



How Larabee is Rooted in Ethnographic Research

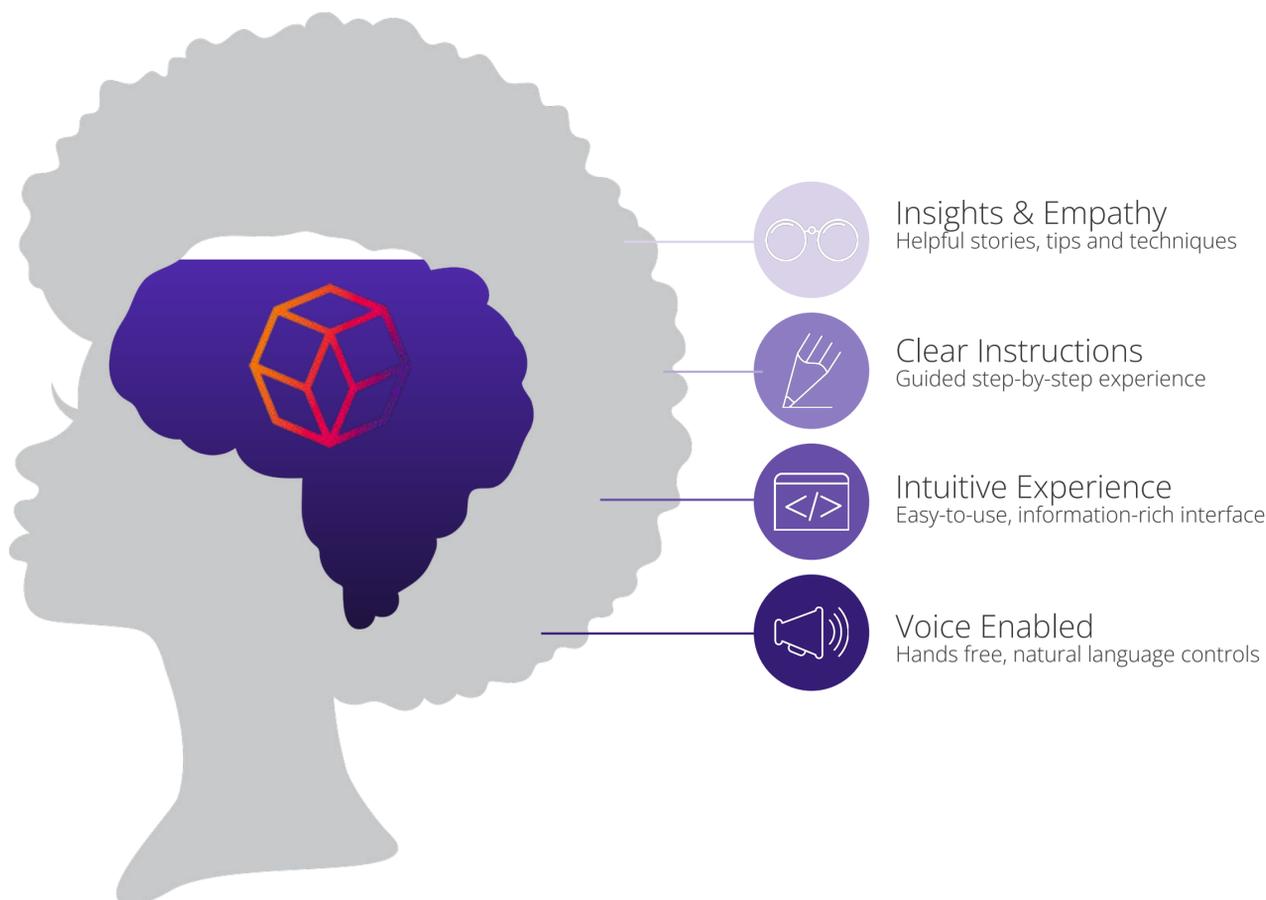
Authored by Grace Choi, PhD
CEO & Founder, Larabee

