

Challenge Project : Kids Media

Final Paper

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Analysis Phase

Problem/Need

“Screen Addiction,” “Tech Zombies,” and even “Digital Heroin!” These are just some of the headlines that parents can find when searching online for advice on media usage for their young children. According to the more colloquial literature, it seems like there are no benefits to technology. Instead, if we do not limit screen time for our children, we will create a generation of “zombies” - children addicted to screens, cut off from reality, and losing out on other forms of play. Although media are not the leading cause of any major health problem in the United States, the evidence is now clear that they can and do contribute substantially to many different risks and health problems and that children and teenagers learn from, and may be negatively influenced by, the media (Gruber et al., 2005; Lenhart, 2012; Strasburger et al., 2010; Van den Bulck, 2007). However, media literacy and prosocial uses of media may enhance knowledge, connectedness, and health (Hogan & Strasburger, 2008; Hogan, 2012; Lenhart, 2012).



The American Academy of Pediatrics continues to be concerned by the evidence about potential harmful effects of media messages and images. However, we should also recognize the important positive and prosocial effects of media use (Hogan, et al., 2012). It is difficult to keep abreast of the situation, because not only are children immersed in media for long hours, the media landscape they engage with has changed dramatically (Lenhart, 2012). Although television is still the predominant medium for children and adolescents, new technologies like cell phones, tablets, and social media are increasingly popular. The overwhelming penetration of media into children’s lives necessitates a renewed commitment to changing the way pediatricians, parents, teachers, and society address the use of media to mitigate potential health risks and foster appropriate media use (AAP, 2010; Nielsen Company, 2009).

The influence of the media on the psychosocial development of children is profound. Excessive and unmonitored exposure to media puts them at risk of losing their imagination abilities, developing violent or inappropriate behavior patterns that could lead to Attention Deficit Disorder, or becoming prone to physical illnesses like obesity (Adachi-Meija, et al., 2007; O' Malley et al., 2013). At the same time, new research is being released every day demonstrating the benefits of games, apps, and videos for intellectual development. So how do we make an informed decision about the kind of media exposure to be given to kids? (Lenhart, 2015; Mills, 2014)

It is understandable how parents might feel confused or overwhelmed. Technology changes quickly, generating a flood of information and opinion about its pros and cons. It is difficult for parents to keep track of it all, and to know which information to trust. The most reputable research is published in places that parents rarely see: journals, conferences, and like. There is no simple, easy way for parents to learn which media are helpful and which are harmful, how to use technology in the correct manner with their children, and how to give children a balanced diet of play with and without screens. Parents can refer to the food pyramid to inform children's diets. Perhaps there should be a "tech pyramid" that gives parents the media equivalent in an accessible format. As of now, however, no such resource exists.

Target Learners

Our project aims to address parents and caregivers of children aged two to five years. These parents and caregivers give their kids access to media in some capacity, whether it be television, tablets, phones, or computers. Our target learners see some benefit to media usage for children, but are concerned about its possible negative consequences. They are uncertain about what kinds of media to seek out, what to avoid, and what limits to set. They are likely to have some assumptions and opinions, and may be informed to some degree about child development and psychology, but may also be coming to the subject completely blank. From the survey responses and the abundant literature available, we found that parents commonly use Google searches to find the right type of media exposure to be given to their kids, and also discuss the matter with each other in open forums or social media groups. Some parents who are quite concerned about the negative effects of media exposure also prefer to discuss it with a psychologist or a pediatrician.

Parents mostly rely on the ‘word of mouth’ from other parents or relatives because that gives them the confidence to trust on the reliability of information that they are getting to make decisions for their kids. The survey responses also showed that mostly parents are willing to change their beliefs or parenting patterns, so that their kid is neither deprived of the ‘good’ that exposure to media has to offer nor the ‘bad’ that can disrupt their normal behavior patterns in the long run.

Exclusion Criteria:

We are not targeting parents and caregivers who are unwilling or unable to give children access to media at all. We are also not addressing parents and caregivers who give children unlimited screen time.

Learning Goals & Objectives

The intention of our challenge project is to help parents make informed choices, to back up those choices with research, and to assuage their anxieties. In particular, we plan to debunk the notion that media is purely evil, that it has no cognitive or emotional benefits and that it only causes irreparable harm. We hope to communicate what the benefits of media are, which titles are particularly beneficial, and how to set sensible limits. Our core message is that it is less a matter of *how long* children spend with media that matters, but rather *what* they are doing during that time, and *how* parents are interacting with them. We will identify particularly beneficial apps, games, movies and TV shows, and give suggestions for ways that parents can use media to support imaginative play, self-guided learning, and emotional development via co-viewing and the like. Our design takes the form of a recommended media “diet” akin to nutritional guidelines.

After conducting a preliminary survey in the analysis phase of the project, we got a sense of what parents currently allow in their homes, what limits they have on their children’s media usage, what benefits they see coming from technology, and what concerns they have. The survey results informed our learning goals, and helped us to narrow our focus to align better with parents’ needs. We learned that parents limit their children’s media usage in several ways:

- Setting a schedule - media usage is allowed on particular days or for particular amounts of time per day.
- Setting a rule that only parents can control devices, or that children may only use devices in the parent's' presence
- Content restrictions - for example, educational titles only

Through our design, we aim to communicate and inform our target audience about the strategies that they could implement for creating a 'balanced media diet' for their kids. The following are the three main parameters that will guide the design of our targeted 'media pyramid':

- Parents should pay attention not just to the quantity of children's media usage, but also its quality.
- Parents can maximize the benefits of media not just by supervising its use, but by becoming actively involved, by co-viewing, discussion, and drawing connections to offline play.
- Parents can select media that is not only educational in an academic sense, but that also supports imagination, curiosity, empathy, and open-ended exploration.

By having parents list their specific concerns about media usage, we can address those concerns specifically: how do we prevent media usage from limited children's attention span and focus? How do we prevent "addiction" and behavior problems? How do we limit inappropriate content?

We will support our design with both primary and secondary research. For primary research, we will interview pediatricians, child psychologists, scholars and other child development experts. For secondary research, we can turn to a broad array of academic research. As luck would have it, the American Association of Pediatrics recently revised their guidelines on media usage for young children, so that forms an excellent jumping off point. After thorough review of literature and analyzing primary sources of data in the form of surveys and interviews, our refined learning goals are as follows.

Through our interactive learning platform, parents will be able to:

- Identify and employ appropriate strategies for their 2-5 year old child's media usage, including limits (both in time and space), and ways to enhance learning (including co-

viewing/co-playing)

- Identify “quality” media for their 2-5 year old child
- Understand the importance of media as a part of a healthy balanced experience, and understand what other activities are necessary for healthy development

Discoveries from Analysis Phase

Existing Research Landscape Audit

The use of interactive screen media such as smartphones and tablets by young children is increasing rapidly. However, research regarding the impact of this portable and instantly accessible source of screen time on learning, behavior, and family dynamics has lagged considerably behind its rate of adoption. Pediatric guidelines specifically regarding mobile device use by young children have not yet been formulated, other than recent suggestions that a limited amount of educational interactive media use may be acceptable for children aged <2 years (Christakis, 2014).

