solo-Saw gives a promising solution to the independent child. Multiple Solo-Saws can be set up side by side to offer an interactive experience where each child can go at their own pace.

For more information concerning the technical or commercial nature of this product, Please send your inquiries in writing to:

Ninety-Nine Designs, inc.
472 Memorial Drive
Cambridge, MA 02139
email: polo@mit.edu

THE SOLO-SAW



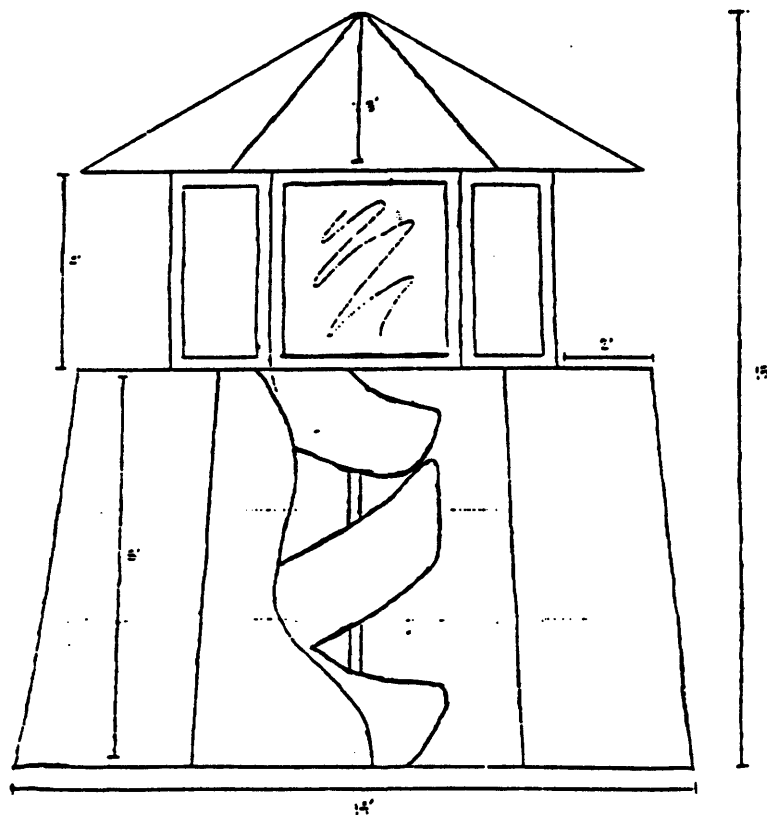
FOR THOSE WHO DARE TO GO SOLO

A safe, enjoyable ride for a single child.

By Ninety-Nine Designs, Inc.

The Optical Lighthouse

Playground equipment with an extraordinary goal



CUTAWAY VIEW

The Optical Lighthouse is playground equipment with an extraordinary goal: to develop elementary-aged children's intuition about light through hands-on exploration and observation. It is a fun learning tool to be featured at school and park playgrounds across the country. The Optical Lighthouse requires no more supervision than any other playground equipment. It teaches by encouraging children to experiment and observe.

Providing safe exercise of both mind and body, the Optical Lighthouse is a fifteen-foot high, lighthouse-shaped, jungle gym inviting kids to climb up its sides. From the observation deck, they can plunge down an eight-foot slide through the lighthouse's middle. But on the observation deck, kids learn about mirrors, lenses, and light through different activity stations and experiments.

Stations include:

Mirror Beacons

learn about reflection
aim light at targets
send messages to friends

Telescope

see far and wide

Colored windows

watch how color affects light

Diffraction Gratings

learn how rainbows are formed
learn how light is bent

Future options include:

Mosquito eyescope

get an insect-like view of the world

Camera Obscura

project a "Silent movie", inside the lighthouse, of the outside world

Foghorn

adds realistic lighthouse sounds

Safety features:

All plastic optics

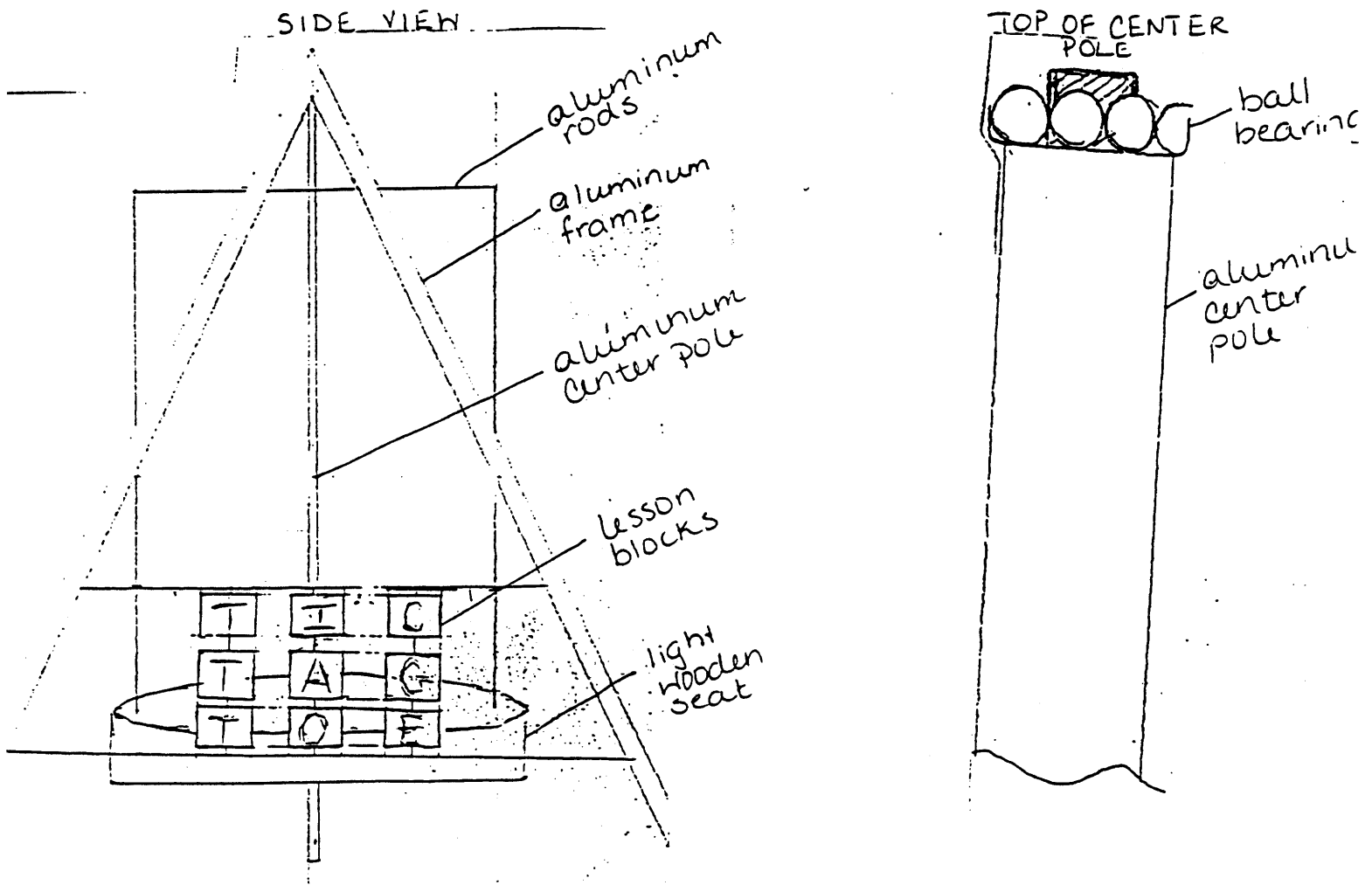
Sunlight may not be directly viewed or focused

Guardrail on observation deck

Foam and sand base

Most types of "edutainment" products actually turn out to be neither fun, nor very educational. Most of those educational, fun products which do currently exist share the same limited scope: mechanics. Other areas of science and physics are left largely unexplored. Two areas that elementary-aged children could use much more exposure to are the realms of light and optics. Like mechanics, much about light and optics is not naturally intuitive to a child. And just as in mechanics, correct intuition on many topics can be developed through experimenting and observing real-world examples. The Optical Lighthouse is one of those examples. It piques a child's curiosity, so that he can teach himself, and maybe even become interested enough to want to further explore the world of light and optics.

