

## **APPENDIX H**

### **U.S. and International Currency Usability Testing Comments Log**

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### U.S. and International Currency Usability Testing Comments Log

#### Blind Participants

##### Australian Dollar

Participant	Comment
Blind adult	With size, you know, just like coins, you'd have to compare it with something. (re 5) It looks tiny. I'd probably do just what I do now – fold them. I have wallets that have several pockets for paper money. When I have money, I like to be able to just dip my hand in, and say “OK, there’s my 1s, there’s my two 5s, and already I’ve got \$23, just that quick. (re 10) It’s a little bit blockier than the other one. I think with experience you could probably start to feel the shape.
Blind, child	Windows need to be a little bit different – size and stuff. And the length.
Blind, child	The colors didn’t work that well.
Blind, adult	The color combination on the 5 is the worst. I hate the 5s.
Blind, adult	Colors don’t help me any. Combination of shape of large print and size of bills. Lighter background would be easier to see. Darker it’s hard to tell what it is.
Blind, adult	This would be hard. Exactly where did I put the tip of my thumb? You would always have to have something to judge it by, to compare, to measure it against. I wouldn’t feel comfortable with it, knowing what it is if someone hands me a bill.
Blind, adult	I have to line my hand up very carefully. Those look like they’re enough different that they’re pretty easy to tell.
Blind, adult	Suggests using measuring guide.
Blind, child	Pretty cool.
Blind, child	Pretty cool.
Blind, adult	I don’t think the different sizes of the windows offers any advantage. They’re just hard. I mean, I’m sorry. This is a token effort. Yet in Australia the blind people say they don’t need to use the [Cashtest] guide. 100: “That’s just long.” This is awful. Length alone is not enough, and that’s too small a difference. I was just there. I had two weeks to practice. I wasn’t any better when I left than I was at the beginning. But I had my little magic gauge.
Blind, senior	There’s no way. There is just no way. Once they get wrinkled, it’s harder to tell where the transparent window is. They’re all the same size.
Blind, senior	I don’t feel at all comfortable with them. I’d probably go broke in a week. It’s too close. I’d still fold.
Blind, child	Those are very confusing.
Blind, child	Eh. OK.
Blind, elderly	These feel cruddy. These don’t feel like money. I’m going to have difficulty with these because they don’t feel like money. You’re seeing something as a window. I don’t know what I’m feeling. You say the window is here, and I feel it just as much over here. This can’t be very big [value] because I can’t feel the window.
Blind, adult	The euros felt more different. Like Canadian better.
Blind, senior	Don’t like them.
Blind, senior	Boy I would not like plastic. I don’t like the system to start with, from the moment I touched them. I’ve been lost as a goose ever since we started with this stack.
Blind, elderly	I would need time to learn the windows.
Blind, elderly	I can see that one clearly.
Blind, child	If I stare at them for a long time I could probably figure them out. Euros were a bit easier to figure out
Blind, senior	“I really can’t tell the shape real well.” They feel like they’re quite old. Eventually you might be able to get used to that.