New guidance is needed because mobile media differs from television in its multiple modalities (eg, videos, games, educational apps), interactive capabilities, and near ubiquity in children’s lives. Recommendations for use by infants, toddlers, and preschool-aged children are especially crucial, because effects of screen time are potentially more pronounced in this group. There are many negative messages about media, and how viewing and interacting with it might harm your child. But children can also benefit from media. The benefits depend on how old your child is, and what kind and quality of media your child is using.

Benefits of Media Usage

For younger children, the developmental benefits of media include developing:

- Literacy skills – for example, learning letters of the alphabet through programs such as *Play School* and *Sesame Street*, or through educational computer games and apps like Teach Your Monster to Read

- Numeracy skills – for example, learning to count or identify shapes through programs including *Sesame Street* and *Play School*
- Social skills – for example, learning cooperation by watching TV programs and using computer games and apps like *Toca Tea Party*, and websites such as [ABC for Kids](#), which show cooperative and helping behaviour.

For older children, there are:

- Intellectual benefits – for example, developing problem-solving and critical thinking skills by playing computer games designed to develop these skills, or developing ethical thinking by comparing family values with values in fiction or documentaries
- Educational benefits – for example, encouraging reading, particularly after watching a program or movie based on a book
- Social benefits – for example, joining online clubs such as [Club Penguin](#), which teach children strategies for effectively and safely using social networking sites, or playing computer games with friends and family
- Creative benefits – for example, developing skills in imagination, art and modelling, music and media, through using software and apps like *My Story* or *Bubl Draw*, or being inspired to make something by a TV show.

Parents' main goals for their children's media usage

are as follows:

[Education](#)

Promising research suggests that interactive media such as learn-to-read apps and electronic books (e-books) may increase early literacy skills by providing practice with letters, phonics, and word recognition (Kucirkova, 2014). However, such extraneous e-book enhancements have also been shown to distract children's attention from the story and to interfere with comprehension. A balance between the 2 is necessary to facilitate learning.

[Medium to avoid distress](#)



The ability of mobile media to effectively distract and entertain young children is also a potential benefit of their use. The use of mobile media is becoming a common behavioral regulation tool: what the industry terms a “shut-up toy.” This could be detrimental to later social-emotional outcomes when used as the principal way in which children are taught to calm themselves down (McQueen, et al., 2012)

Displacement from parents to technology

One mechanism by which heavy media exposure negatively affects child development is by displacing language- and play-based interactions with caregivers. Parents’ use of interactive media also has the potential to distract from parent-child interactions. Although interactive media are well suited to teach concrete knowledge (so-called skills and drills), other important pre-academic skills such as self-regulation, empathy, social skills, and problem-solving are primarily learned through children exploring the natural environment, interacting with peers and caregivers, and playing in unstructured, creative ways (Radesky, et al., 2014).

Overall, the research on kids and media suggests that the negative consequences of excessive media usage is detrimental for psychosocial development as it leads to obsessive, compulsive and other disruptive behavior patterns, poor sleeping and dietary habits, poor concentration, and short attention span, all of which interfere with learning.

However, the research also suggests that games and videos can develop socio-emotional skills, build vocabulary, and both stimulate and satisfy curiosity. Media usage can support imaginative play away from the screen and the positive contribution towards transfer of skills to real-world scenarios.

This brings us to a crossroad where it is clear that media usage is an irreplaceable aspect of our lives, for good and ill. That creates a need for recommendations and guidelines for parents to make informed choices. The New American Association of Pediatrics guidelines (Oct,



2016) recommend that parents should prioritize creative, unplugged playtime for infants and toddlers, and focus on quality over quantity of time spent on media. Parents should inculcate this habit of ‘co-viewing’, that is, engaging in media with their child, to help children understand what they are seeing.

More recommendations for parents include:

- Design a ‘healthy media diet’
- Make planned and sensible choices
- Set time limits for screen time
- Establish tech-free zones
- Overcome the use of media as “default mode”
- Develop a family media policy



Common Sense Media is one of the best existing resources. It is a comprehensive guide organized by media type, subject matter, age group, gender, and many other criteria. While it is admirable in its thoroughness, it is also totally overwhelming in its scale. We have found it valuable when searching specific titles, but it does not address general usage guidelines and strategies for coviewing.

The October 2016 National Conference of the American Academy of Pediatrics produced *Healthychildren.org*, an online platform to help parents design a Family Media Plan for their children. It is well supported by research, but it does not make recommendations about specific titles, and is written in a dry and clinical tone.

Results from the Survey conducted by our team

We asked parents a variety of questions to learn about their current attitudes about technology for their young children. The questions were as follows:

- How much time do you allow your kids to use these media per day? Do you have any other rules for them? (feel free to differentiate between various media, if need be).
- What concerns, if any, do you have about media usage for your kids? (i.e., developmental,
- What benefits, if any, do you see from your kids' media usage?
- What information do you wish you had about this
- What sources would you trust?

- Where do you currently receive information regarding your child(ren)'s media use?
- What is your age?
- What is your gender?
- What is your profession?
- What is your educational background?
- What is your marital status?
- Where do you live?
- What are the ages and genders of your children?
- What devices/services, if any, do you allow your kids to use? (i.e., Broadcast/Cable TV, iPads, YouTube, Netflix, apps, games)

We mostly received responses from women aged 30-45 with children aged 0-12 years old. They allow media such as YouTube, cable, Netflix, Nickelodeon, PBS, PBS Kids, Sprout, photos, FaceTime, Pixar/Disney, Kindle Fire, music, and various apps and games (Stack the States, Math Bingo, Endless Alphabet, etc.). They limit their children's media usage by time (1 hour per day), by time of day (only at night or on the weekend), by content (educational only), or simply that the children can't use the devices directly or without supervision.

Parents do see some benefits of media usage by their children. They believe that some media can educate their children in science, about other cultures, or literacy. Some parents mentioned how shows like *Daniel Tiger's Neighborhood* teaches their toddlers about "social etiquette" and how to empathize. They see how some media can teach their children the value of storytelling, and that it can support structured creativity. Some even mentioned the value of self-directed research that media can provide. Despite these perceived benefits, however, there are some very real concerns. They worry that their children will become addicted to technology, that their attention span and focus will suffer, and that they will be unable to sit without some form of entertainment. Other parents fear that their children may see violent or inappropriate content, or simply that they are not learning positive behavior from television. Lastly, some parents see that their children are not using their imagination enough, and believe that it is due to the constant presence of technology in their lives.