From Cooking to Everything Else

Our beginnings in food are the foundations for today's Larabee experience

My friend Alex is, by his own admission, a “pretty decent” cook. His arsenal of recipes includes crowd-pleasing favorites such as a pico de gallo he might take to a party, or a classic marinara for a quiet Sunday dinner with close friends. By all measures, the pico de gallo and marinara are similar in that both are tomato-based dishes that come together quickly with five ingredients apiece. The difference (aside from cuisine) is Alex’s **confidence level** when making them. For the pico de gallo, he has to find the exact recipe online and never departs from the precise ingredients and line-by-line instructions. His eyes dart between lines of text on his phone and the ingredients on his cutting board, his left index finger continuously scrolling up and down. When he makes marinara, which he learned from his old roommate (who learned from his own Italian grandmother), Alex moves effortlessly, grabbing this, adding that, adjusting the taste here and there to his own liking. Same person. Same degree of difficulty. Vastly different experiences.

Today, Larabee is a learning platform for procedural knowledge (skills, actions, and activities). When we began, however, our intent was to reimagine recipe interaction. As wonderful as cookbooks and cooking videos are, learning to make something from them is inherently less effective and impactful than learning to make something from another human being. We questioned whether it was possible to create a new model for recipes that *captured the richness of in-person guidance*, multiplied by the *distributive scale of digital technology*, while also *enabling home cooks to build on their skills and knowledge in nearly limitless ways?*



What we discovered was two-fold. First, the answer to this wildly ambitious question is **“yes, but not without ethnographic fieldwork.”** Second, **the problem we were solving for was much, much bigger than recipes.**

About the Author



Grace Choi | CEO & Founder

Upon graduating from the University of Notre Dame, Grace Choi moved to New York in 2003 and promptly enrolled in culinary school at the former French Culinary Institute. After receiving her Grand Diplôme de Cuisine and externing at Thomas Keller’s Per Se, Grace moved to Umbria, Italy, for a seasonal sous chef position at the award-winning vegetarian agriturismo Country House Montali, for whom she co-wrote the cookbook *The Vegeterranean: Italian Vegetarian Cooking*. In 2006, Grace returned back to New York to enroll in the doctoral program in Food Studies at New York University with a research focus on food, ethnic identity, and psychology. There, she studied under the psychologist Carol Gilligan, from whom she learned the Listening Guide method of qualitative inquiry and research. She also took coursework with linguist Bambi Schieffelin, whose courses in linguistic anthropology and the acquisition of cultural practices helped lay the foundations for Larabee. Grace received her PhD in 2014 and created and taught courses in food and psychology for The New School.

In addition to her academic studies, Grace developed branded content for and hosted a short-form interstitial program for the Cooking Channel titled “Cooking with Grace.” She served as a judge on Food Network programs such as “Rewrapped,” and continues to adjudicate for the James Beard Awards. Most recently, she has contributed a chapter to the upcoming book *Practicing Food Studies: Building an Emerging Field*, which will be released by NYU Press in 2023.

“Grace is smart, talented and compassionate. She has a singular capacity to synthesize recent developments in the field, identify the lacunae, and craft her work to fill that space. A tribute to her intellect is how quickly she mastered the intersection of Psychology, Sociology, and Ethnic Studies, which is one of the productive sites where new work on food is being done in the academy. Such an intersection is by nature open in those directions, hence difficult to contain and find the corner to develop disciplined work of one’s own. Her work was exemplary and has become a standard by which we judge other people’s work in the department.”

Krishnendu Ray, Professor, Food Studies



Below, I share **three critical learnings** from the ethnographic research methods I employed to understand how a new pedagogy for procedural learning could be created and what was required of it to meet the demands and potential of our human nature. These findings serve as beacons for us in nearly everything we do and build for, starting with the Larabee Player - our learner-facing interactive multimedia player.