## Canadian Dollar

Participant	Comment
Blind adult	Yeah, they do wear out bad. I don't know if I can even find where there were blocks here. It's something to know which is the front and the back of the thing when they're worn off like this. What if you had these little blocks closer, so you could feel them under a thumb? You got the bumps and I can feel my two zeros (100). This is quicker. I'm more comfortable than having size alone. If you had both size and dots, you know. If they're as wrinkled as this, another helpful thing would be to know which way is up and front. You can tell front and back by texture of US money today. One side is slicker.
Blind, child	I guess I'll have to do it the old fashioned way (then holds it up to his eye). I think they need to figure out a way to make the bill so it doesn't wear out. I like the Braille cells a lot.
Blind, child	I agree and I have one other suggestion: I think the 20 should be 4 marks, since 5x4 is 20.
Blind, adult	Big numbers work, color is a bit more problematic. Number is OK, color doesn't help. Reverse numbers: can read them but not as clearly. "Definitely harder to spot but I can read them now that I know they are there."
Blind, adult	That's the easiest of anything, because the numbers are so large and blocked. What I really like about theirs is the fact that you've got both the dark numbering and the light numbering, because a lot of people need that. But for me personally the darker is easier to see.
Blind, adult	When they're not good I can't feel them.
Blind, adult	I like the concept of the marking if you can make it just stay. Of all the ones I tested I liked the Canadian idea the best. That's the best concept (after spending multiple minutes on a worn \$20). Not useful after they're getting old. I really liked the strip on the Canadian bills that you could use to orient them.
Blind, adult	"Boy, if those marks wear off..." Brand new Canadian currency is a piece of cake to identify. You could identify new ones out of a machine all day long. The old ones, no. You'd have to have a currency identifier or something.
Blind, adult	This, what obviously seemed like a really good idea, once that gets rubbed, this is just hard. This had better have some bill reader of some kind, which then gets right back to American money. You'd sure have to have something like a table; you couldn't put it on your pant leg or something like that. Wants something in the bill to make it not wear down. I'd have a shot at going longer with this one.
Blind, child	They're good.
Blind, child	They're good.
Blind, child	Easy, cool
Blind, child	Easy, cool
Blind, child	Old and faded is a problem. Would work for her.
Blind, child	Interesting. That could be a system we could use
Blind, adult	Any guess I make is going to be utterly and totally random. When you get one you can read, it's like "Whooooo!" I love the raised numbers. They're super-easy. I think these are from before they had dots. I don't think these ever had dots.
Blind, senior	Can I put them through my teeth? Whatever they use, it has got to be durable! Somebody stomped on 'em! Later summary: By far, when it wasn't worn, was absolutely the best.
Blind, senior	Where are they? I don't feel any. Come on! Did you take them off? [bumps] Any time you have to lay your money on a table to determine what it is, that's not very convenient. If it's new enough, the dots are very useful. I sure wouldn't want to have to go through that at the cash register (67-second scan). It's slow, I couldn't use it as a cashier. When they're new, it was pretty easy to discern. By spreading them, it meant you had to cover more area with your fingers. Don't like the space between with the 100. It's superior to the Euro.
Blind, child	The newer ones were easier than the other ones. Raised print numbers kinda helped too.
Blind, child	I think the ones that have distinct little clusters on them worked pretty well. But when they don't, it gets really hard.
Blind, elderly	God they're crazy! In one way, the big space [between 1 <sup>st</sup> and 4 <sup>th</sup> positions for the \$100 bill], but you could feel this [first cluster] and think it was a \$5. I like the idea, but I think what they have as a marker could be clearer. It shouldn't have to be so precise. The Canadian system is most tactile, but it needs the most refinement.
Blind, senior	At first couldn't read the numbers, but seemed to get used to them. Never adjusted to the tactile affordances.
Blind, adult	I can't feel any of the numbers on any of them.
Blind, senior	I didn't like any of them.
Blind, senior	One time getting wet and these clusters are going to be gone. This is better, but still. It's still going to be hard. When they're worn they're almost unfeable.
Blind, elderly	This system is better. I could learn this system much faster than the other one (CH). I do Braille pretty good so I know I can handle this.
Blind, elderly	Has a bit of trouble with Braille – sensing dots. I can see these numbers because they're large. She has trouble with mixing up her currency, though she tries to be consistent in folding them different ways. If she has a 1, 5, and 10 in the wallet at the same time, she might get them messed up.
Blind, child	If the Braille is squished, usually the ink is squished. They were nice. The new ones were nice. The other ones I had no idea what they were. I liked the bumps but they seemed to go away.
Blind, senior	She doesn't turn the bills around logically. Flips them over but doesn't rotate them. But she runs her fingers over the right areas (top and bottom long edges). "All I can find is this round thing." (was 0 in 100, upside down). Unless I would get new bills, it's very hard for me to tell.
Blind, adult	Comment regarding tactile codes: If it's easy to counterfeit, somebody's going to do it. I like the idea that anything you do like that, it will be really hard to counterfeit because they don't understand what the code is. When they get worn down some it would be harder to tell. You know what I would like better? If they had done more than one corner. I like the idea but I would like it

	better if it was on more than one corner.
Blind, adult	I don't know why this is so hard. This is frustrating. I am not finding much that's helping me here. I think they're nice when they're new but when they get old they're not so easy. I can feel that: one zero zero.
Blind, adult	I like the new ones. They're not holding up very well, are they?
Blind, adult	I like it. 1s would be no clusters. A cluster on each end. That would work.
Blind, adult	The font is very good. It's very plain. I like that. For the 100, the numbers are awfully close together -- difficult to tell that it is two numbers (00).
Blind, adult	The old ones were really hard to tell. The older ones were almost impossible to tell. If you guess enough times you'll get some of them right. The new ones were easy to tell.
Blind, adult	This Canadian is really easy for me. Prefer dark on light numbers.
Blind, senior	Can read magnified print

### Swiss Franc

Participant	Comment
Blind, child	They were more obvious. Colors and sizing.
Blind, child	I like them.
Blind, adult	I really do not like having the differences between the money be in the length.
Blind, adult	20 vs 50 similar in darkness. 10 is lighter. Center of face is darkest on 50. Having them one at a time it's hard to tell which is which. If you have them all together it's easier to tell. If you just handed me a bill I wouldn't really be sure that really was what I might guess. Those were easier (compared to Australian). Because of the different faces you could figure out which was which. With the size you could get an idea because the fatter ones seemed to be the larger ones. Swiss colors not helpful.
Blind, adult	That's awkward to do it that way, but it is a detectable way.
Blind, adult	Those are pretty easy to tell. The ones that are different by one dimension would be pretty easy to figure out. You'd catch onto those.
Blind, adult	If you really played with it so you had that feeling memorized, it could be helpful.
Blind, child	They're pretty cool.
Blind, child	Prefers when sizes change both directions.
Blind, child	Liked that one
Blind, child	Liked that one
Blind, adult	"Those work." I was confident about the 10. I was more confused about 20 vs. 50.
Blind, senior	I was confident about the 50.
Blind, senior	They're just so close that I don't feel at all as if I'm doing a good job.
Blind, child	Confusing.
Blind, child	It's really hard to tell the difference between the three though. I mean they are then same widths. It's hard between the 10 and the 20. They're really confusing.
Blind, elderly	The paper has a nice feel. I think I might do better if I handled it better.
Blind, senior	Didn't understand the scheme. Just guessing, 100.
Blind, adult	Didn't like them.
Blind, senior	I think I could get to learn it.
Blind, senior	The texture is good, but I don't like the system. With a lot of practice, you might learn this or you might not.
Blind, elderly	I think it could work. It might take a long time to get accustomed to it.
Blind, senior	3 denominations aren't bad. If you get up to 5 it might be trickier.
Blind, adult	Difficult if you don't have one to compare. Probably with use you could maybe get used to it.
Blind, adult	Do not like size differences.