Results from the Interview conducted by our team

Expert #1 Response (Max Goodman, Manager of Sprout Original Programming/Development):

- #1 priority for Sprout is to be entertaining and fun to ensure that kids want to watch
 - Good stories
 - Character-based
 - Aspirational kids
 - Positive role models
 - May have flaws, but learn about/figure out tools to get by or improve themselves
 - Toolkit to overcome obstacles
 - Relatable scenarios
 - From kid angle- careful not to impose “adult” perspective, quirks, etc.
- Cognitive skills not a priority, focus more on social emotional.
- Don’t think that aesthetically appealing is necessary for quality (i.e. Dora).
- Because shows are more social-emotional on Sprout, many skills are baked into the characters, but focus is on the story, the world, the characters → make sure you can make enough episodes out of this, that it’s engaging for kids. Social emotional learning goals come later.
- In order to make sure the shows are “quality” shows:
 - Attach child development/psychology consultant to each show
 - Also consultants for specific parts of the show/skills that the characters have (i.e., Nina’s World has a sign language consultant because one character is hearing impaired)
 - Make sure the shows pass certain filters: characters must display certain characteristics.
- Kids are attracted to the content, whereas parents want to know what kids will learn/get out of the content.
 - Would be helpful for parents to see in a concise way what learning goals can come out of each show.

- Important to create aspirational characters so that children pretend to be them and will embody those social emotional skills learned.
 - Important to have apps/games to reinforce those skills
 - Also other experiences that allow children to really be a part of it

Expert #2 Response (Kristen McGregor, Producer of Sprout's live morning show, Sunny Side Up):

- Quality is so subjective, but I see it as:
 - Giving kids a greater worldview
 - Gives low income kids a leg up
 - Is well-researched
- The best media does all of it!
- The community portion of our website could have strategies as well as suggestions for new shows/apps/other media
- Perhaps you can add a word cloud about what parents are watching- this was you can see what is trending at any given point.
- Current offers for parents are really dry! Allowing for parent interaction is a great way to make it fun.

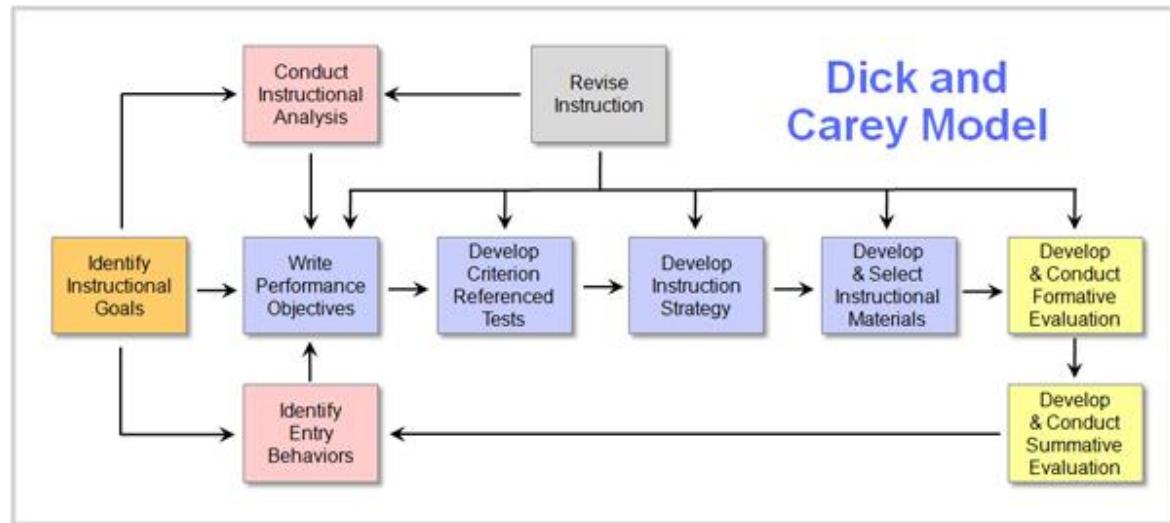
Expert #3 Response (Emily Reardon, Adjunct Faculty for ECT Program at NYU, Designer at Sesame Workshop)

- While designing, quality of media is given preference - ensure that the design elements and the content to be delivered are incorporated well
- For design purposes, learning goals are decided based on the target audience and their needs - once learning goals are refined through iterations, content is built and supplemented with design elements including graphic designs, multimedia, narratives, etc.
- Sometimes, backward design is also followed wherein the content and graphics are there but we need to check for the target audience for whom it will be suitable

- For most of the projects, human-centered design method is followed since our main aim is to ensure that the product is as user-friendly as possible as our target audience is young children.
- Prototyping, iteration, playtesting - are done continuously during product development
- For research purposes - pre & post tests are conducted for evaluating whether learning outcomes are achieved through the product usage - user data and analytics are also collected for evaluating and refinement of the design elements
- Products also created for adults (parents, teachers, caregivers, grandparents, etc) - same processes are used
- There is no way to 'ensure' that the parents will use the product - we can only strive to promote the product through good marketing and creating a user-friendly design

Implication for the Design Process

Our design methodology has followed the Dick and Carey Method that we chose at the outset of the project.



We continually re-evaluated what the design could be as we learned new information. The primary research, in the form of a survey, gave us direction when we were searching for articles, and the guidelines from the AAP and Common Sense Media were a wealth of knowledge. True to the Dick & Carey Model, as we began designing, we realized we had a gap in our research, and went back into the field to complete one-on-one interviews with media experts and our target audience. This allowed us to gain more clarity about the context in which our

learners would be using our website, giving us the ability to narrow our learning goals and to be prepared in our design phase. We learned that busy parents constantly check their phones on the go. This is why, in our design phase, we chose to make our learning environment into a website, rather than an app; we wanted to reduce the friction involved in accessing our resource.

Because of the informal context in which this website is likely to be used, it may be difficult to drive parents to the website, to keep them there, and to ensure that the information is readily transferable to their daily life (as they will likely be looking it over quite briefly). We have chosen to whittle the information down into small bullets so that it is easily readable, and we have given strategies that parents can easily employ into their daily lives to ensure that the information is relevant and readily transferable.

Original Reflection of Team's Work

Jordana

I have always been fascinated by how children learn and grow, and, separately, am a media and television enthusiast. In undergrad, this lead me first to developmental psychology classes and, eventually, to an internship in the content research department at Sesame Workshop. This was my first entry into the world of media research, and I've stayed there ever since. I've seen firsthand how much children can learn from media, and why it works so well as a learning tool. So when I see headlines like the ones described at the beginning of this paper, I can't help but to want to change their minds. This design idea came from me wanting to help parents see that media is not all bad, so long as it's used in the proper way, as well as to alleviate the confusion and anxiety that comes with navigating the "wild west" of technology for young children (as it has recently been described [here](#)). Also, because I work in children's television research, it is my job to make sure that the shows that reach the green light stage at Sprout are "good" for kids- that they are appropriate, educational, and fun! I believe in the power of media to teach children on a greater scale (especially those who don't have access to the best school systems) and in a way that doesn't feel difficult or like "work." If learning is fun, children will be excited to learn, and that is my ultimate goal. However, if parents see media as inherently evil, they won't give this media a chance, and I hope to give them a new perspective.