Learning 1: Start with People, Not Paper

“Good luck, but it can’t be done,” said the CEO of an award-winning creative agency to me as he walked me out of his office in 2017. A friend-of-a-friend and thought-leader in the voice assistance space, he had met with me in his Midtown Manhattan office so that I could share my ideas for interactive, voice-navigated recipes and pick his brain. When I asked him to expound, he admitted that his company had been approached by one of the largest meal kit delivery services in the country to create voice-navigated recipes for their customers. “We prototyped, tested, tested again. No matter what we did, we couldn’t get our beta testers to complete a recipe, *let alone prefer us* to a written recipe.” It was an elegant summation of the problem every company attempting hands-free recipes at the time was facing. What the executive didn’t know was that I had built and tested a prototype simulation that had already succeeded where his had failed.

The reality is: voice-enabled recipes make *perfect sense*, and all of the startups and media companies clamoring for a piece of that space knew it. In 2019 both [Amazon](#) and [Google](#) were “doubling down” on hands-free recipes for their smart home assistants. The reason why they failed to gain critical mass wasn’t because of a lack of need. Rather, I believe they were starting with the wrong assumptions. Not unlike audio books, they were attempting to convert written recipes into voice-enabled experiences. We knew that in order to create a meaningful experience that spoke to how we learn, we had to begin from the font of knowledge exchange: person-to-person interaction. Wildly challenging; incomparably effective.

Pumpkin Pie

ingredients

DOUGH	FILLING
FLOUR - 250 GR	PUMPKIN - 500 GR
BUTTER - 125 GR	MILK - 500 ML
POWDERED SUGAR - 50 GR	SUGAR - 200 GR
EGG - 1 PIECE	VANILLA - 1 POD
MILK - 2 TBSP.L.	EGG - 2 PIECE

preparation

Cut the cold butter into cubes and grind with flour and powdered sugar until crumbs. Add egg and milk. Knead the dough, roll it out and transfer it to the mold. Leave in the refrigerator for 30 minutes.

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After cooling, drive the eggs into the pumpkin.

Put paper on the dough and cover with rice. Bake for 10 minutes at 356°F (180°C). Remove the paper with rice, bake for another 10 minutes. Cool it down.

Pour the filling on the dough, bake for 30 minutes.