### Euro

Participant	Comment
Blind, child	Euros better than AU for sizes.
Blind, child	I can't see colors. Not as good (as Swiss).
Blind, kid	I would have trouble with this. It's kinda confusing to tell the difference between some of them. Regarding the EU100: "that gets a little out of hand."
Blind, adult	I would be lost trying to use Euros unless I had a pattern card to use them. I might eventually learn how to tell them apart, but it would take me a while. If I lived there I could probably figure it out after a while, but if I was just travelling there I would probably end up getting fleeced.
Blind, adult	100 and 50 – can read the numbers. 20, 10, 5, can't read the numbers. Other than the 5s and 100s, the 10s and 20s were pretty much similar; I was guessing. Lighted background with darkest numbers is easiest for me.
Blind, adult	I like the Euros.
Blind, adult	I'm not real confident in guessing the sizes. It'd be something you'd have to get used to.
Blind, adult	Uses left hand as measuring guide (for width, not length)
Blind, adult	I can see that I would have some concept after I had had them in my hand a bunch, and what I would do is still put them in different places in my wallet then. I think I could get the hang of it with practice. In Norway they have something you can carry to check the bills.
Blind, child	Those were awesome.
Blind, child	Those were awesome but really, like, random.

Blind, child	Those ones were easy.
Blind, child	Feel the same.
Blind, child	I don't really like that system.
Blind, child	I like how it goes up in size for denomination, so it's logical.
Blind, adult	People don't need to use the CashTest guides after a while.
Blind, senior	Unless you have a pile of them, you don't know. I don't like them. When traveling, I did exactly the same thing I do with American money. (folding)
Blind, child	Those are confusing.
Blind, child	A little difficult. Not bad.
Blind, elderly	They're stinking.
Blind, adult	I don't like the different sizes. I really don't. I like everything to be uniform. Everything doesn't fit in your wallet.
Blind, senior	I still say: to know each one, you'd have to have them all, wouldn't you?
Blind, senior	They're a lot different, but still I don't like them. Didn't like them after using them.
Blind, elderly	Liked CA better.
Blind, elderly	This is a problem for me. I would be guessing at them. She can't really tell the color difference. That larger print. I can see that.
Blind, child	They definitely take some getting used to. Liked the foil strip as a hint.
Blind, senior	If I was plunked down in Europe and somebody gave me a bill, I would be very hesitant. I would have to have something to measure it with.
Blind, adult	There's not enough distinction. Maybe with use I might do a little better.

### UK Pound

Participant	Comment
Blind adult	I'd probably still fold unless the tactile identification was very reliable. The Euros were easier. There was a more dramatic size difference.
Blind, child	I don't know. I liked them. [Didn't try to see the large print.]
Blind, adult	I don't like that foil business at all. I don't want to pull it out and feel the whole thing. I could probably memorize the sizes of the bills. I probably could get to be pretty good at it, but right now as a visitor this would not be a helpful thing to me. I don't think much of them.
Blind, adult	That wouldn't be easy to tell.
Blind, adult	Easier than Australia. You need a bit more size difference than some of these other ones. "You have to get used to it."
Blind, adult	I hate judging by size. Size in general. I know if I was in a country I'd get used to the feel of it better. I wouldn't want to trust measuring it the way I've been doing.
Blind, adult	I don't know why, but I had a tougher time feeling that than the Swedish ones.
Blind, child	they feel the same to me (narrow vs. wide sets)
Blind, adult	Don't like it.
Blind, child	I like it.
Blind, adult	Foil strips and patches just feel like another lump in the bill. I would not get that. Width is better than length. It's easier to tell.
Blind, senior	It's such a guessing game, because they're too close. I had a terrible time with that.
Blind, child	They're confusing. They're difficult.
Blind, adult	I don't like those.
Blind, senior	I don't know. It's confusing. Would I have given all my money away?
Blind, senior	I could probably get used to those, but if you're not being careful you're going to give them the wrong one.
Blind, elderly	They're good. They're good. But I'll still go for the Braille.
Blind, elderly	But suppose I was by myself (regarding inability to see anything on the 50). What if I were paying somebody? Everybody not honest, you know.
Blind, child	They're OK. Like these better than EU, because the foil was in different places, giving hints. Still like Swedish ones better.
Blind, senior	Liked those ones.
Blind, elderly	Doesn't like them much (same as the other test currencies; US is fine with her.)
Blind, adult	Could work with practice.