MERRY GO SWING (MGS): THREE TYPES OF FUN FOR EVERYONE



The Merry Go Swing safely combines the functions of a Merry Go Round and a Tire Swing. Through innovative technology, this swing allows children of ages three and above to simply spin themselves around an aluminum pole that serves as the centerpiece of the frame. The actual spin is achieved when participants pull on a fixed ring that extends from the center pole.

This revolutionary design is ideal for playground equipment based on the

following reasons:

1. A pivoting system made of ball bearings makes spinning easier by reducing the amount of friction against the center pole, thus allowing children to swing as long as they desire. This pivot also adds safety as it rotates relative to the strength of the participants; the younger the child, the weaker the pull, the less speed in which the seat will turn.

2. A lightweight wooden seat is suspended by rods extending from the pivot that rests on the center pole. This seat, located at a safe height from the ground, allows children to easily climb on the Merry Go Swing.

3. The Merry Go Swing incorporates interchangeable lesson blocks into the sides of the outer frame. Customers may choose from a variety of puzzles such as the map of the U.S, the world, tic tac toe and many others according to the age range of participants.

This product has increased stability due to its sturdy frame, which can be made of either aluminum or wood. These materials are easily obtainable and therefore make manufacturing of the Merry Go Swing uncomplicated; hence it's simple design. This product therefore accomplishes what many other playground equipment fail to achieve. Other machinery has a tendency to combine a simple design with less security, whereas the Merry Go Swing effectively combines a simple design and heightened security.

In essence, the Merry Go Swing has many desirable qualities which include:

1. safety measures such as body support
2. affordable cost due to inexpensive building materials
3. attractive colors and designs for children
4. educational features sought by parents
5. easy production due to the swing's modified, but simple design
6. lesson blocks that suit all ages.

The Merry Go Swing sets itself apart from other pieces of playground equipment. It encourages imagination and exploration, makes operation simple for children, and promotes social interaction between peers and parents. Best of all, not only is it fun, but it's also educational!

For questions of a technical nature, contact Ms. Eno Essien, Ms. Liliana

Ojeda, and Mr. Eto Otitigbe and for questions of a business/commercial nature, contact Ms. Latoya Maynard and Ms. Maisha Kito Gray. Please send your inquiries to:

Ms. Eno Essien
(617) 225-7492
queeneno@mit.edu

Ms. Liliana Ojeda
(617) 225-7309
lilyk@mit.edu

Mr. Eto Otitigbe
(617) 225-9513
think@mit.edu

Ms. Latoya Maynard
(617) 225-7479
latoya@mit.edu

Ms. Maisha Kito Gray
(617) 225-7458
maishag@mit.edu

playground craze of the future is here! The Merry-Go-Swing is a new and improved design please both children and adults. The simplest materials along with the imagination of a child Merry-Go-Swing a well-designed and playing environment.

ember growing up with swings, jungle-horizonal bars? It was these simple that made us happy. The Merry-Go-Swing children happy by combining a toy that they with an added a new twist. The Merry-Go-Swing stimulates children's imaginations by its One day, the Merry-Go-Swing can be a spinning off into space. Another day it can be in a wild whirlpool. The possibilities of only when the children's imagination children can sit and spin on the Merry-Go-Swing and never get tired. With the Merry-Go-Swing, and security, a child's playing environment is fulfilled.

SAFETY:

We realize that children do not always play with equipment as the designers intended them to, so we have taken many precautions to assure the children's well-being. Unlike the conventional merry-go-round, children do not have to run along with the wheel and jump. Instead, the turn wheel on the Merry-Go-Swing allows a child to be seated before, during, and after the wheel moves. Also, the backing of the handles on the wheel prevent children from falling out. The sand under the Merry-Go-Swing is yet another safety feature that keeps children who do fall out from hurting themselves.

COST:

The design criteria of the Merry-Go-Swing enables it to be made of aluminum, wood, or plastic. These materials are, in fact, very inexpensive and easily accessible. The Merry-Go-Swing can be built of other materials such as plexiglass or steel. The final building materials may be chosen for either aesthetical or economical reasons.

The Merry-Go-Swing, with its affordability, its safety, and its enjoyment, will make children very happy. It will be the cause of hours of fun for children and hours of relief for parents. Again, you will not have to worry about a child hurting his leg because he ran after the merry-go-round. Merry-Go-Swing...the simple pleasure of life.

Computer Playground Unit™

Innovative Playground Equipment that Teaches about Basic Computer Components

This playground equipment is centered around the theme of computer education for children. An entire Electronic Playground is envisioned with a full line of computer accessories. The equipment line is composed of various computer accessories such as a CD-ROM drive, printer, modem, and more. The play set is a larger-than-life size replica of desktop computer equipment. Children can actually enter the equipment and explore the internal aspects of computer devices. The Computer Playground Unit™ (CPU) is just one component of the Electronic Playground. The CPU is replica of a desktop computer which features a simple tic-tac-toe game. Children can play this game through the use of a simple interface.

Educational Values of the CPU:

- Expose children to computer parts and functions: monitor, keyboard, CPU, computer cords and plugs (the slide), CD-ROM, printer.
- Help children to become generally familiar with computers and to be comfortable around them.
- Through the use of the tic-tac-toe game, the children will:
 1. Learn about the interaction between the monitor and keyboard
 2. Develop hand-eye coordination
 3. Improve their thinking skills
 4. Be able to play cooperatively
 5. Get an early start on using a computer

Entertainment Values of the CPU:

- Because the CPU is actually playground equipment, it has many of the advantages of the traditional playground. These advantages include the following conventional playground equipment:
 1. Slide
 2. Fireman's pole
 3. Sand
 4. Colorful Display
- Tic-Tac-Toe game is fun and allows the children to match wits.
- The children's imaginations can expand without limit:
 1. They can pretend they have been magically shrunken down
 2. They can imagine themselves as miniature aliens trying to get inside the computer and figuring out how Earth computers work.

Physical Aspects: Materials/Construction & Safety Considerations

The construction and material aspects of the CPU are fairly simple. The CPU will have support structures consisting of metal beams that hold up the platforms. Metal platforms fit into the beams at specified distances apart. Dimensionally, the CPU is eight feet high, excluding the three feet high protective railing on the top of the unit. The unit is eight feet long and five and a half feet wide, along with a slide that projects out 10 feet.