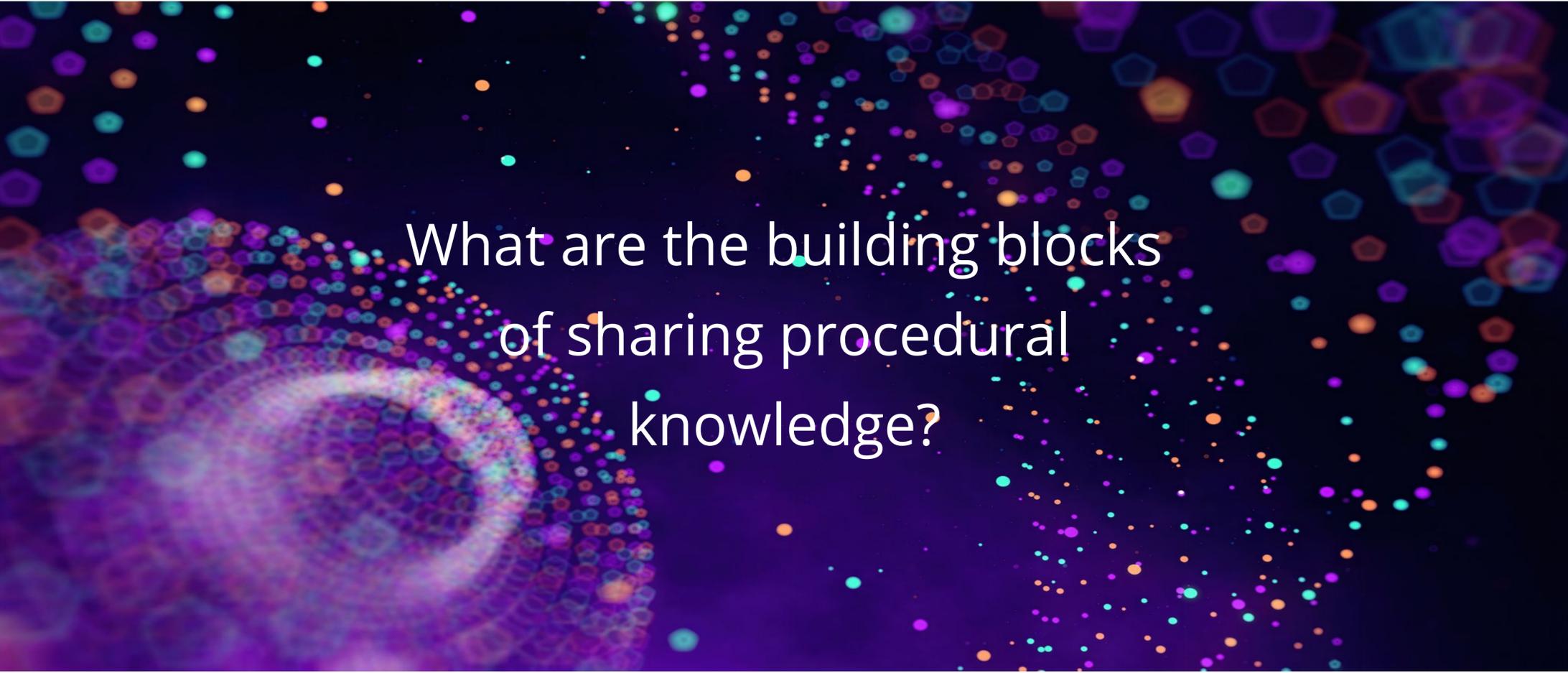
Even tastier with whipped cream or cream cheese

Consider the recipe format shown here, with the top down list of measured ingredients and sequential list of steps.

Written recipes of this nature are wonderful references, and I use them daily. However, one shouldn’t mistake ubiquity for immutability.

This conventional recipe format didn't walk out of the Garden of Eden with Adam and Eve, nor is it the quintessential model for what recipes should be. It is, like all things, manmade, a reflection of time and change. Today's written recipe finds its origins in the late 20th century with the help of individuals like William Kitchiner (responsible for including exact measurements for every ingredient), Isabella Beeton (who wrote *Book of Household Management*), and Fannie Merritt Farmer (of *The Boston Cooking School Cook Book*) who systematized and typified the format of recipes we know and love today. The beloved M.F.K. Fisher writes at length about the evolution of recipes as reflections of the technological capabilities of human beings in her gorgeous essay "The Anatomy of the Recipe," found [here](#).

Ethnography begins with one theoretical question through which one case of everyday context is observed and interpreted. One question serves as the north star in a research process involving iterative cycles of interview, observation, interpretation, and application. For Larabee it was:



What are the building blocks of sharing procedural knowledge?