### Swedish Kronor

Participant	Comment
VI, child	She and her mom agree she could probably manage OK in Sweden. Swiss was identifiable by color. Swiss and Euro were about the same
Blind, kid	This is OK
Blind, child	Suggests length and width both be different (unlike 20 vs. 50)
Blind, adult	I could get used to this.
Blind, adult	The length and width increments being the same can be a little bit confusing. This (Swedish) is definite differences. I could probably figure this out easier.
Blind, adult	The sizes are a little bit confusing to remember, but I know the 500s and I know the 20s. I think I only get the 50s and 100s mixed up.

Blind, adult	You'd learn after a while, about the different widths and lengths. They're confusing.
Blind, adult	Oooh, that'll be interesting. That's pretty wild. You could get the 50 and 100 mixed up if you weren't careful. (using hand to measure widths) Swedish were harder than the Australian for sure. You gotta pay attention to both width and length on those notes.
Blind, adult	That could work. It seems like there's enough difference in them that if I worked at it I could come fairly close.
Blind, child	Easy
Blind, child	Easy
Blind, adult	An interesting idea. An idea we ought not to throw out too quickly. We don't want it to be so hard for people to learn.
Blind, senior	When you're by yourselves, you look funny. It's easier than the Euros. I suspect I could get used to it. I think I'd still fold it.
Blind, child	"They're kinda confusing" [despite very few errors.]
Blind, child	That's not a bad system. But the [Canadian] dotted one is easiest.
Blind, elderly	[regarding 20] It's very tiny. This [100] is the bill you could tell by touching. The 20 and 50 you'd have to get used to the size. The ones I have the trouble with are 20 and 50. The 100 was easiest. The 500 was big. That money was not too hard to tell. I was doing better with that than with the dots. Those are interesting.
Blind, senior	It's hard to tell if you don't have them together. I don't like them.
Blind, child	I think I'd probably be able to handle them later. I don't know why they seem easier than the Euros, but they do. I like this system better. A couple of more variables have been taken into account. I think I like those a lot, because it doesn't just take the length, which could be an iffy thing. It's so easy to mistrust the length.
Blind, senior	This is confusing because it's out of place, the way it ought to be. (100). I might be able to get used to those. That ultimately might be easier.

## Visually Impaired Participants

### Australian Dollar

Participant	Comment
VI, adult	These were weird. I didn't find them all that easy to work with. I was guessing on what I thought I saw. 50s felt easier, but not sure. Contrast is my thing. General opinion: No. I could make it work, but it's easier to tell U.S. currency.
VI, adult	Can't see 5 from table, but can see the others. Doesn't like the size scheme. Doesn't like the poor contrast. The colors are all subtle. If I was going to go by color, and try to do it in multiple different lighting conditions, I'd want more contrast.
VI, adult	The colors would help but I wouldn't base it solely off that. I would go off the numbers. The numbers are nice and big. Pretty good contrast, so they're pretty easy.
VI, adult	Easier than Swiss
VI, adult	Those aren't bad.
VI, child	Those were interesting. Having the foreground of the numbers the same hue as the background is difficult.
VI, elderly	Down here [window] it feels like Scotch tape. What horrible colors! Somebody must have been color blind when they designed these. I don't like it.
VI, elderly	The sizes aren't that much different. Those are pretty easy to me. They're not very distinct colors – muddy.
VI, elderly	They're OK.
VI, elderly	I couldn't feel the difference as much as I could sorta see them in the upper right hand corner.
VI, adult	Canada's got 'em beat.
VI, adult	You see how big they make their 100 [number]? That's the way the US needs to make their 100. You can see the big print. The 100 and 50 I could see.
VI, adult	It was hard to see.
VI, adult	Harder than EU, not CA. It depends on the color.
VI, senior	For me, it's not my favorite.
VI, senior	I'd be really tempted to identify this by the color. Says these colors work better than the CA colors. With this you have to have all types to figure out what you've got. She wants an international code so different denominations match across countries.
VI, adult	"When you're at the cashier, you can stand there and test it, but who wants to stand there and do that? That's embarrassing as hell."
VI, adult	Better than ours, but so far CA has it right.
VI, adult	They put the numbers in the right place, so you can see them. Those are OK. But CA is better
VI, adult	I could probably tell them by their colors. I wish our money had different colors. It helps me. I did well with the colors. Those windows – what if they were harder plastic? Then you could Braille those. It wouldn't rub off.
VI, adult	The 5 doesn't pop.
VI, senior	The five is bad, the ten is poor, and the rest are OK. The five is really bad. The face vs. the reverse makes a difference. The contrast is different. The 5 seems to blend on serial side. The five is a real problem.
VI, senior	Tactile isn't great but not terrible. Not as sharp and clear as Canadians. Canadians have it down. The best yet that I've seen. Noted the fives are difficult. The contrast and the art behind the numbers are what is important. The 10 face side is easier to read.
VI, child	"less doodads; kind of confusing, too much detail"