An important detail concerning the construction of the CPU involves safety for children. The following characteristics of the CPU exhibit the unit's safety features:

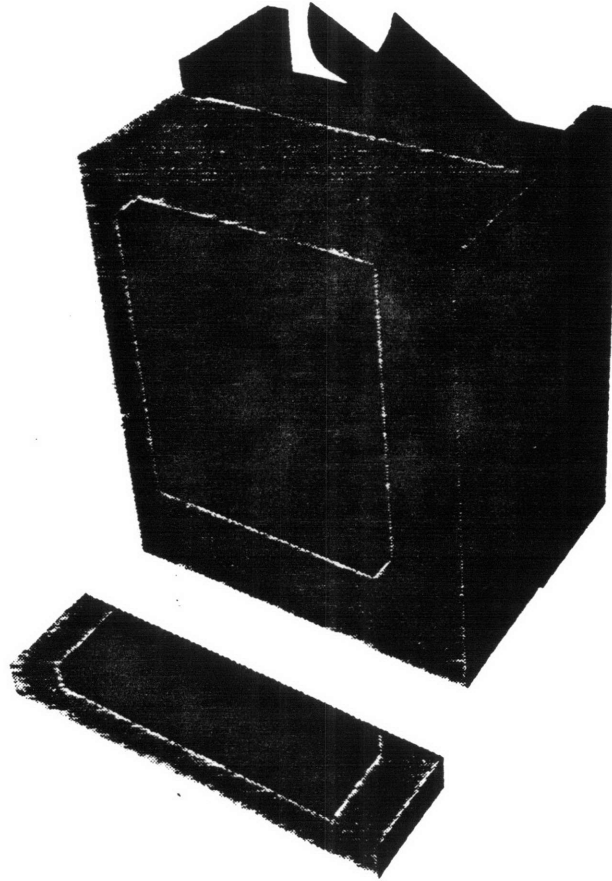
- Thick, scratch resistant plexy glass for the front of the unit, along with plexy glass for the side panels.
- High strength steel platform with durable and colorful coating, providing safety without sacrificing beauty.
- Thick, coated "bumpers" at the corner to all platforms to minimize serious injuries.
- Safety railings that surround the top platform.
- Perforated platforms that prevent pools of water from collecting;
- Main frame supported by galvanized stainless steel beams, thus providing even more support under the weight of the children.

Electronic System

The electronic system in the CPU is designed with few parts so that excessive maintenance is not required. The purpose of the electronic system is to control the interactive tic-tac-toe game generated by the unit. An external power source is required to power the system. This power source necessary can be generated from an underground line connected to the unit. A user power switch is located on the side of the unit. The power switch allows an adult supervisor to easily turn the tic-tac-toe game on and off. Internally, the electronic system consists of electronic processing circuitry with controls of the children's interface and the output to the screen of the unit. This circuitry is ultimately responsible for declaring the winner of a game and restarting a game. The screen of the unit consists of a number of lights in an array fashion.

Computer Playground Unit

Innovative Playground Equipment that Teaches about Basic Computer Components

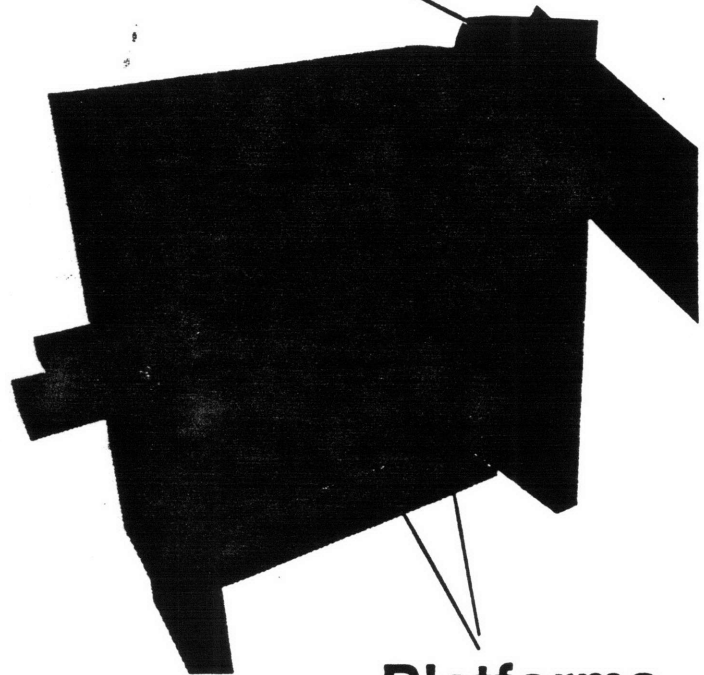
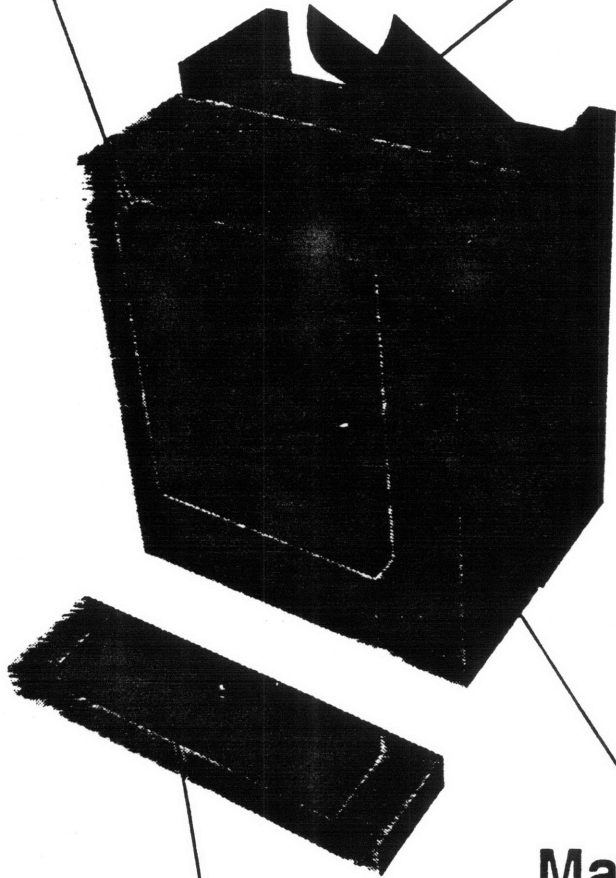


This playground equipment is centered around the theme of computer education for children. An entire Electronic Playground is envisioned with a full line of computer accessories. The equipment line is composed of various computer accessories such as a CD-ROM drive, printer, modem, and more. The play set is a larger-than-life size replica of desktop computer equipment. Children can actually enter the equipment and explore the internal aspects of computer devices. The Computer Playground Unit™ (CPU) is just one component of the Electronic Playground. The CPU is replica of a desktop computer which features a simple tic-tac-toe game. Children can play this game through the use of a simple interface.

CPU, Inc.