Our team has stayed true to this vision: first by exploring what parents truly want to know about technology for their children (Do they even have these anxieties? What are their current limits? What do they want to know?), and then by diving deep into the research that has been done. While this wasn't our original plan (at first, we planned to do all the research at the same time, as mentioned above), this was definitely the way to go, as it gave us clearer learning goals. True to the Dick and Carey Model, we revised the plan as we received that feedback. This process really drove home the fact that primary research can give significant insights and shape the rest of the project. I've learned how important it is to complete this part of the research at the outset to give a straightforward plan as it moves forward. However, there is a lot of information to cover in our design, and a concern that I have moving forward is designing something that can capture all the details that we wish to convey. Because I believe in the research and see its importance in so many areas, and because of the many concerns we've seen from parents, it may be difficult to bring all the answers together into one coherent, easily digestible design.

Heena

When I chose this topic for my challenge project, I was very clear that I want to understand the specific details of this area because this will help me build on my skills as a game designer. I have read a lot of research available in this field from the online research articles to the journal articles in the NYU Library as well as various educational design textbooks that focus on these aspects. This is not my first experience with this topic domain. As a Psychologist, I have encountered several children and parents going through the same problem where they have no clarity whether the kids should be exposed to media or not and how should they set limits for the same. The biggest challenge here is that you can't take an all-or-none approach in this situation. You have to be aware of both the positives and negatives before taking any decision. So to make it possible, the need of the hour is to help parents make an informed decision for their children with realistic planning instead of being scared or apprehensive between these extreme ends.

As a part of team work, the survey responses helped me to gauge at the different perspectives and needs of the parents. It helped me visualize the state of technology and its outcomes in a developed nation like US and correlate it with my personal experiences and

survey data collected for this project from people of a developing nation like India. My a-ha moment was when I realized that the cultural differences between the two places are also a contributing factor that plays a significant role in the differences of kids' usage of media and the kind of impact it has on children. I haven't been able to explore the research on this aspect but have been to establish several hypotheses from this exploration. I hope to test my hypothesis, if time permits and gather more research for the same so that I am able to enhance my understanding in this domain. I am also very keen to get an opportunity to interact with more experts in this field, like Psychologists, Pediatricians and Media Experts studying these aspects of technology in this country. I am hoping to get gather more first-hand data and delve deeper in the field.

Ethan

This topic is a personal one for me, since I fall squarely into the center of our target learner group. The photos throughout this paper show my son Milo using his iPad. We got it for him when he was sick and needed to have regular nebulizer treatments. Since then, however, we have struggled with how much to let him use it. His choice, of course, would be "every minute he's awake." I have felt strong and conflicting emotions about this. The practical advantages of letting him use the iPad are too many to count, especially during the periods when I am taking care of both him and his baby sister. On the other hand, I don't want him to become incapable of entertaining himself without the screen. I suffer from enough of that myself.

The benefits to Milo from his various apps and games are impossible to ignore. He is intellectually precocious, with a large vocabulary and wide-ranging curiosity. Before he turned three, he could identify the stabilizer legs on a backhoe. We saw Mars in the sky one night and that led to his watching NASA videos of the Mars Rover landing. There was a brief period where he was obsessed with Beethoven's Fifth Symphony and eagerly sought out videos of orchestras performing it. Several of our survey respondents mentioned how the Daniel Tiger videos and apps had helped their children understand their own emotions and those of others; I have seen this with Milo as well. Our liberal YouTube Kids policy led Milo to discover some other wonderful shows on his own, including the droll Peppa Pig, the science-infused Octonauts, and the warmly teamwork-oriented Paw Patrol. All of these shows have crossed over into his offline play. The Toca Boca apps have also richly informed his pretend play, with blocks and trains and so on. And the Toca Boca apps are beautiful aesthetic objects unto themselves, with loving

attention to detail in their graphics, animation and music. I feel that the same beauty we find in classic children's books can be found in Toca Boca and other high-quality apps.

YouTube Kids is a mixed bag. Many of the videos are cheesy MIDI arrangements of public domain songs set to inexplicable low-budget animation. These seem harmless enough, but there is not much benefit from them. The advertising is limited and age-appropriate, but very much present, and Milo is as susceptible to it as any other kid. If I never hear "Let It Go" again, it will be too soon. We have been too casual with letting Milo use the iPad before bed, which inevitably results in his being awake for hours after lights out. For better or for worse, he has come to expect that he will be able to "watch games" first thing in the morning or whenever I am busy cooking or taking a shower. He has never seen TV and we would like to keep it that way. My wife is suspicious of the iPad and would prefer to restrict it more, but she works long hours and in practice my policies usually prevail. My intuition says that the videos and apps are helping Milo much more than harming him, but I am not eager to pass along my own near-pathological internet addiction. Whatever guidelines and recommendations we end up establishing, I will be the first to benefit.

Luyanran

At first, we simply think that children using media is a common thing, but we don't know on which media are helpful and which are harmful, therefore, we want to do research on it. After team discusses we figure out we should create a document, which help parents to create a guideline on media usage similar to food pyramid. We have weekly meeting through Google hangout that best fit to everyone's schedule. We all commit to it; we work very well and contribute our ideas. Back to my undergrads I always do face to face meeting so it is a new experience for me. Since our program wants to do online and this experience make me feel positive things about online course.

My teammates, Ethan, Jordan and Heena all have experience dealing with kids, which I didn't. In the beginning I don't think it is a big problem, but throughout this project I know more about parents concerns and negative things if kids use media in an inappropriate way.

I think we should do more research on experts, interviewing experts how they think about kids media usage and what their views on creating a guideline for parents as a record. Moreover, we need to narrow our learning goal earlier so we can have more time dive into our project. We also need to see how parents reflection on our product, if there is a guideline whether they will use it as a reference or not.

Design Phase

Project Description & Visualization

Today's world is flooded with media of various kinds. For children, it is an unavoidable part of life. It is important that parents know how to filter through all the apps, videos, movies and television, to use media properly, and to set appropriate limits. There is a great deal of information available, but parents are likely to feel overwhelmed, both by the sheer volume, and by the fact that so many sources are dry, incomprehensible, or simply incorrect. Parents receive information from Google or Facebook, from friends, and from internet sources with a wide range of reliability. They do not want to harm their children with too much screen time, but are not sure how much is too much. Also, they may not be aware of the positive aspects of media for young children, the educational and emotional benefits they may provide when chosen and used carefully. Parents would benefit from a single, central location that sums up the present state of research in accessible language, offers a manageable set of recommended titles, and creates a community to discuss these issues with other parents.,

To solve this problem, we have created a streamlined and curated website of information for parents trying to navigate the media landscape for their 2-5 year old children. It includes relatable strategies and ideas, links to selected professional and academic resources, a quiz to evaluate their current knowledge, a forum, and a list of recommended titles for them to start with. The site combines the best parts of what parents are already using with research findings by professionals.