### Canadian Dollar

Participant	Comment
VI adult	I found these easiest both tactile and visually. This actually proved easier than I expected (light on dark numbers). Preferred the tactile if it could be done. This isn't cool. [hunting for bumps] So they do wear down significantly. My first thing is to go for the tactile, and if that's gone I just try to find anywhere where the number is printed and look at it (close to eye). It's much easier with the tactile. If the tactile is worn off I can venture a pretty accurate guess based on two places where the numbers actually show.
VI, adult	Says 20, 100, 10, 5 all look quite similar, but 50 is different (color perception). Reverse of 10 is great (legibility) Likes dark on light better than light on dark. As far as orientation, if someone required you to face them, the silver stripe is nice. Can see the new 5 OK on the table, can't see the old 5 on the table (but could tell what it is by the silhouette). "This is much better here. [new 5]". Like new 5 better than Canadian 5. Older darker 5 on Canadian is preferred. Darker 5 like on the old Canadian (but bigger like new 5) would be ideal.
VI, adult	Would fold them as with US, then visually identify them after getting them out. Those are nicely done. Better than ours, in my opinion.
VI, child	These are cool.

VI, adult	They stand out more for me -- better contrast. It jumps out at you, just a little bit easier.
VI, adult	Easiest.
VI, adult	Can feel heavy print for numbers better than the raised dots.
VI, child	Since it has a whitish background, I can read these ones. Light on dark background was also easy. Primary colors don't matter to her.
VI, elderly	Canadian money is easy to read. Those are OK.
VI, elderly	Dark on light is easier. Those were pretty easy.
VI, elderly	Dark on light is a little bit easier I can see the [color] differences but I look for the numbers. Easy.
VI, elderly	Dark on light is easier. I could read the numbers pretty easily on those.
VI, adult	Some trouble finding dots on bills, not turning over appropriately. I like that raised number on there. I like that too.
VI, adult	That'd be easy. Especially after I've been drinking and can't see the large print any more. Natural light is best, but not too bright – cloudy day.
VI, adult	If I was in a bar or out of sunlight I wouldn't be able to see this. This lighting is no problem. I can read them but I can't feel them.
VI, senior	For me, no-no.
VI, senior	I'm beginning to tell them by their color. Likes the speckled pattern of the new digits better than the older solid pattern. "It's better tactually and visually."
VI, adult	"That's pretty cool though." (raised number). US should do heavier ink for some of the bills and not others. "Red and Green? Those are the main color blind colors. And you have them on two bills that are likely to be confused anyway. That is kind of stupid. Or 5 and 50. I wouldn't do anything similar on those."
VI, adult	I feel they made the same mistake – they put the number on the bottom. Prefer upper corner. Prefers dark on light but either are good. Easy, very easy. I'm really comfortable with this. The color contrast is good. It's just another way to verify. Said the newer 5 is more visible than the Canadian numbers.
VI, adult	Prefer the dark on light. "The numbers are nice and big." US 5 is better than CA 5, but I would like it in the upper corner.
VI, adult	The only thing is – do they rub off? I love the color and the bigness of the numbers.
VI, senior	My Braille isn't that great, but the separation/location helps. Numbers are the key, strictly by the number. The heavy ink feel to the numbers, that helps. Reverse numbers: no problem. The strip doesn't interfere with the numbers. Halfway through: Size and contrast are really good. Those were easy.
VI, adult	Dark on light is better; light on dark is OK.
VI, senior	They did the numbers right. Braille not interesting. That's easy. They made the embossed numbers easy to read. Reverse, can read without problem, quickly. They're big enough. They're smart enough to use deep color for contrast. Pastels are too hard to read. The Canadians are smarter about designing their money. It [the largest numbers] doesn't need to be any bigger. It works.
VI, elderly	That's not bad. I still like American. I like that nice big purple 5.
VI, elderly	Very good. Very plain.

### Swiss Franc

Participant	Comment
VI adult	I'd probably have to compare them to something or to each other. Use template? Depends on how bulky. Fit in bag? It depends on the situation. If you're in the middle of standing in line, I don't think that is something I'd feel comfortable doing. But they were a little bit easier than the Swiss ones.
VI, adult	Reverse side of 20 and 10 look the same, with 50 different, but 20 and 50 look the same on the face, with 10 different. I'd throw it out.
VI, adult	Can see the colors moderately well. These would be hard to use on a functional level, because there is so much different color – on both sides different. The back side is not consistent. If you set two of them (different denominations) next to each other, you don't know which one you've got – fast.
VI, adult	The colors help, though it might take you a while to get used to it. Much more difficult. The numbers are small.
VI, child	The 10 and 20 are almost the same (color tint).
VI, elderly	Can see the base differences. "They're better than those Australian ones." These colors, they get me (before turning the bill over to the lighter side.)
VI, elderly	You really have to put two [different denominations] together to make any use of the size difference. To the eye they don't look that much different. The numbers were all smaller.
VI, elderly	They're a little harder to read than the AU or CA.
VI, elderly	Not easy. You'd have to have something to compare it to.
VI, adult	I don't like them.
VI, adult	These are supposed to have numbers on them? [not finding them] There were size differences? I didn't pay that any mind. I don't like them.
VI, adult	No problem.
VI, senior	I think that worked pretty well for me.