Lighted Display

Slide



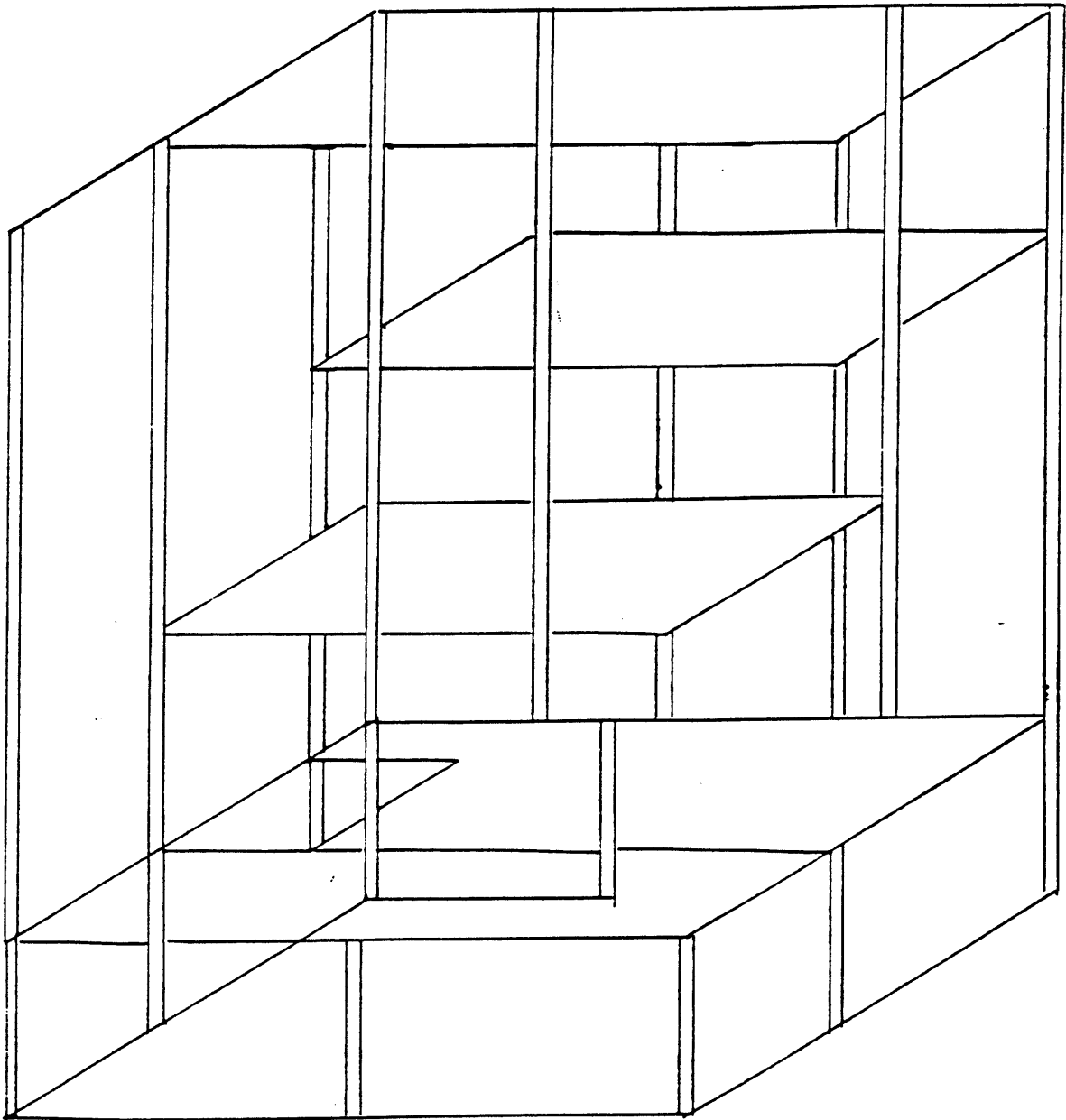
Platforms

Main CPU

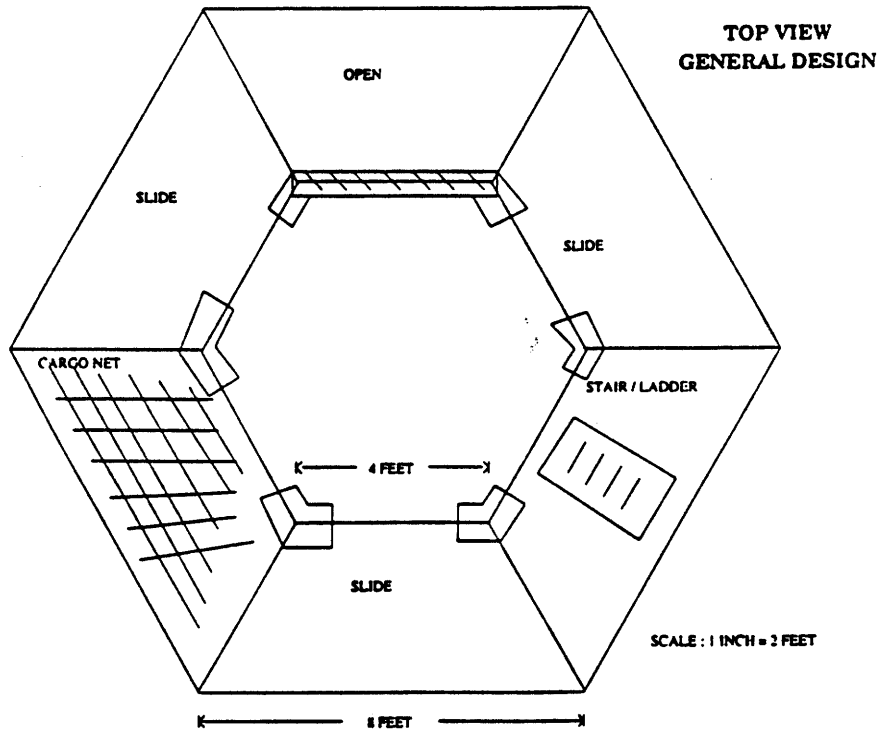
Push Button Interface

Approx
8 ft x 8ft x8ft

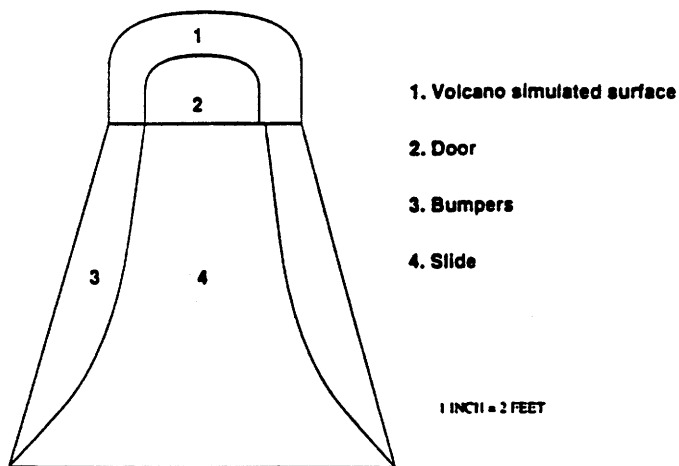
Playground Model



Mount Salebo



SLIDE



Mount Salebo is an indoor recreational learning tool developed for use in indoor children's entertainment centers. It is an extraordinary combination of safety, education and fun which allows children to play and learn simultaneously.

Mt. Salebo has many defining characteristics:

- Bi-level hexagonal structure
- Steel, polyethylene and wood support systems
- Recreational equipment such as a cargo net, ladder and slides
- Challenging exhibits and workstations.

Mt. Salebo bi-level structure is essential to the challenging network of the games and exhibits. Mt. Salebo is designed so that the child learns and explores while in the lower level and is given incentive for further exploration through educational games and slides on the upper level.

The support system of Mt. Salebo is designed with safety as the main objective. The use of steel railings and wooden support beams ensure this safety.

Mt. Salebo meets a critical need in children's toys. Sources of education and entertainment are everywhere, but seldom are the two combined. Typically, educational toys bore the children, while entertaining toys children find amusing, but have little educational value. By combining educational games and traditional playground equipment, Mt. Salebo integrates learning while retaining amusement.

In addition, Mt. Salebo allows for changes in the child's interest, age, and mental development. The design is flexible enough to incorporate various themes, ranging from dinosaurs to space exploration. It can also be modified for usage in smaller establishments and outdoor play areas. Finally, Mt. Salebo can entertain many children at a fraction of the cost, compared to traditional children's play equipment.