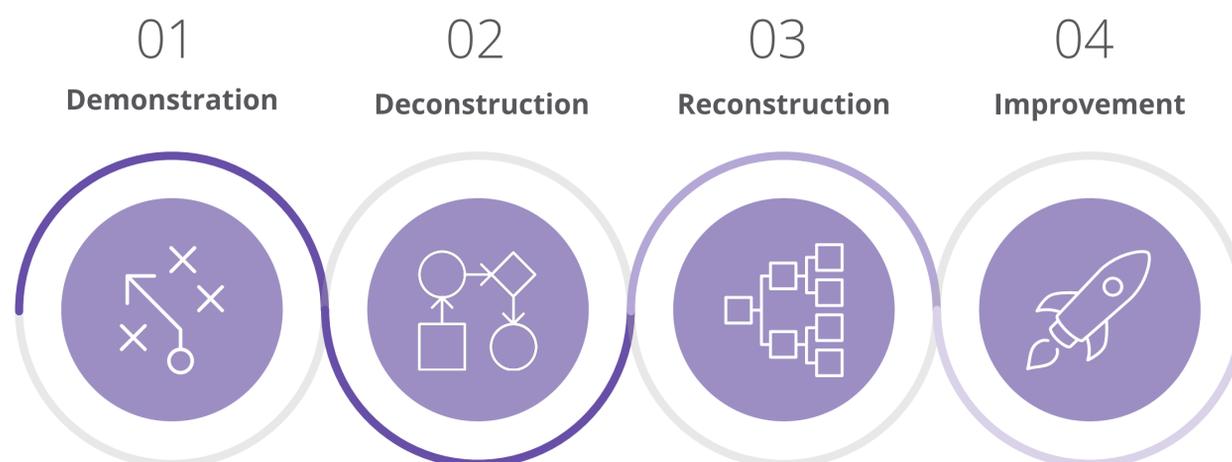
First, I recruited volunteers and conducted pre-interview questions centered on decision-making drives, aspirational wants and needs, routinized behaviors, and questions on food and identity. Then, I recorded the act of my giving them a cooking lesson for a dish of their choice. One-on-one, they learned to make dishes like sweet pickled peppers, creamy jalapeno crab dip, and gochujang ribs. I reviewed the footage to note verbal exchanges, non-verbal performances, examples of correction and adaptation, the emergence of conversation and other moments of candor, the use of metaphors and analogies, etc.

In tandem, I observed classroom teaching and learning in formal pedagogical settings in the form of my old culinary school (the now-closed French Culinary Institute in SoHo). I watched chef-instructors give detailed lessons on classic dishes, such as french onion soup and potato galette. In this particular environment, novices are indoctrinated into the world of culinary arts and gastronomy, adopting its vernacular, developing action- and tool-based muscle memory, and preparing themselves for the fast-paced responsibilities of professional kitchens.

During one particular exchange, I watched as a young student, grating cheese with the energy of a sloth, told his chef-instructor about a recent section he had read from *The Omnivore's Dilemma* by Michael Pollan. Expecting to see the instructor step in and demonstrate the application of more force to the cheese, I was surprised to see him pat the young man's shoulder after a minute and walk away.

Later, I asked the instructor, “Why didn’t you tell that student over there to use a little elbow grease on that block of gruyere?”

“Oh, that?” he replied. “Yeah, that was driving me nuts. Like, how hard is it to grate cheese? But that wasn’t the right time to correct his form. He needs to develop other foundational knowledge first.” For the life of me, I couldn’t imagine what could be more foundational than that, but who was I to question? The point was: information withheld was almost as important to consider as information shared.



Any person-to-person exchange is a uniquely dynamic and psychological encounter, and for that reason it can be difficult to identify patterns and behaviors that apply to each and every one. What I did learn from these observations was the nature of successful learning as an iterative, repetitive, and buildable process in which learners are scaffolded in bridging the gap between what they do know and don’t know. If you map out a very general organizational framework of imparting procedural knowledge, you can see a cyclical pattern that looks like: **demonstration-deconstruction-reconstruction-improvement**. I can’t be so bold as to say this cycle is universal, but I have not seen examples of that not being the case.

This early fieldwork analysis informed the creation of the Larabee Player as one that prioritized crystal clear iterative cycles of delivery and timely information that came neither too soon nor too late that adapted to different learning speeds and skill levels.

Learning 2: Remove Unnecessary Obstacles, Add Compelling Ones



In a 2021 episode of The Late Show, Stephen Colbert asks the actor Henry Cavill what it was like to build his own gaming console – an experience the actor had recently documented on social media. Cavill described it as immensely rewarding, having accomplished it by watching informative YouTube videos, conducting independent research, and reading instruction manuals. Many people, Cavill explains, do not read instruction manuals but then proceed to post questions to the online community to which a curt response invariably comes back as: “RTFM.” When Colbert asks what “RTFM” means, Cavill responds, “Read the...manual” (politely omitting the middle f-word).