The website includes five subpages:

- Not Only **What** Media You Use, But **How** You Use It

- ◆ Here we have outlined several strategies and activities for parents to use with their children that have been vetted by reliable, research sources.

The subjects include:

- Design a “healthy media diet”
- Set time limits for screen time
- Establish tech-free/ “unplugged” zones
- Overcome the use of media as the “default mode” - or the default “babysitter” mode
- ◆ Each of these headlines is broken down to small, manageable strategies that are relevant for parents and easy to employ.

→ Quality, Not Quantity - What apps are “good” for preschoolers?

- ◆ This page explores not only a list of recommended titles, but also teaches parents how to make planned and sensible choices, as well as how to curate a collection of “good” media, and what specifics to look for when searching through the App Store or channel surfing.
- ◆ This includes our Five Components of Quality, that we recommend parents look for in each app, show, or video they find for their children. The more of these that describe the media, the better an app it is. These components of quality include:
 - Educational (for example, Tinybop)
 - Emotionally intelligent (for example, Daniel Tiger)
 - Creative (for example, Kidpix Studio)
 - Aesthetically appealing (for example, Toca Boca)
 - Fun for the sake of fun (for example, Sago Mini)

→ How Do You Measure Up?

- ◆ On this page, parents can take a quiz that allows them to assess how they currently use media with their children, and gives them direct and immediate feedback based on their answers. While they may be doing things well, there may be others that they need to work on. This quiz will bring those to light and assist them in making better choices in the future. In addition, it is written in a narrative format to make it easy to apply and learn from. The quiz will look like this:

- ◆ When your child is using media of any kind, what are you doing?
 - Sitting next to them, but doing my own thing
 - Sitting next to them, watching/using with them
 - Somewhere else, but checking in
 - Somewhere else, doing my own thing

Response: It is important for parents to be using media with their children in order to help them transfer skills to the real world, to foster parent-child relationships, and to give parents a better idea of how their children are spending their time.

- ◆ When searching for new apps/shows for your child, what do you look for?
 - I make sure it is teaching something
 - I look to see if it is straightforward without a lot of bells and whistles
 - I don't have any criteria
 - I make sure it has received input from developmental specialists.

Response: Many apps and shows are labeled as “educational” but it is important to make sure that these are quality programming that has received input from educational/developmental specialists, don’t have too many distractions from learning, and/or that it promotes interaction, connection, and creativity.

- ◆ I use media to...
 - Babysit my child
 - Connect with others (i.e. via FaceTime or to use the time to interact with my child)
 - Calm my child down
 - Teach them new things

Response: When children are just thrown in front of apps when they are upset or bored, they don't develop the proper skills to self-regulate in difficult situations. Instead it can be used as a time to connect and learn new things.

◆ My child uses media

- All the time - I don't set any limits
- Only as part of their day
- Before bedtime
- When they are having a hard time

Response: Using media before bedtime can distract children and impact their sleep patterns, and using it all the time can lessen time their time spent on other important activities for their development. Additionally, using media only when they are having a hard time limits their ability to self-regulate. For children under 18-24 months, media should be limited to FaceTime. For kids 18 months to 5 years, it should be limited to quality programming, no more than one hour a day.

◆ Other than media, my child spends time

- With family and friends
- Engaging in physical or imaginative play
- Reading
- None of these apply

Response: It is important for children to use media only as a part of their daily life - all of these other activities are needed for children to grow developmentally and physically.

→ Community Page: Speak to Others

- ◆ This subpage acts as a forum for parents to discuss our recommendations (both for shows and strategies) and make their own. Since parents are already discussing this topic on platforms such as Facebook, this brings the community aspect to our website to encourage participation between our users.

→ Learn Even More....

- ◆ Our last subpage simply gives parents additional resources, should they wish to explore further. We have pared down the information included in all of these websites, but if parents wish to read the full articles, they are available for them.

For more detail, and the type of information that parents will see on each subpage, please see our prototyping document [here](#).

After interacting with the website, parents will be able to:

- **Identify and employ appropriate strategies** for their 2-5 year old child's media usage, including **limits** (both in time and space), and ways to **enhance learning** (including co-viewing/co-playing)
- Identify "**quality**" **media** for their 2-5 year old child
- Understand the importance of media as a **part of a healthy balanced experience**, and understand what other activities are necessary for healthy development

Site mockups

Landing page:

The screenshot shows a web browser window with the URL "kidsmediaguide.org" in the address bar. The title bar says "Ethan". The page has a blue header with the text "media diet | recommendations | quiz | community | expert opinions". Below the header, the main content area has a red background. It features a photograph of a young child sitting on a couch, looking at a tablet device. To the left of the photo, the text "Preschool Media Guide" is displayed in a large, bold, red font. Below this, a paragraph explains the purpose of the website: "Today's world is flooded with media of various kinds - especially for children. With media as an unavoidable part of children's lives, it is important to know how to filter through that media and how to use it properly. This website is an easily digestible, curated website of information for parents trying to navigate that media landscape for their 2-5 year old children." To the right of the paragraph is a bulleted list of links: "It's not only what media you use, but how you use it", "What does a healthy media diet for preschoolers look like?", "Quality, not quantity: what apps and titles are good for preschoolers?", "How do you measure up? Take our quiz", "Community page: speak to other parents", and "See what the experts have to say". At the bottom right of the red section, there is a credit: "This web site was created as a challenge project in Design Process for Learning, a course at NYU Tandon's Digital Media Design for Learning program by Jordana Gilman, Heena Gulati, Ethan Hein, and Luyanran Le".

Strategies Page:

The screenshot shows a web browser window with the URL "kidsmediaguide.org" in the address bar. The title bar says "Ethan". The page has a blue header with the text "home | recommendations | quiz | community | expert opinions". Below the header, the main content area has a red background. On the left, the text "Making sensible choices" is displayed in a large, bold, red font. To the right, there is a diagram of a triangle with dashed lines connecting its vertices. The top vertex is labeled "fun for the sake of fun", the left vertex is "emotionally intelligent", and the right vertex is "aesthetically appealing". The bottom vertex is labeled "creative" and the bottom edge is labeled "educational". To the left of the triangle, a bulleted list provides strategies: "Media designed with educational consultants, child psychologists or other specialists can improve cognitive, literacy, and social outcomes for children.", "Avoid media that has extra enhancements that make it distracting for children to follow or learn. It shouldn't be too fast paced. eBooks especially should be without distractions, so children can focus on their own reading, literacy skills, and imagination.", "Diversify your collection so that children are not spending all their time on one activity.", and "Use open ended apps that encourage creativity, shows that teach reading, and videos that work on social skills - don't limit yourself!". To the right of the triangle, the text "What makes a good preschooler app, movie or TV show?" is displayed.