For questions of a technical nature, contact:

Jimmie Dale Walker III
472 Memorial Drive
Cambridge, MA 02139
e-mail: jdwalker@mit.edu

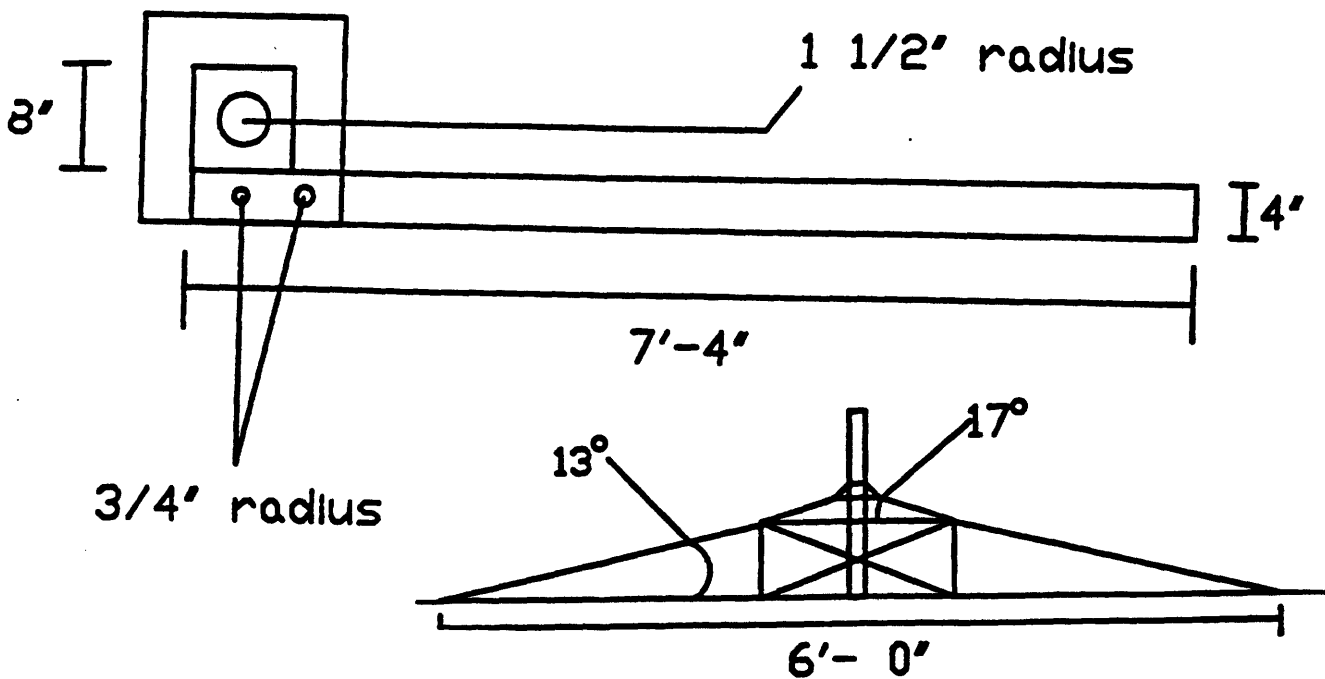
For questions of a business nature, contact:

Kareem Howard
472 Memorial Drive
Cambridge, MA 02139
e-mail: howardk@mit.edu

The GSR 1000

"APPROVED BY 100% OF THIRD GRADERS"

The GSR 1000 is a combination gyroscope and merry-go-round which allows children of various ages to enjoy play safely and easily. Our product is a fantastic playground ride for kids in elementary schools. The GSR 1000 is innovative, incorporating concepts of outdated playground rides, such as the see-saw and merry-go-round. The GSR 1000 uses both concepts to create a "gyrating" ride capable of entertaining children more so than current playground equipment. Children from Pre-school through sixth-grade are bound to utilize the GSR 1000 with complete security. Two to four children can be on the ride at one time while learning about group interaction. The GSR 1000 provides for an innovative and gratifying experience that will provide children with a fun and adventurous encounter.



The GSR 1000 design is revolutionary in the playground equipment market. The design consists of:

- > Bearing-mount with countersunk indentations.
- > Radial bearing connection to shaft.
- > Bearing-mount attachment to arms.
- > Reclined seats and attachment to arms.
- > Unique radial-bearing rotation system.
- > custom-building

The radial-bearing feature in the GSR 1000 allows its users to experience merry-go-round and see-saw type motion simultaneously. The smooth and safe ride achieved by our product is achieved by limiting the vertical motion of the arms to three feet, while providing the children

with a safe adventure. The motion of the product is limited by adding constraints to prevent the chairs from hitting the ground. Extra bracing in key areas and back support on the main frame also strengthen the safety of our product.

Our product supplies the consumer with a new type of playground equipment at prices comparable to today's see-saws. With many features provided for your convenience, our product can be adapted to any age group.

Next to the GSR 1000 will be a podium for the kids to read which states: When you sit down and the swing, gravity will pull you down and you will exert a force downward. In order to prevent yourself from hitting the ground, you need someone exactly opposite you to balance the weight. If this person is heavier than you, the person will exert a greater force downward. This will cause you to slowly rise. If you would like to exert a greater force downward, distance yourself from the center, or lean back. This will cause you to go back down.

In order to spin in a circular motion, everyone must agree to push from the ground in one direction. If you begin to spin really fast, you will begin to feel a small pull outward. This is called centripetal force.

We plan to market our product in playgrounds with possible expansion into in-home use. As stated earlier the many features and accessories provide a wide range of ages with a totally new and delightful experience. For more information on our product please contact:

Sabrina Almeida
phone #: (617) 225-8839
e-mail: asmorg@mit.edu

Marcos Carreno
phone #: (617) 354-3204
e-mail: marccarr@mit.edu

Adriana Holguin
phone #: (617) 225-7480
e-mail: dreholg@mit.edu

James McIntire
phone #: (617) 225-7457
e-mail: mcintjr@mit.edu

Rodrigo Prieto
phone #: (617) 494-0330
e-mail: prieto@mit.edu

Appendix B

Urban Design Corps Project: Motivational Music

Prepared by

Marc Graham and Dameon Harrell

I, Marc Graham, am a Mechanical Engineering master's student, studying under Professor Alexander H. Slocum at the Massachusetts Institute of Technology. As a thesis project, I am developing a plan to start up minority owned and operated corporations in urban cities. I am also designing a number of products to be the basis of some of these start up companies. The purpose of starting these companies in urban cities is to provide jobs for the people of these cities, so that they can become self-sufficient and capable of taking an active role in the educational system of their communities. The organization that will provide resources for the founding of these companies is to be known as the Urban Design Corps.

As it is now, the morale of many students in urban cities is low. Students are often encouraged by teachers to do their best in preparing for college, but there are numbers of students who do not see college as a possible option. The problem is that there are limited resources for these students, but they are still expected to achieve on the same level as students with tremendous advantages over them. What usually ends up happening is that many students do not get the opportunity to go to college and they are the ones whom the next generation of students behind sees. It becomes hard for parents, teachers and administrators to motivate students to do well, when all the students see are people before them who, in many cases, tried and did not succeed. In order to give students the perception that they can be successful, it is necessary to provide them with the resources needed to do so.

In order for the Urban Design Corps to be effective, it is necessary to take some key steps in the fundamental stages of development. The students who tend to be damaged the most in urban city schools are the artistic ones. It is more often that scholars and athletes get a chance at greatness following high school, than do artists. Because scholars

and athletes have some hope of being successful, they can oft times be motivated to achieve, but it is hard to convince artistic students to work hard, because rarely do they have this hope. Artistic students also experience frustration from not being allowed to express and develop their artistic abilities, due to a lack of resources. Steps must be taken in the direction of attaining the resources which must be provided for artistic students. Giving them a place to improve their skills, based on academic merit, will encourage them to do well in school and give them hope for the future.