VI, adult	"It's funky both length- and width-wise. They're so similar that they're not discernable."
VI, adult	These would be very confusing. Their sizes are not that much different.
VI, adult	I'm having a little trouble finding what you're worth. Not as beautifully printed as the Canadian. It's color-coded. I'm all right with it. The numbers aren't printed nice and boldly. I wouldn't read the numbers.
VI, senior	All serial side up new ten seems narrower than others (20 and 50). I need to know where to look I think I'll find them. One side is easier than the other.
VI, senior	One side is clearer background blend for 20 (numbers stand out more).
VI, elderly	Can't tell any color differences between the bills. I wouldn't pass in Switzerland.
VI, child	Check first by color, then confirm the number; color-vision sensitivity issues.

## Euro

Participant	Comment
VI adult	They're interesting. The size difference doesn't seem to do all that much for me. If there isn't something else to go by I won't get the size difference. Large numbers really didn't do much for me.
VI, adult	Better than UK, but don't like.
VI, adult	These are harder to see. Little 5 is easier to read than the bigger 5 on the face. Same for 50. For the 100, 20 and 10, the larger digits are better.
VI, child	Suggest colored borders for different denominations. Those were random.
VI, adult	Can see the colors of all bills OK. Those were easier because the numbers were bigger. Regarding sizes (it seems to be a bit more of a difference between denominations). That one is more pronounced.
VI, adult	Easier than AU because they use more white, gives better contrast with the numbers. Canadian are still easier.
VI, child	Smaller numbers in lower corner are easier than the larger numbers with art behind them.
VI, elderly	Says German money (pre-EU) was nice and big. That was easy. But the paper isn't so hot.
VI, elderly	Can see base colors OK. They're OK.
VI, elderly	Can see the base colors OK. Fairly easy to identify.
VI, elderly	Can't see the EU 5. Have trouble seeing the foil strips. Can't see colors much at all. Can't see the larger 50. I wouldn't ever trust myself in a store with them. I'd have to have a buddy with me.
VI, senior	If they had one of those reader device machines, it might be OK. Just guessing 100.
VI, adult	Can see the base colors OK. I see that they're all a bit bigger than the others but man this would be something trying to do this! The 5 wasn't big. That's the 5 up there, but it's kinda like messed up in the building. I like Canada's better.
VI, adult	They should make money that when you touch it, it says what it is.
VI, adult	Looks like monopoly money.
VI, adult	I would do better with those, because they were so big.
VI, senior	If I had a little ruler...
VI, senior	Had some minor difficulty with some of the color differences. Noted that the digits collided with the art. I just have to turn it right-side up. It doesn't matter which side I look at. Doesn't pay attention to the large number, just the smaller one in the lower-right corner. "It's the contrast that does it." Eventually I'd learn to use just the color.
VI, adult	Didn't see the 5 in the art. It was OK.
VI, senior	Numbers are a good size, the big five is hard to distinguish. 10 ok, 20 fair. 50 is pretty fair. 100 is very good in the art work. 20, another one is the same. Looking down he has no trouble distinguishing visually.
VI, senior	Said the 20 is hard to read. Asked about the orange (50); it was too much for him. Bigger 5 is hidden in artwork. 100 is the easiest. The 5 just blends with the other colors.
VI, child	"They're cool": sizes, especially the color. Big numbers on art too obscured
VI, elderly	I didn't like those.
VI, elderly	They're not too bad.

## United Kingdom Pound

Participant	Comment
VI adult	Eh, not really. The size thing was working for me. The colors slightly. I think the 50s were a lighter color. I was also going on the fact that they were a lot larger and looked larger.
VI, adult	New 20 is better. "There's nothing compromising the background." Why would they go with high contrast and small size? "The difference between the 5 and the 50 is so great that you wouldn't make a mistake if those were the only two sizes." I don't like that at all.
VI, adult	Those are sized both ways. That's even better than ours. I'm not sure vendors would like that though. These are harder to see. It'd be quicker to learn these by size.
VI, adult	The smaller denominations, with the bigger font, are easier to see. I could see it (50) but barely.
VI, adult	Says older 20 is clearer.
VI, adult	That 20 up there is worthless (new design). This is the better 20 (old design).