The acronym RTFM has two implications. First: don’t waste others’ time because you are too lazy to do the work yourself. Second: deciphering an instruction manual is a necessary rite of passage. It’s mentally cumbersome, but required.

The ability to translate written instructions into actions is certainly a commendable skill. But it is not a requirement to gain expertise, particularly when it comes at the exclusion of so many learners. When it comes to procedural knowledge – or all forms of knowledge, for that matter – human beings are gifted with diverse learning styles in which one mode of information intake (e.g. watching, thinking, feeling, or doing) dominates others.

Privileging one style of learning invariably excludes and discourages those who are weaker in that particular area, resulting in learners who chalk up their inability to cook, do math, create art, or perform surgery to their own insufficiencies and inadequacies. The most effective coaches and instructors are not the dogmatic ones who prioritize and hammer in one style of learning, but those who can teach in all styles while intuiting the strengths and weaknesses of the learner. So maybe you don't have to RTFM.

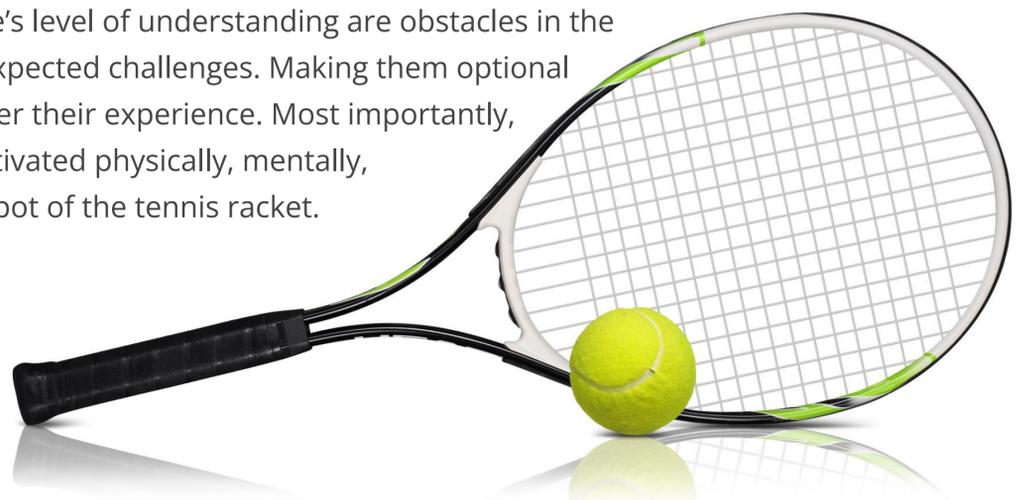
What I aimed to do, then, was to create a system that spoke to diverse populations. If the four styles of learning were watching, thinking, feeling, and doing, then the challenge for us was designing a platform that activated learners visually, intellectually, emotionally, and physically without overwhelming them. (Not easy!) My first attempt was the aforementioned prototype simulation created on GoPro, GarageBand, and PowerPoint featuring a recipe for seafood paella. After recruiting a batch of beta testers, I went into their homes with bags of ingredients, propped up the simulation on laptop, turned on the video recorder, and stayed out of the way. When the testers uttered words like “next step,” “pause,” or “play,” I manually navigated through the lesson. The testers were able to successfully complete a recipe, but it was clear that they felt inundated with too much audio and visual stimuli in the form of instructions and stories.

In many ways, this attempt upended and discouraged several of my assumptions going in, but opened the doors to make new hypotheses and craft rich new opportunities. Reviewing the video footage allowed me to track where attention was directed and obstructed by the system, learning where, when, and how to prioritize different forms of information.