The first program to be developed as part of the Urban Design Corps is the Student Studio and Design Park (SSDP). It provides a place for artistic students to exercise their talents. Students will have access to a recording studio where they will get the opportunity to make recordings and talk with people who will be able to inform them of the routes to take in pursuing a career in music. This program will also provide students with a design park where students can come in and design whatever it is they envision, under the assistance of experienced designers. And lastly, this program will provide artists with materials and space to be artistic. By providing students access to all of these things, based on their academic performance, they will be motivated to achieve at a higher level.

In addition to students who might be facing academic problems, the SSDP will be available to students who are doing well, but wish to gain hands on experience in artistic areas. However, just as an athletic, or academic team the most artistic students will receive "starting positions" in the SSDP. This will encourage students to work with the same tenacity in the design park as one would who is trying out for a sports, or a scholastic based team. This will also prepare those students with a definite interest in art for future experiences and push those without artistic abilities to work harder in their areas of expertise.

I have composed a number of rap songs to be included in my thesis, which explain the objectives of the Urban Design Corps, tell stories of my personal experiences and urge kids to try hard in school. These songs can be used as a motivational tool to many students of urban cities, where rap music is extremely popular, but rarely offers students the opportunity to hear a beneficial message. Arrangements are being made to have these songs put on c.d.s and distributed to students all across the country. In order for this to happen, I must attain the resources needed to record the songs and still be around to complete the development of the Urban Design Corps. It is urgent that this take place; showing kids by example what can be achieved through academics is the best motivation they can have.

Appendix C

Marc Graham

Urban City Development: Program #1

Student Studio and Design Park

1995-1996

Abstract

This program was developed to better the state of the youth in urban cities. The target group is creative students in areas of art, music and design. These students were chosen as the target group due to the large number of them who are misguided and led to use their creativity in a negative manner. The program is to be developed over the 1995-1996 school year and is to begin its operation in 1997. It is open to all students who are residents of impoverished cities and membership for each quarter will be based on academic performance of the previous quarter. It has the capability to unite communities and allow the people to work towards a common goal. This program provides opportunities for everyone in the community, by allowing each individual to partake in activities of his/her specific interests.

Contents

Development of a Program.....	116
Personal Background.....	117
Scholastic, Athletic, and Artistic People.....	121
The Program.....	124

Development of a Program

To develop a program that is meant to improve a situation, it is first necessary to fully understand the situation. Once an organizer has a grasp of the situation he/she can then begin to develop a program to improve it. In doing this, it is important that the organizer remembers that his/her job is to improve the situation, not to change it. In developing a program to improve the state of inner cities, I kept in mind all of the aspects of life that were important to me and others like me growing up. I noted these activities and used them to develop a plan where they could be used to better the community.

I am Marc Graham, a candidate for a master's degree in mechanical engineering at the Massachusetts Institute of Technology; I received my undergraduate degree from M.I.T. in 1995. I grew up in East Cleveland, OH, an extremely impoverished and overcrowded city, in a single parent home consisting of my mother, my brother and me. Growing up, I participated in an abundance of activities, scholastic and otherwise. I did so many things that I felt I had to keep some of them secret so that others wouldn't get the wrong impression of me. As I got older and stopped keeping things secret, I was often asked the question, "how do you do all of that and still excel as a student." The misconception that I could not participate in certain activities and still be successful helped me come up with the idea for a program to improve the state of the youth in inner cities. I will explain this by relating my personal experience to the program that I have developed.

In developing a program I find it necessary not to focus on what is seen as the traditional road to success, but the process by which success is achieved. Traditionally people believe that success is achieved by excelling in school. I do not disagree with this argument, but I feel that it is not complete for everyone, only self-motivators. The belief

should be stated as: Success is achieved by excelling in school, and those who excel in school are those who have been motivated to do so. This is the belief that was used to guide the thought process that went into the development of my program.

After completing a careful analysis of my childhood experiences, I have come to the conclusion that creating a program that caters to artistic youths will improve the state of education in urban cities most quickly. Creativity is one of the most abundant resources of urban cities, yet it is also the most abundantly destroyed. There are many efforts to be creative, but there are no, or not enough outlets to support them. If the creativity of the youth is not supported, it is used in a negative manner until it is eventually destroyed. Programs must be set up to support the creativity of the youth, before more lives are lost due to foolishness.

Personal Background

I am studying Mechanical Design focusing on development of toys, exercise systems, and other fitness/entertainment devices as a graduate student and writing the plans for an Urban Design Corps, to bring minority owned and operated corporations to the inner city. For as far back as I can remember, I have always enjoyed making toys, machines and interesting gadgets. Whether it be the sling shots I used to make out of a 2X4, a rubber band, and a nail when I was younger or machines that carried out ten step processes at the flick of a switch when I got older, I was always motivated to create. Raising us in a single parent home, my mother wasn't able to buy my older brother and me lots of toys, or take us places to provide us with entertainment. My father whom I rarely saw was even less capable of treating my brother and me to things with an expense attached to them. But,

while unable to shower me with expensive items and outings, both of my parents were able to instill in me a will to create.

My mother who worked as a teacher for pre-school and mentally retarded children often times while I was young used to make all sorts of board games and mobile type structures for her students to educate them and further develop their physical and social skills. She would test her games by playing them with my brother and me before she presented them to her students. The first time my mother showed me one of her games I was amazed that she had made it; I was so young that I was still unaware of how things came to existence. It hadn't dawned on me that normal people actually made toys and games and by seeing my mother creating them, and doing such a good job, I believe gave me the confidence that I could design whatever I envisioned.

My mother is also an amateur singer and has performed with lots of accomplished musicians at many large events, but never chose to pursue a professional career. She used to make up songs with my brother and me when we were younger and this led to me making up songs of my own on a daily basis about whatever, birds, people, cars; it didn't take much to get me singing. My mother also worked as a reporter while I was in junior high school and for most of the time I was in high school. I would read what she wrote and it would influence me to write things of my own. I began writing poetry while in elementary school, and in the environment that I grew up in, it wasn't long after that I began writing raps. Following in my mother's footsteps, I have also performed with accomplished entertainers with my rap group, which has been together for approximately ten years, other entertainers and as a soloist. Undoubtedly, there is no one who has been a bigger influence on me than my mother.

I remember when my mother and my father got divorced, I think I was about three or four years old; not old enough to remember everything, but old enough to remember big events. I don't remember knowing my father very well, although I do remember that I was scared of him. My father was in the Navy when my brother was born and they all were living in my maternal grandmother's house when I was born. He didn't care much for the Navy, or anyone giving him orders, but he was very strict and militant. I feared being around him if my mother wasn't with me; he never hit us, my mother was against that, but he would talk to us in a very strict and low tone which seemed threatening and unlike my mother's high pitched voice of reason. After the divorce, my father went to live with my paternal grandmother; while I didn't understand what was going on, I could remember feeling relieved.

There never seemed to be much for me to do over my grandmother's house. I'd draw pictures and play with my brother and my uncle (my father's brother) if he was around, but I didn't really look forward to visits. Once my father moved in I thought I'd never want to go to my grandmother's house again, but my mother felt it was important for my brother and I to know and spend time with our father. The first time I went to visit my father over my grandmother's house I did not want to go; I didn't tell my mother this, although I'm sure she knew how I felt. I thought that I was going to have a miserable time, I just knew that my father wasn't going to let us do any thing, but I was wrong. When we got there, my father was extremely happy to see my brother and me; he seemed like a totally different person. He played football and wrestled with us in the living room and cooked us something to eat, but the real treat came when he took us in the basement. My father had a small tool shop in his basement and he designed all kinds of things down there. He made lamps out of cans and bottles, rings and cup holders out of plexy glass and

my most prized possession to this day, a 2ft square, black and white plexy glass checkerboard with my initials in the middle of the board. This was when I found out who my father truly was. I understand now that it was hard for him to be a father to my brother and me while he was very young himself and I can feel how proud he is when ever I accomplish something that he knows he helped influence. It makes me feel good to make him proud and I look forward to the day when we are designing and creating things together.