Recommendations page:

The screenshot shows a web browser window for the website kidsmediaguide.org. The page title is "Recommendations". Below it are links for "Movies | TV | Apps | Web sites". A section titled "Toca Boca" discusses the app's design, noting it as the gold standard for interaction design. Another section, "Tinybop", is described as having a fresh and unique nonverbal interaction style. To the right, a red sidebar features the text "What makes a good preschooler app, movie or TV show?" above a diagram of a triangle. The triangle has vertices labeled "fun for the sake of fun", "aesthetically appealing", and "educational". The base of the triangle is labeled "emotionally intelligent" and "creative".

Quiz page:

The screenshot shows a web browser window with the URL kidsmediaguide.org. The page has a blue header with navigation links: home | media diet | recommendations | community | expert opinions. Below the header, the main content area has a red background. A large yellow thinking emoji is positioned on the right side. The text on the left asks: "When your child is using media of any kind, what are you doing?" followed by a list of four options. Then it asks: "When searching for new apps/shows for your child, what do you look for?" followed by a list of four options. Finally, it asks: "I use media to..." followed by a list of three options.

Take the quiz

When your child is using media of any kind, what are you doing?

- Sitting next to them, but doing my own thing
- Sitting next to them, watching/using with them
- Somewhere else, but checking in
- Somewhere else, doing my own thing

When searching for new apps/shows for your child, what do you look for?

- I make sure it is teaching something
- I look to see if it is straightforward without a lot of bells and whistles
- I don't have any criteria
- I make sure it has received input from developmental specialists

I use media to...

- Babysit my child
- Connect with others (i.e. via FaceTime or to use the time to interact with my child)
- Calm my child down

Learning Design & Design Rationale

Our challenge project enters a world already filled with information on our chosen subject. Our task, then, is not to create a new resource from scratch, but rather to filter and sort existing resources at a level of information density that will not overwhelm busy parents. We need to strike a balance between a readable but superficial magazine article and a well-researched but dense academic literature survey. And we need to create some interactivity to differentiate our design from existing resources.

A reference-oriented web site is the obvious choice of format for us, because of its expediency both for learners and for us. However, we have worked to retain our skepticism about the value of yet another web site, and to stay mindful of the fact that this technology, like all others, is only as good as the content that it transmits. Mayer (2005) describes how radio was a great disappointment for education as a cautionary tale for excessive enthusiasm about the internet. Perhaps radio was unsuccessful in the classroom, but it has had great value as a diffuser of passive knowledge, culture and current events in the world generally. We see the internet as similarly benefiting informal learning more than formal learning.

We have structured our design as a reference work rather than a course. Our learners are not beginners at making parenting choices, and as Quinn (2014) observes, the course format is a positive hindrance for intermediate and expert learners. Beginners need all the sequencing and scaffolding of a well-structured course, but once that scaffolding is in place, it is more effective for learners to refer to information in the order they need it, at the time they need it. We take a constructivist approach, and view our purpose as "facilitating" learning rather than "causing" or "controlling" it (Reiser & Dempsey 2007).

We do not need to create a comprehensive media guide, or to explain a given app is good or bad; those resources already exist online. Instead, we want parents to understand the components of a good or bad app so they can evaluate for themselves. We hope not to convey factual knowledge, but rather to create a "learning enterprise" (Dirksen 2106), a method for parents to think about their media choices. Therefore, instead of evaluating whether parents come away from our site with a particular set of facts, we will be asking whether parents come away with a feeling of expertise, a confidence about their ability to make wise media choices.

Our challenge, then, is to remain learner-centered rather than technology-centered. In addition to our reference materials, we have made it a priority to include interactive features in our design: a quiz on media attitudes and rules, and a community forum. This is to take advantage of the reinforcement value of social approval and peer pressure from other parents. That said, we do have the luxury of assuming that our learners are already motivated (Smith & Ragan, 58), because early on, we chose not to address parents who indulge their kids' every whim; nor are we addressing parents who are unable or unwilling to give their kids any media access. Therefore, we do not have to create motivation from scratch, or to use involved psychological techniques like gamification.

The quiz will be created in a way that it gives immediate feedback to parents depending on the choices they make while answering those questions. As suggested in Dirksen (2016), feedback helps the learner understand where they are doing things right, where they are doing things wrong, and what they should try instead. Also, according to the principles of Multimedia Learning (Mayer, 1976), feedback should not just be corrective, but also explanatory. Hence, our design will incorporate these design specifics so that our learners know the ways and means to

achieve their ultimate goal, that is, to ensure that their kids get the right kind of exposure to the right kind of media.

Our website will also include a platform for the community members to interact with each other so that they can discuss their ideas, thoughts, opinions, etc. about the kinds of apps, shows or games available for kids. Learners need to ‘feel’ knowledgeable to make fruitful contributions towards these community discussion. So if we empower the learners with knowledge about positive and negative aspects of media as well as their implications for child’s psychological development, then they will feel confident while discussing the same with their peers. The learning principles surrounding our approach for these design specifics is Computer-Based Collaborative Learning in which learning happens through interaction with others over the internet. It increases the possibility of social learning as parents will learn from each other to evaluate the credibility of every app/show/game that their kid uses. Thus, our aim is to empower our learners by providing them with resources and knowledge so that they can make informed decisions for their kids, and then share those decisions with others to empower them as well.

Media & Technology Selection & Rationale

For this learning environment, we have selected a mobile-friendly website. In our one-on-one interviews with parents, we found that their major concern is that they are *busy*. Parents have no shortage of information resources, but choosing and evaluating from among them all can be overwhelming. This points to a shortcoming of Common Sense Media: the sheer volume of information it contains makes it authoritative and comprehensive, but also daunting and overwhelming.

Millennial parents are turning to email services such as The Skimm, Park Slope Parents, or New York Times Now, which summarize the news and sends them as email. Parents are looking for a quick, easy route, with no extra steps to take. For this reason, we decided that an app was not feasible for our learning environment, as this requires parents to take an added step of downloading the app and finding it in their phone (among a multitude of others) every time they want to reference our materials. We opted not to create an email service, as we wanted the information to be more interactive, with a community of like-minded people to speak to and

quizzes to take, rather than a one-way broadcast. This also allows parents to see what is working for others, as well as how to implement strategies into their everyday life. The quiz in particular allows parents to relate the information to their own lives, and see ways to improve what they are already doing- or see that they are doing a great job.

While the information in emails like The Skimm is constantly changing (as evidenced by the fact that there is enough to fill a new email every day), ours is likely to stay mostly the same. Additionally, since parents are mostly Google searching and speaking to friends on Facebook to learn about new methods and media for their kids, they are already on the internet in search of this information. This website gives them a “one-stop shop” for all the information, on a platform that they are already engaging with. By making it mobile-friendly, we have made it accessible for busy preschool parents, who are likely to do much of their internet reading in elevators, on subway platforms or in lines. This is also why we have chosen to organize the information on the website in small, easy to understand pieces, rather than including academic articles or exhaustive listings. We use an informal and encouraging voice that gives reasoning and encouragement with each strategy. For example, in the “limits” section, we say: “Screens should not be used an hour before bedtime, as it can interfere with sleep patterns - the more sleep your child gets, the happier you both will be!” and “By establishing certain rooms or times of day as ‘no tech allowed,’ children understand that this is a limit they cannot break. Children appreciate limits to understand that they are secure.”