Having reformatted responsiveness to physical and visual habits and behaviors, I turned attention to the emotional and intellectual. One of the key differentiators between synchronous in-person learning and asynchronous instruction is context. Namely, the lack of it. When Alex learned how to make marinara from his former roommate, they were participating within a contextual framework (their apartment) with all of its aromas, visual markers, and easy conversation. What's more, by recreating his grandmother's recipe, Alex's roommate was performing a reenactment of his relationship with her by imparting onto Alex the same linguistic cues, naming conventions, anecdotes, tips, and critiques. Every time Alex makes marinara, he, in turn, reenacts his lived experience with his roommate. It's a powerful and indelible dynamic that cannot be underestimated.

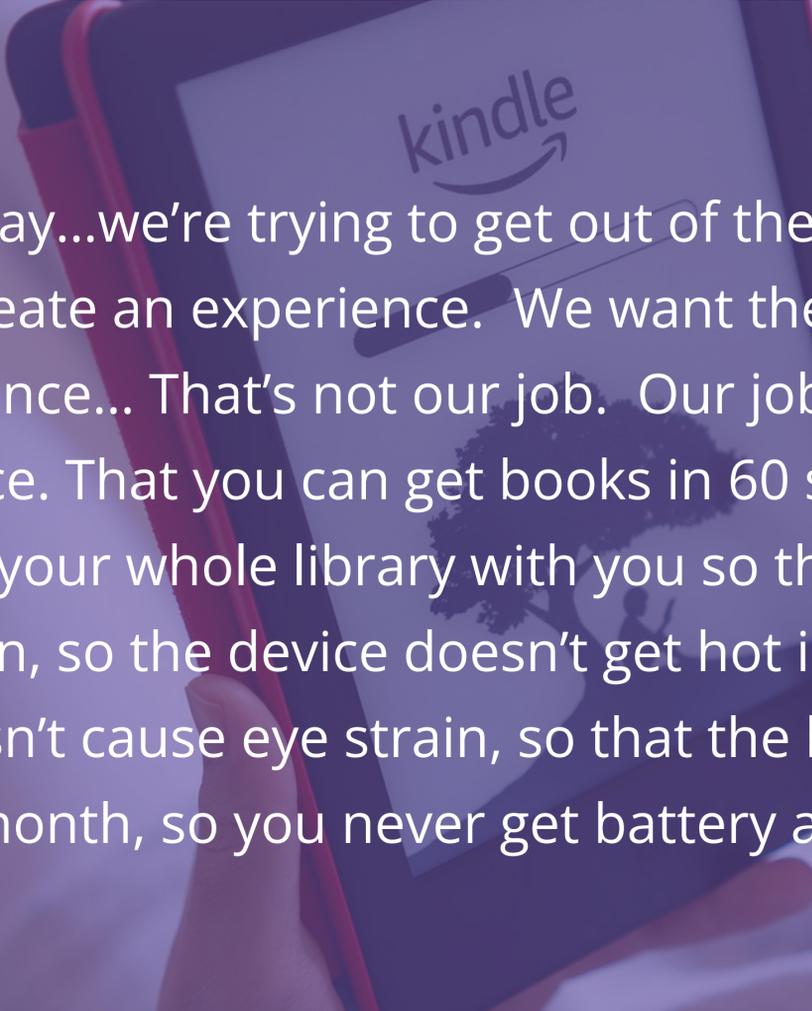
Contextual elements such as visual stimuli, olfactory cues, and stories not only improve the experience of learning, they also serve as retrieval cues that make learnings easier to remember. In a [2014 article](#) by Slate on memory and the gender divide, one reason why women were attributed to having crisper memories than men was because they were habituated to tethering events to emotions and contextual cues. Girls, the psychologist Azriel Grysman observes, are encouraged to talk about how they feel about things that happened, whereas boys are encouraged to speak in terms of action and activity. Emotions and contextual elements (what they were feeling, eating, wearing, etc.) give memories more “entry points” in the brain, enabling the person to remember quicker and in greater detail.