My brother has always been my driving force. Everything he did I wanted to do and better. He played first trumpet in the band, I had to play first trumpet solo in the band; he got a good grade, I had to get all A's; he'd make a new friend, I'd make two. It wasn't long before he led me into something that I truly loved and at which I was excellent. My brother began wrestling when he was in junior high school and he was good at it. He owed a lot of that to me, because it was on me he practiced all of his new moves. I couldn't wait until I got to junior high school so I could wrestle. I could never beat my brother, but I had to show him that I was good. When I got to junior high I tried out for the team and I was the starter at 80 lbs. I was off to an excellent start, but we moved to another school district and I had to leave the team. That put an end to that season, but the next season I wrestled at the new school district and broke every record ever set at that school. In fact, I only had one point scored on me the whole season, and it was a penalty point for an illegal move. The coach of the team even started up an award in my honor, "The Marc Graham Award," given to outstanding student athletes and team leaders which is still given out to this day. I went on to wrestle in high school where I had three more undefeated seasons and was ranked as the number one wrestler in the state of Ohio at 112 lbs. I never would have started had it not been for my brother.

I was lucky growing up, I had people who cared for me pushing me in the right directions. I had a mother who was a perfect role model and supported me in everything I did and I had a brother who knocked down all of the barriers that I would have had to face if he had not been before me. I had to do a lot of work to get where I am, but I can not take all of the credit. It is necessary for programs to be set up for others who may not have all of the support that I had.

Scholastic, Athletic, and Artistic People

Luckily, I had good role models to lead me in the right directions while growing up; a lot of my friends did not. I know that if many of them would have had the same influences as I did, their lives would be different now. Everyone I knew growing up wanted to excel in something and if they couldn't excel doing something good, often times they excelled in doing something bad. It is tough for a kid to decide what and what not to do with friends in situations of right and wrong. I had to choose which childhood friends I could keep and which ones I was going to have to lose. Although I often had to, I didn't want to lose any of my friends. To avoid totally losing a friend, I would base friendships on what I most had in common with someone. Because I did so many different things, I was able to keep a lot of friends, but I felt like I had to keep a lot of these friendships secret, because I didn't want my teachers to think that I was a part of the "bad crowd."

The friends I had growing up fell into three different categories: scholastic, athletic, and artistic. I had lots of scholastic friends and made more each year, but the friends that were closest to me were the athletic and artistic ones. Unfortunately, the friends that were athletic and artistic, were the ones who often times found school to be an area in which success was difficult. Athletic friends, while some of them were seen as hoodlums, would usually struggle through school in hopes of making it to college on athletic scholarships. My artistic friends rarely found interest in being successful students and felt that education would not take them where they wanted to go. Because of this, many of my artistic friends were looked at as being the bad students.

I do not think that school work was too difficult for any of my high school friends. It is my belief that students had different levels of motivation, so some did better than others. The students who did their school work, because they liked what they were learning and wanted to go to college, did well. Students who were athletes did as well as they needed to in order to maintain eligibility for sports, but rarely pushed beyond that. Students who were artistic usually had no interest in school work and didn't excel in many subjects. I know what is there for each type of student and can speak for each ones motivation. The artistic students were not stupid, they just weren't motivated.

Students who love to learn get rewarded for this all of the time and due to this, their performance is elevated. They make the honor roll, merit roll, "Who's Who Among American High School Students," etc. until they receive the biggest award of all, college acceptance. They may be seen as nerds, but since they are in their own classes, they don't have to be bothered with teasing students. Athletes, who must maintain a certain grade point average to be eligible for sports are also rewarded for success. They get to go to the league, sectional, district and state finals, be seen in "Who's Who Among High School

Athletes," receive every award known to man at banquets and with a little luck, they get to be as big a success in college. They don't usually have to worry about being teased, because they are athletes and everyone thinks that they're cool. Scholars and athletes have all of the support in the world.

What is there for artistic students? Glee club, art class, and vocational classes which add up to be essentially nothing. Artistic students are the only students who are rewarded with classes, or being able to participate in a club. They don't receive any awards for their grades, they don't get their names and pictures in the paper, they get nothing. Yet when they lose motivation due to lack of reward, they are labeled as the bad students. It is very difficult for a child to believe that he/she is not a bad student when all of their classmates are receiving awards for something, while they get nothing.

As mentioned earlier, growing up, everyone wanted to be good at something and if they couldn't find something positive to excel in, they usually found something negative. My artistic friends wanted to be recognized for their art. Some of them became graffiti artists and painted almost everything in the city, but most of them formed rap groups. As a matter of fact, even the ones who painted rapped. In 1985, while in the seventh grade, I began rapping. At this time, many adults saw rap music as trash and rappers as being ignorant. With this being the popular belief of adults, no one wanted their kids rapping. This made it even worse for artistic students, because now it was no longer a case of not being rewarded, but forbidden to do what they loved. This stopped no one from rapping, it only gave people the impression that rappers were bad.

The belief that rap was bad eventually changed as rap music grew. By the time I was halfway through high school, almost everyone I knew was rapping (scholars, athletes

and artists). This and graffiti were about the only two things for which artistic students were rewarded. But still, this reward didn't come from the school, it came from peers. If the reward that someone gets is not from school, what reason do they have for attending? This is what was and is on the minds of lots of artistic students. These students are not bad, but just like everyone else, they want to be recognized.

Most of the students I knew growing up were creative in some way. It is sad to see that while so many were creative, creativity was the least supported aspect of their lives. This lack of support has done unnecessary damage. Lots of designers and artists have gone unnoticed and have not had the chance to develop their talents to their maximum level of greatness. I believe that this lack of support is due to the expense of being creative. The largest expense in any company that creates successful products is its research and development department. How can we expect urban cities to produce successful students if no money is being put into R & D.

The Program

It is my goal to return to the city where I grew up and establish programs that will eventually eliminate large scale crime and increase the academic and economic state of the people without changing the people who live there. I intend to then further these programs of urban city development by introducing them to similar cities across the United States and the world.

The average person who knows nothing about urban cities would look at me and see an M.I.T. graduate, who is a positive role model who could influence minority students to do well in school. This theory should quickly fall apart for anyone who read the section previous to this one. Students who are going to do well in school are already doing well in school. They are rewarded regularly and have programs set up to better them. I could best serve my community by setting up a program that does not already exist in some fashion.

The first program that I have devised to better my community and ones like it is the setting up of an art and music and video recording studio that offers studio time to students based on their academic performance and a design park for students who like to design, but are likely lacking resources. Students with exceptional performance in school will be credited hours in an art and recording studio, and/or space and materials needed to do design work. This program will be useful to people in the community of all levels of intelligence. It will be an outlet for creative students to use their creativity in a positive manner. Here they will be able to do things the things that they like to do as a reward for the grades that they get. This will have the greatest influence on the students who need it the most.

This program will do for artistic students what schools have already done for scholars and athletes, it will reward them for their academic efforts. It will also give them a chance. Scholars do extremely well in college because they have spent their whole lives preparing for it. Athletes have a chance to get into college and possibly become a success in their sport. This program will improve the academic performance of artistic students, giving them the chance to go to college, where they will find that even they are offered a chance to succeed. It will also allow them to develop their talents and learn more about

their interests, by studying art in workshops provided by the program. The program will also teach them how to run businesses and handle all of the marketing issues involved with their art work. This program leads towards changing graffiti vandals into established artist and drug dealers into established businessmen. This program is capable of finding the animators for the next great Disney movie, or some of the greatest minds for business and design in the country. It sets up a forum for the community to work as one, by providing a space for everyone.