The website contains information that addresses all of our learning goals, giving parents specific and relevant strategies that are easily implemented in their day-to-day lives (including what limits to set and how, as well as ways to enhance learning by co-viewing and co-playing). It elucidates five components of quality media and what to look out for when searching for media for one’s child. It also gives examples of these types of media so parents have a place to start. Additionally, we outline all the important aspects of a healthy balanced experience for preschool children, showing that media is just one part. The website format gives parents an organized and searchable location that can be accessed in multiple ways for varying lengths of time.

We know that parents are motivated to learn what is best for their kids, and they are always looking for “tried and true” strategies that they can try. This will be a sort of parenting magazine for media, which our interviews indicate will be an attractive format. The motivation to learn is there; however, the fact that parents need to get to the website in the first place may be a deterrent. Though we have eliminated some steps by creating a website instead of an app,

going to the website on its own is an added step for already busy parents. They may feel that finding, reading, and exploring the website is not worth their time.

Implementation Details

Our website is an open informal learning environment for all who want quick information on media usage for children aged 2-5 years. It is organized according to subject, and into small, easy-to-understand chunks, so that parents (our target learners) can look specifically at the area they are interested in at the moment. They can check in once or continuously. They can look at it quickly on their phones while they are busy with other things. Therefore, the sequence and duration is up to each individual learner. We presume that our users have some expertise over their own approach to parenting, and that our site will be filling in gaps more than providing a basic introduction. Therefore, our users should need minimal support, as the information is made for them to easily understand.

We will use a self-hosted installation of WordPress as our site's content management system. WordPress is free and open-source, supported by a robust community of developers and users. While our site does not take the form of a blog, WordPress is still a good choice for our purposes. It offers a huge selection of themes that can be customized via WYSIWYG editors or direct editing of CSS styles. It includes a variety of existing plugins for admin and editor account management, email subscriptions, media embedding, search engine optimization, analytics, surveys and quizzes, and information ontology. While WordPress is more complex and idiosyncratic than fully hosted solutions like Google Sites or SquareSpace, it has the significant advantage of not being subject to those companies' future whims, business decisions or policy changes.

For the community section, we will use an installation of [Discourse](#), an open-source forum software application. One of our group members has used it both as an admin and a community member. It has an elegantly minimalist interface that is easy to learn and renders well on mobile. It supports threaded conversations, and has effective moderation tools. While we will also establish a Facebook group to make it easy for people already invested in that platform, we also want to house our own discussions independently. Convenient and widely

adopted though it is, Facebook has some problematic aspects for our purposes, particularly its advertising and history of privacy issues.

While we believe we have designed a website that is easy to use and relevant for parents, making people aware that it exists in the first place may be a problem. Additionally, it may be difficult to make the website the first place for parents to go to find information about kids' media. It may also be complicated to transfer the conversation from Facebook to our website. However, we believe that having real voices of real parents will truly enhance the website, and so we included it in the design. We will need to launch with an aggressive social media campaign targeting parent groups on Facebook, Twitter, Pinterest, LinkedIn, and wherever else we can find them. We can also reach out to PTA groups, pediatricians, and email listservs like Park Slope Parents. Until the community forum attains a critical mass of users, we will need to seed conversations there, so part of the site content will need to include forum posts. For example, a site editor might give a list of "anti-recommendations," apps and movies recommended by Common Sense Media or that are popular on the App Store that we consider to be bad.

Evaluation Phase

Evaluation Plan

Evaluation is one of the most important aspects of designing a solution to a problem. In our case, the evaluation strategy is based on Rossi's Five Domain Evaluation Model. There are five domains in the model that are assessed – **Needs, Theory, Implementation, Impact and Efficiency**. Being a continuous iterative process, the assessment plan for our project will be both formative and summative. The evaluation questions focus on assessing the need of the project, its conceptualization, implementation as well as the impact and effectiveness of the designed solution (in our case, the website for Kids Media). The evaluation questions are also aimed at assessing the user experience for the target users. Our methods should be cost-effective, while at the same time provide us with relevant information about the effectiveness of our design solution.

Our first evaluation question is a basic one: did we succeed in giving parents who visit our site a more informed rationale for evaluating media and setting rules for their kids? Are they considering quality rather than quantity? In other words, we want to know if our website has succeeded in providing the outlined learning goals. We wish to know whether we designed something useful, and whether or how it can be improved in the future. We plan to do this by interviewing a selected subset of visitors (inspired by Nielsen: "[Why you only need to test with five users](#)"). By having an in-depth conversation, we can find out the specifics of why the website is or is not working for our target users. We can also hear directly from the learners the details of what would help to improve the website. Our learners are the best people to hear from, as we want to tailor the website to their needs. We will also use this as part of our summative research plan- to see if parents are truly learning from our website.

In our evaluation, we also wish to answer the question: "is the website a first stop while making decisions about media usage?" We want our Kids' Media website to be a reliable, one-stop, first destination resource for parents. When they have a question about their children's media, we want our website to be the first place they think of to answer it. We want to learn if parents were aware of our website when they had to make those decisions. We plan to evaluate this by using site analytics in order to track the amount of traffic coming to the site. We also plan to have this as part of our qualitative interviews or surveys. This way, we can ask where parents are going first, if not to our website. We can ask what those websites have that ours does not, or how we can better make parents like them aware of our site in the first place. We also plan to ask this question in our summative research, to prove that our website is making a difference, and that it is useful for parents in navigating the children's media landscape.