The power of context is evident in human-to-human interaction, but less so in object-to-person interaction. Providing emotional and intellectual contextual elements, relevant to the lesson and optional to the learner, was of heightened significance to us. Opportunities to dive deeper, learn more, and enhance one's level of understanding are obstacles in the sense that they can interrupt the experience and pose unexpected challenges. Making them optional but compelling to the learner gives them greater agency over their experience. Most importantly, the synergistic experience and inherent reward of being activated physically, mentally, emotionally, and intellectually is akin to finding the sweet spot of the tennis racket.



Learning 3: “Get Out of the Way”

There is a well-known interview with Jeff Bezos in which he shares the design considerations around Amazon’s Kindle e-reader:



“I would say...we’re trying to get out of the way. We’re not trying to create an experience. We want the author to create the experience... That’s not our job. Our job is to provide the convenience. That you can get books in 60 seconds, that you can carry your whole library with you so that you don’t get hand strain, so the device doesn’t get hot in your hands, so that it doesn’t cause eye strain, so that the battery life lasts a month, so you never get battery anxiety.”

In other words, in order to compel book lovers to convert to e-readers, they needed to enhance and emulate the inherent quality and inexplicable magic of physical books: the ability to disappear completely into the hands of the reader.

Close your eyes and imagine following a conventional recipe – or really any written instruction for that matter. Whether it’s displayed on your smartphone or a piece of paper, chances are your eyes are not simply resting on the line of instruction you need, but darting up and down, back and forth, continuously moving from ingredients to procedures, seeing what came before, what came after. The benefit of having all of the information in one place and being able to situate yourself is (I believe) the main reason why voice-only recipes have failed. It is simply too uncomfortable to be so unmoored.

At the same time, the object you’re reading (or watching video) from is often physically situated between you and the endeavor at hand. Your principal activity should be cooking the dish, but when you hold a recipe in your hand or spend time and energy deciphering its meaning or finding your place, that interaction becomes the principal activity.

Compare this to learning in-person where you’re standing shoulder-to-shoulder with someone walking you through the steps and procedures. These human-to-human interactions consist of scaffolded guidance in which you are given incremental assistance for repetitive actions that are evaluated and improved on.

For Larabee, the primary design challenge was to understand our pure utility – to provide guidance and assistance – then build for that purpose. In our case, Larabee needed to deliver on crystal clear and companionable ease that lived not between the learner and principal activity, but on the periphery as a reference point. In other words, we should never confuse, impede, or diminish, but always clarify, complement, and enhance.

Conclusion

Well-trained ethnographic researchers are able to immerse themselves in diverse environments and populations, establish rapport within interactive social contexts, and uncover attitudes, values, and cultural patterns that shape behavior. Essentially, it is the exercise of delving far beneath superficial observations of what is happening and investigating the seemingly mundane and commonsense reality through which we are all bonded. Regardless of how trained or untrained one is in ethnographic research methods and fieldwork, anyone can employ the tools and techniques required to explore the ordinary and spectacular ways in which human beings interact within the world.

Recipes are at the foundation of Larabee's origin story – not only because of my professional culinary background but because cooking is one of the most elegant examples of procedural knowledge. For one, recipes range in complexity, from the most simple assemblies to the most comprehensive executions. Also: it is most often a time-bound activity that can sometimes feel like a race against the clock. Lastly, cooking is among the most ancient of human endeavors and therefore recipes are wellsprings of knowledge, culture, and history.

Larabee's new pedagogical model centers on procedural knowledge, and the Larabee Player presents the ideal way for learners to receive guidance in a way that turns on all the learning centers of their brains. Our challenge and opportunity beyond the Player continue to be to facilitate the transfer of knowledge between experts to novices, to scaffold novices towards deeper participation within domains of expertise, and to tap into the most fundamental of human drives: to feel creative, generative, productive, and connected to others.

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