The studio will offer a place for musicians to record, and artist to paint and draw, the design park will offer designers a place to design and kids to play. I know people who have experience in music and crafts who would be willing to run the studio and design park with me. The program will be introduced to schools during the 1997 school year and teachers and administrators will use it as a motivational tool for students throughout the year.

I have put together a team of seven people to help me run the studio. Three of the people, Dave Brown, Maurice Goodwin, and Marlon Kenniebrew are all members of my rap group, which I started ten years ago. They have all done studies in fields related to this program. Marlon Kennibrew is an exceptional artist, who further developed his abilities by attending art school after graduating from high school, Maurice Goodwin is a college graduate with an associates degree, now finishing up a bachelor's and has studied music production and Dave Brown has experience in television production and performs rap music regularly. Charles Hightower is an M.I.T. alumnus of Electrical Engineering who, plays bass guitar and writes rap music and poetry. Amechi Nwachuku is an M.I.T. alumnus of Chemical Engineering and is working with me on the development of the Urban Design Corps. Dameon Harrell is an M.I.T. sophomore with lots of experience in

operating a recording studio. My brother, Karlos Graham, is a certified welder and has been to trades school and is capable of constructing complicated design patterns. He has also been working on redesigning the game of life for the past few months. This new version will be more like life that is experienced by someone growing up in an urban city. This team has experience working together and is capable of achieving great success.

Appendix D

Executive Summary for

The Urban Design Corps

Developed by

Marc Graham and Amechi Nwachuku

Proposal for The Urban Design Corps

Executive Summary

- The Urban Design Corps is a corporation focused on starting companies guided towards providing careers and resources for minorities and underprivileged people.
- The Urban Design Corps provides an opportunity for successful members of minority communities to assist in the economic revival of their communities.
- The target market for the Urban Design Corps is investors and entrepreneurs. Investors are needed to provide funding for the product ideas developed by the entrepreneurs.
- Giving designers the opportunity to start-up a company is the competitive advantage that the Urban Design Corps has over other establishments of its kind.
- The Urban Design Corps is a non-profit organization, however the companies started by the Urban Design Corps are for profit.
- Start-up companies of the U.D.C. are expected to have great potential for profit, backed by extensive support and resources from the Urban Design Corps.
- The Urban Design Corps is designed to have an exponential growth rate, as it is a requirement for all companies started by the Urban Design Corps to become investors in the Urban Design Corps., giving a set percentage of earnings back to the Urban Design Corps each year.
- The Urban Design Corps is a company that gives successful minorities the opportunity to invest in a permanent solution to the economic problems facing minority and underprivileged communities.

Urban Design Corps:

In the United States, there are many urban cities inhabited by a large percentage of people, particularly minorities, overwhelmed by poverty. There are more people than there are jobs and there is not enough money available to provide competitive school systems. These problems are not solved by providing welfare, rent subsidization and other forms of government assistance which do not lead towards people becoming self-sufficient. The best way to remedy this situation is to set up a system which focuses on providing jobs and a means of self-dependence. Once there are jobs available and people of the urban city no longer have to depend on people from outside the inner city for assistance, urban cities will not be overrun by poverty. There is a need for the Urban Design Corps (U.D.C.).

The Urban Design Corps is a corporation focused on starting companies guided towards providing careers and resources for minorities and underprivileged people. As a business the U.D.C. finds and provides resources for the start-up of companies to be developed by minorities. A corporation such as the U.D.C. initiates an opportunity for successful people to contribute money and time, channeling this into ventures that benefit the community and provide for others like them who are less fortunate and may never get the opportunity. It is these companies started by the Urban Design Corps which will set the grounds which allow for people of urban cities to become self-sufficient.

Due to a lack of resources many potentially successful ideas are not given a chance in minority and underprivileged communities. Urban Design Corps hopes to take advantage of this opportunity. While there are many successful members of minority communities that wish to assist in the economic revival of their communities, there are very few programs or companies taking advantage of this opportunity in such a manner. Most contributions are to charities and organizations that perform a one-time service and not to ventures that are capable of sustained development. This gap must be filled with an

organization that allows people to systematically reinvest in their community helping to permanently eliminate economic problems.

The strategy of the U.D.C. will be to initially to seek out those capable of and with an interest in uplifting urban cities to donate funds for the development of the Corps and its premiere companies. The development process for companies will be to seek out bright minority entrepreneurs with product ideas that are capable of establishing corporations and urging them to use their ideas as a basis for start-up companies. The company development process will be sustained through design programs for students such as the Second Summer Program at M.I.T. and the nationally held Invention Convention. Through the Corps, more programs like these will be set up with the specific goal of contributing to the Urban Design Corps. As successful companies are developed there are more investors available and less of a need for outside assistance to the U.D.C.

The target market for the Urban Design Corps consists of investors and entrepreneurs. Investors are needed to provide funding for the product ideas developed by the entrepreneurs. These investors sought by the Urban Design Corps regularly contribute to charities and causes, but would be now faced with contributing to a program that intends to make such contributions unnecessary. Because of the large pool of designers available to the Corps, the variety of products developed is expected to be rather large. Initially the areas of expected profit are in the music and sports apparel businesses as a result of the large availability of known minority talent in these fields. The more investments received by the Urban Design Corps, the more likely these companies are to succeed.

The Urban Design Corps focuses on designs in all areas, teaches methods of design, and offers the designers working with the U.D.C. the opportunity to start their own companies based on their designs. Being given the chance to start-up a company gives designers the incentive to work extra and do whatever is necessary to beat the competition. Designers working with the U.D.C. are guided in the design process in

efforts to design products with high market potential. The competition is mainly from schools and other organizations which offer assistance to students or members, to develop and patent designs. Giving designers the opportunity to start-up a company is part of the competitive advantage that the Urban Design Corps has over other establishments of its kind.

The Urban Design Corps is a non-profit organization, however the companies started by the Urban Design Corps are for profit. The Corps does not target investors who's sole purpose is to gain profit from the organization, but rather those who want to help underprivileged minorities and others experiencing poverty become self-sufficient. The U.D.C. will be maintained through investment and reinvestment and is designed to have an exponential growth rate, as it is a requirement for all companies started by the Urban Design Corps to become investors in the Urban Design Corps, giving a set percentage of profits back to the Corps each year. Start-up companies of the U.D.C. are expected to have great potential for profit, backed by extensive support and resources from the Urban Design Corps.

The team which makes up the Urban Design Corps consists of investors, minority designers and people in management. In establishing a team, the Corps seeks out the best and the brightest of minority designers and business minds. The better the products developed and the better the companies are run, the more likely they are to succeed and provide employment for people of urban cities. The Urban Design Corps offers minorities and others facing poverty a chance to change their situation for the better. And in doing so, the Urban Design Corps needs very little to motivate its workers to make it all that it can be.

The Urban Design Corps is a company that gives successful minorities the opportunity to invest in a permanent solution to the economic problems facing minority and underprivileged communities. This is an opportunity to assist in making people economically self-sufficient and contributing members of society. With the establishment

of the Urban Design Corps, there can be more corporations and less need for prisons, more people will have jobs and less will look to welfare and other government programs for assistance, people will be able to work one job close to home and in turn be able to play a more active role in the educational system of their communities. All problems facing urban cities can not be solved by the Urban Design Corps, but the major cause of many problems faced can be eliminated through its establishment.