VI, child	It was easier than Euros.
VI, elderly	Can read the 20 on both styles with equal ease. Foil patches not helpful. Likes US dollars better. I like all of them but the 50. The 50 is a bit harder to see. I don't know why, but it is.
VI, elderly	Older 20 is better. It's hard to read [50]. They were alright except the 50. They didn't make an effort on that one. It's not as much contrast.
VI, elderly	I have trouble identifying this as a 50. Older 20 was easier. All OK except the 50.
VI, elderly	The colors seem to be identical. Can't see the newer 20. Those are not easy for me.
VI, adult	I don't like this 50. It's not to big up there. They need to make it bigger. Canada's got it beat.
VI, adult	Can read both 20s, but the older one looks like a 200. It's OK but I don't like the 50.
VI, adult	You say this is a 50? Where the heck is the 50 at? New 20 is easier than old. Those aren't bad – better than the CH.
VI, adult	I don't really like them. I can do them except for the 50. The 50 being black on black and red on red, and with smaller numbers. I guess I'd have to compensate with size. It's not my favorite.
VI, senior	More confusing to me.
VI, senior	The pound sign looks like another digit. These would fan out better. This 50, I don't like at all. This works (10). This works (20). This doesn't work (new 20). I would have to say, "5, 5, 10, purple." [referring to upper-right corners of the bills.]
VI, adult	Those are lower contrast. And then they throw in the pound sign. The sizes are OK. Says he'd go for the colors with time.
VI, adult	They're not good. Those are harder for low vision. Base colors don't matter to her, but wants dark colors for the numbers.
VI, senior	Like the older 20 better. Using the upper left is good. Larger and darker would be ideal. Can't see the top right number on NEW 20. Trouble with the 50, hard to pick up the number.
VI, senior	Questioned pound symbol. Would need to work the symbols. Quicker and more secure to read the numbers only. Regarding the 20s: New bill has bigger print (size). The old one is darker. Older one is easier to read. At this stage in his life, it's the number. They should burn the 50. Did NOT like the 50 at start. Multiple comments that this was a hard one.
VI, elderly	The pound sign is the zero part? Right here? I think it stinks to try to read their money. I'd never get anything bought.
VI, child	"I can't read that". "Numbers "hard to find", especially the 50 . "It's just huge", doesn't need to strain eyes to check number.
VI, elderly	Can't see the pound sign next to the 5 on the 5 bill (contrast? Color?) She can see the tiny 5 (darker) though. Can't see the number on the old 50 either Older 20 is better than the new 20. You can send those back. It's very confusing!
VI, elderly	They were hard for me.

### Swedish Kronor

Participant	Comment
VI adult	This is a bit easier, because it varied in two different directions, but even at that you'd probably need to be in a situation where you could compare them. But if somebody hands you back change you know what you're getting.
VI, adult	Criticized the color mushiness.
VI, adult	They print it [numbers] right on top of the stripe [foil strip], so it makes it harder. It takes away from the contrast. The numbers are smaller; they don't stand out as much. The printing on top of the strip makes it difficult, so you have to flip it to the other side.
VI, adult	The colors stand out more than the numbers. I'd have to be careful.
VI, child	Those I can read, but it's a little difficult.
VI, elderly	It seems lighter on both sides.
VI, adult	Swedish is easy. The small one is a 20. The 50 is little bigger. The hundred is a little longer. The big one is a 500 – huge. The 50s got to be bigger.
VI, adult	Used feel as more than sight to recognize bills. I'm getting a glare off of them. I like the 50 because I can see it better. It's clearer than the rest of them.
VI, senior	Doesn't like them 100 vs. 500 confusing
VI, adult	Likes visible numbers in upper corners. "What matters is contrast. If you have contrast, and distinguishing little dots or something, you don't have to make them different sizes."
VI, senior	Easy to read numbers when flipped so the bar [foil strip] is not going through the numbers. The bar makes it hard to read. He's flipping them from the strip side to be sure. Move the strip to the other side. Agrees with black numbers.
VI, senior	The 50 is easy to read. The foil strip on 20 is hard to read. The 100 is OK, but strip causes problems. All he sees on the bar side of the 500 are the zeros. Move the strip. Do the numbers in black. Don't worry about the colorful artwork.
VI, elderly	I don't like these at all. These are terrible.
VI, elderly	I'm sorry. I don't like the pounds.