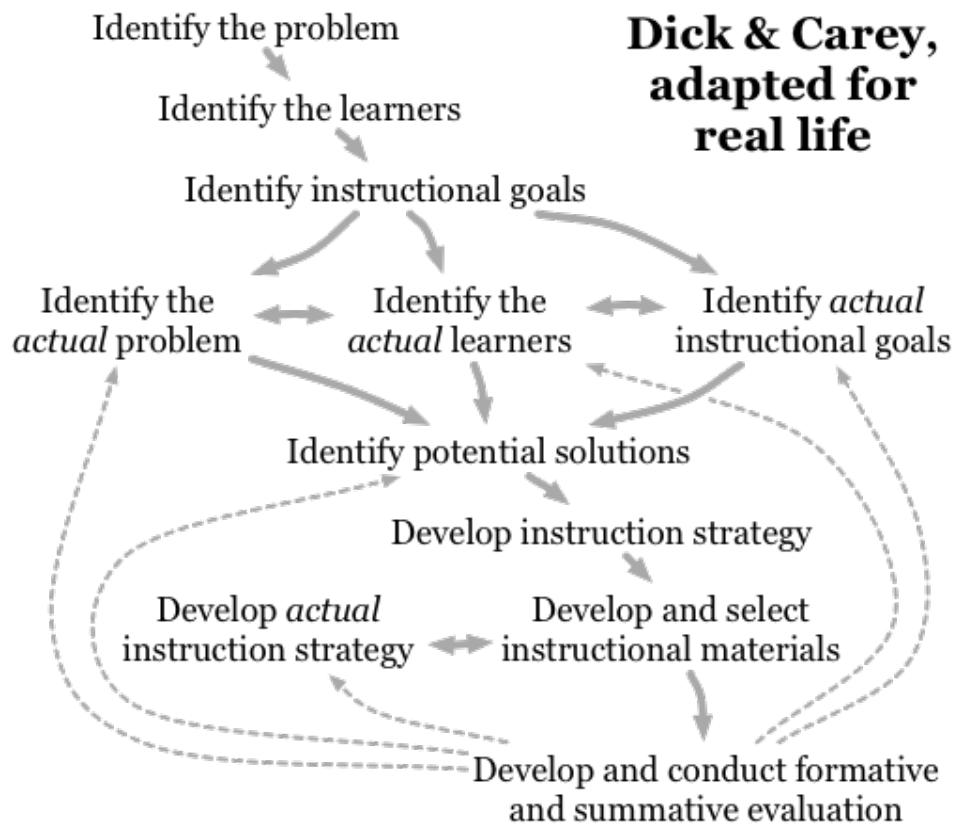
Another evaluation question we have is: "Are parents open to exploring new media based on our recommendations and criteria?" We wish to know if our recommendations are useful to parents of preschoolers, and if they are trusting what we have suggested. Based on this evaluation, we can change that part of the website to better fit their needs. Part of what is so wonderful about having a community aspect of our website, is that we can do much of the evaluation by looking at those posts. In doing so, we can see if people are trying out and discussing the media we have suggested, and how they feel about it. We also plan to ask about this in our qualitative interviews and surveys with our target users, in order to give more color to their decisions. If they aren't taking our suggestions, we can find out why, and what we can do to better tailor them to fit our learners' needs. In terms of summative research, this question is

important for app designers, as well as film and television producers to know. If they see that parents are looking for certain criteria when searching for media for their children, they may be more invested in creating this quality media. They can also see what types of media are popping for parents of preschoolers, and use this information to create what parents are looking for.

We also wish to know if parents feel that they have received relevant and useful information from the website, and if this is information that they are really looking for. This information is crucial for us to discover in our evaluation, because this is the basis of our website. Based on what we find and the feedback we receive, we can change the information we have included on the website. We designed it based around the information that we had researched, and that we believed that parents want. If this is not the case, we need to alter the facts that are presented on our site, tailoring them to better fit our audience's needs. We plan to evaluate this first by using surveys, and, if necessary, also qualitative interviews. A survey is certainly the less expensive option, and this may give us all the information we need. However, if we need more detailed information, qualitative interviews may, as above, give us more information. We plan to use these methods for the same reason we conducted surveys and interviews in our analysis and design phases. We want to hear from our target audience to ensure that the website is working for them.

Our last question evaluates our website's ease of use. It is important for us, as designers, to know if the user experience is easy for parents. As we've seen, parents' busy schedules change how they use media themselves, and we want to ensure that the design of the website does not make it difficult for them to use. Based on this feedback, we can make changes to ease the burden on parents trying to use our website. We plan to evaluate this by observing and interviewing our target audience while they use the website, as well as eye-tracking and user testing studies. This way, we can see if parents express frustration when trying to use the site, or if they have an easy time navigating through. We can also see if they go through all the pages, or if they stay on one page in particular. Through interviews, we can learn the details behind their navigation. We also plan to use site analytics here, as we can check the bounce rate and the time spent on each page.

Personalized Design Process Model



Our Design Process Model is quite similar to the Dick & Carey Model, which we have followed since the beginning of our process. However, our version reflects the continual reassessment and refinement of our goals and assumptions as the process went on. We begin by identifying the problem, the learners, and the instructional goals. This is then followed by identifying the *actual* problem, learners, and instructional goals through research, both primary and secondary, and much brainstorming. These three aspects of the design are refined as one dives deeper into the process. Additionally, they continually influence each other, which is why there are arrows between them. For example, in our project, as we learned more about our target learners (the “actual” learners- the full picture of a busy preschool parent), we were able to refine the learning goals to tailor to them.

This step is followed by the identification of potential solutions, and then by the development of the instruction strategy. Again, these are left somewhat open-ended, leaving the

final decision to be made at the next stage: developing and selecting the instructional materials, and developing the actual instruction strategy. As with the identification of the actual learners, problem, and goals, these also inform each other, hence the arrows between them. They also need refining as the process moves along. As we found with our goals and target learners, it was difficult to decide on a specific design until we actually began designing it. Lastly, we have “develop and conduct formative and summative evaluation.” Of course, this is left until we have something to actually test, but has arrows back to most other areas of our process. This way, we can continue to make changes as we learn more about our design. While we did not have enough time to perform an evaluation on our design this semester, we believe that testing would necessarily inform future iterations.

Reflection

As we advanced through the stages of our design project, there were countless lessons learned along the way. From the beginning, we learned how important it is not only to conduct surveys with your target audience, but also to speak with them face-to-face. By doing so, we were able to truly understand them. In our case, we learned how truly busy parents of preschoolers are, and how that impacts all other areas in their life. We needed to design something that was mobile-friendly, and is able to be used quickly and easily. We were also surprised to hear that parents are not necessarily against media for their children; instead, they are simply scared that they aren’t making the right decisions for them. This further proved the need for a design like ours.

Later, as we got to designing (in particular, the “recommendations” section), we learned that there are, in fact, quite a few well-designed apps for preschoolers. They are many that are researched and tested just as *Sesame Street* has been in the television world. As we recommended that parents look for media that are researched and tested, with input from professionals, this was a pleasant surprise for us. Our last “lesson learned” was simply that you truly have no idea what you are designing until after you’ve designed it. Our website design took a lot of brainstorming and discussion, and while we were pleased with the result, we didn’t know what it would be until we actually designed it.

In looking back over our work and our design process, there are a few things we would have done differently. Firstly, we realized that if we had narrowed our learning goals slightly

Final Paper

Design Process for Learning

earlier, we would have had a clearer path while designing. While we were pleased with the final result, part of what made our design phase difficult is that our learning goals were much too broad for one design. We also realized that if we had gathered first-hand data from parents and media experts earlier on and melded these together, this could have allowed us to design more refined learning goals from the start. Additionally, after writing our paper, we learned how important it is to create a formal editorial flow for our writing, along with strong project management from the start. This was certainly an area of growth for us.

We truly enjoyed diving into the research and creating a design that is accessible to parents and is something that they are clearly searching for. The digital world is such a huge part of many children's lives, but it is still mostly unknown for many parents, as they did not grow up with it. We are glad that, as a team, we could design something to assist parents in making important decisions about their children's media use that is both backed by research and relevant to their everyday lives.

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