Problem 1: Bank of Glass Doors

The glass makes it easy to see inside to know what the building is and you can have a pretty good idea if it is open or not based on looking inside. Glass doors also allow you to see if someone is coming the opposite direction from you, preventing the door from opening and hitting someone. If the push bar is working correctly, people can lean against it with their body to open the door, allowing them to carry books in and out of the library without having to try to open doors at the same time.

Because the doors are glass, the glass can more easily be broken into. With a push bar, people may not realize the push bar unlatches the latch holding the door closed, so they cannot just push the door open, they have to use the push bar. With doors you can see through people can easily assume the library is open because people are inside when the doors are actually locked.

Problem 2: Improved door Handel

The handle looks good. This handle is easier to install, and it is a separate component from the door, so it could be replaced without having to replace the entire door. There is no lock to pick, making it a safer handle.

The handle is not traditional, so people may not know if they need to push or pull on the handle to open the door. The only way to learn to open door and be quicker is by experiment. Even for regular user, it would be more time consuming to open door as it will take higher number of moves than using push bar as said in ‘motion and time’ study. There is no lock on these handles, the lock has to be a latch on the door meaning two mechanisms have to be used and maintained. Also, when the door is latched closed, these handles still move, so someone may use the handle and the door will not open. This will leave the person wondering if the door is locked or if the handle doesn’t work or if they should have pushed when they pulled. A library door should be easy to open if someone is carrying a lot of books. If this handle requires you to use one hand to pull the door open, then people have to always have one hand free, which is not always plausible at a library.

Problem 3: Scissor

The things right about this design are its curvy shaped handle, handle being in an angle to cutter or blade, and more space for finger in lower handle. Our four fingers except thumb are naturally in arch shape which will make it easier to handle given scissor. The angled design is very useful to cut stacks of construction paper so that he don’t have to place paper parallel to his hand. And, one more right thing about the design: bigger the stack, higher the pressure we need to cut the papers. And the use of more fingers means more pressure and easier to cut the stack of paper.

The one thing that is wrong for our present scenario is our scissor looks little small for the job we want to do. The shorter the scissor is, higher the repetition going to be which will bring imperfection in the work we do. Also, we are assuming that the teacher is right handed.

If we want to maximize the effect of each repetition while cutting a paper which our human mind automatically does, we need to wide open the handle, so we can cut longer. But wide opening the handle can be difficult and might give pain to our hand. To solve this problem, we can increase the load distance/length of the blade and make handle little more angled.

4. Keypads

The phone has smooth keys that are easy to slide your finger across to get to another key without lifting your fingers. The phone has all flat keys so the phone closes flat. The 9-key has large keys that are easy to find and click making it easier to type faster.

The main thing that creates the most difficulty in the keyboard is their placing of numbers. Our human mind is used to the number in ascending order (Our mind thinks the letter or number in the left is smaller than the right and one under it. Think of alphabet chart and their link with ASCII values, or think of numbers in chart in primary level they were in the same pattern as keys in phone but not in keyboard). The placement of numbers in calculator is unnatural and one has to invert his muscle memory. Also, the boundary between numbers keys and sign other keys are not separated which makes touch typing even difficult.

5. Electric Razor

The design of the razor fits nicely into one hand, either right or left. It is easy to operate with a single on/off button. The razor heads move to form to your face, so you do not miss spots on your face. Hair is caught by the razor head, so you do not have trimmings all over. The razor heads have a dramatically lower chance of cutting you than a blade.

There is no way to know how much charge is left. This means that eventually, it will just die with no warning, possibly in the middle of a shave. If it is used on the go, it can be hard to know if any spots were missed as you may not have a mirror. Blades can be more precise than the three electric heads. It does not look to have any grip on it, making the probability of it slipping out of your hands higher. Nobody wants to drop trimmed beard on their clothes, so there should be some mechanism to suck trimmed beard.

6. High School Desk

The desk is space saving and compact. It is light-weight and easy to move when needed. The chair and desk and connected making it one piece of furniture, so you teachers never have to worry about matching chairs to desks. Also, Basket does not have any boundary except four legs of chairs that will help in taking extra space for our object if needed. Eg: coat and backpack can sometimes be bigger than the basket size and it can still fit there.

The baskets are big enough for a few books, but many high schoolers carry a backpack, making the basket unnecessary. With the basket being under the desk, it is hard to see what you are grabbing, everything is done by the sense of touch. Also, because it is out of sight, students can easily forget things in the basket. It cannot even handle a higher stack of books and notes; it may fall. The connection between the chair and desk require students to only be able to enter on one side to sit down. The chair and desk are not adjustable, so those who are bigger may not fit comfortably in the desk.