## United States Dollar

Participant	Comment
VI adult	20s I generally don't have a problem with. 10s are a little more difficult. 5s are a little bit easier because it is only one number as opposed to two. 50s and 100s I don't really run into very often. I see the 50. I don't know if I necessarily know it's a 50 or not. If they (20 and 50) were a little bit bigger and had a little bit better contrast, I'd probably be able to see them more easily. 50 without pink is better than 50 with pink. ...after looking at every single corner and not finding anything written on any of them, I decided it was a 100. Five maybe? It's probably a 100. (re new 5) [She was one of the few LV participants for whom the new 5 was more difficult than the previous one.]
VI, adult	Tinting on recent bills (5, 10, 20, 50) makes it look dirty. Doesn't interfere with silhouette. New 10 and 50 are pretty close though, except heads pointed different directions. Can't read tinted 10 from arm's length. "What I'd like to be able to do is not have to do this (hold it closer to eyes)".
VI, adult	They're awkward.
VI, adult	They need to make all of the numbers big. Bigger numbers are better. Darker -- the higher contrast the better. I can see the color, but I prefer the darker. If you're doing it quickly, the 20 and 50 are close. All of the bills should have a large number on both sides.
VI, adult	Hollow numbers are easier than the solid ones (20s). Has given 50s in place of 20s. Tinted 20 is easier because of hollow numbers. Big purple 5 helps. It's bizarre, but the color is OK. Darker wouldn't matter.
VI, adult	The tinting does make some difference. I keep thinking something is wrong with my money [regarding the new \$10s]. Have confused 20s and 50s several times in stores. Tinting does give some sense of what the bill is without looking at the number, but can't just go on that because of the potential for confusion. Size, color of new \$5 is good. "Plenty dark." "I have a hard time telling the 20 from the 50 in US currency, and the 100, but I don't see that one very often. I don't mind spending extra half a second looking for the hundred on the \$100 bill."
VI, elderly	With US money, I always look for the numbers. Don't confuse 50s and 20s. I'm stuck. [trying to identify a \$100 bill.] That second 0 doesn't look too prominent (in the \$100).
VI, elderly	They're [100s] hard to read, don't you think? I put my bills in with the back to the front because it's easier to read.
VI, elderly	When I get a hard to read one I know it's a hundred.
VI, elderly	Sometimes confuses 20s and 50s. Tries to avoid 50s for this reason.
VI, adult	This is purple? I can't tell it's purple. The 50 and the 20 look close. They need to change the 100. The 1s too. Making the 100 the size of either 5 would be OK.
VI, adult	It [big 5] looks black to me. Doesn't confuse 50s and 20s [How do you tell a \$100?] Because you can't see it. You see how big they got that 50? That's how big they need to make the 100. Says the size of either 5 would be OK. I heard (US) got a money identifier, but it's not always accurate.
VI, adult	I thought it [new 5] was fake money the first time I had one, because it was purple.
VI, senior	Objects to the purple hue used for the big purple 5 in new US5. Wants black instead. These new colors give me pause. It's a distraction. This to me is very confusing [\$100 bill.]
VI, adult	The new 5 -- doesn't make any difference
VI, adult	I have trouble with the \$100s. US 5 is better than CA 5.
VI, adult	I try to avoid getting \$50s and \$100s. They're gone wrong with ours. They put them at the bottom. You have to flip them over and reverse them. Wants big numbers on each denomination, of different colors.
VI, senior	The purple works for on the new five. The difference between the \$1 and all the other bills is that the \$1 is the only one that doesn't have a building on the back. The generation before this one was worse. He doesn't usually pay very much attention to the front, just looks at the back. Large print on both sides would be good.
VI, adult	I don't like that lighter 10 in the corner. [Lighter with new tinting.]
VI, adult	Big purple 5 is better.
VI, senior	Purple 5 is good. Darken the numbers, just print them in black. The 100 is identified by process of elimination. He doesn't like the 50 much. You need to do the back on these things. The purple 5 is good. The \$100 is a hard one.
VI, elderly	I just look at them. If I don't know what it is, I ask the cashier "What is it you just gave me?" Says the old 5 is easier to read than the new 5, but then changed her mind. She can faintly see the tinting of the new 10, 20, 50.
VI, adult	I look at the backs because they look different. I have to see the big number. The ones are easy. It's all that green on the back.
VI, adult	That (big purple 5) helps me a lot. I have to turn them right-side up. I can't read them upside down.
VI, elderly	These are the ones I have a little trouble with. I'm not sure if I got a \$1 or a \$10. I have to hold it way up close. Have no color vision to speak of. I love that (new 5). That's beautiful. I don't have to look twice. I can't see the tint (5, 10, 20, 50). None at all. I never tried a \$50. I can see that number. I have a special wallet for when I have big bills. That would be tough.

VI, elderly	The \$100 is very hard to read.
Blind, adult	When I can't find a number, I look in the corner and see if there is a 1 there. Older 5 works better because it is darker (higher contrast). It's either going to be a very old bill or a \$100 bill, because there is no 1 on it.
VI, adult	Don't notice the tinting on 10, 20, 50. Identify 1s by silhouette, 100s by Benjamin's face. Size of new 5 is very easy to see. Could be a little smaller. I look for the big fat numbers on the back. New 5 can pick out easily. The old 5: I can pick it out, but I really have to look for it. Same for 20 and 50.
VI, adult	If you give someone a 20, and they give you money back and say they're giving you \$16, you really have to trust that person. You shouldn't have to do [anything special] to make sure they're giving you the right money.
VI, elderly	[after spending at least 3 minutes with a \$100 bill, then deciding it was a \$10] See, they'd have cheated me out of all my money!
VI, child	Couldn't see the big purple 5. Said it might be the room lighting.
VI, adult	When I can't find a number, I look in the corner and see if there is a 1 there. Says older 5 works better because it is darker (higher contrast). It's either going to be a very old bill or a \$100 bill, because there is no 1 on it.
VI, adult	Where are you, Benjamin? Doesn't notice the tinting on 10, 20, 50 Identifies 1s by silhouette. Identifies 100 by Benjamin's face. Size of new 5 is very easy to see. Could be a little smaller. I look for the big fat numbers on the back. new 5 can pick out easily. The old 5: I can pick it out, but I really have to look for it. Same for 20 and 50.
VI, adult	If you give someone a 20, and they give you money back and say they're giving you \$16, you really have to trust that person. You shouldn't have to do [anything special] to make sure they're giving you the right money.
VI, elderly	I have some trouble with the \$100s. Overall I think it's inferior to a number of others.
VI, elderly	\$100s are hard.