Am I Native Enough? Exploring American Indian Identity through Language Learning

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Abstract

Minowe is an online community dedicated to teaching and learning Ojibwe, an American Indian language. Its goal is to enable certain Peripheral American Indians (defined below) to better connect with their American Indian communities. Building on prior research in language education, the Minowe website and mobile app emphasize situation-based learning. Minowe introduces non-speakers to Ojibwe through the use of game-oriented lessons. It facilitates language learning by connecting fluent speakers and non-speakers via video chat. Minowe encourages collaboration by incorporating user-generated vocabulary into future lessons and activities.

Author Keywords

American Indian; Native American; Language Learning; Language Revitalization; Ojibwe; Online Community; Video Chat

ACM Classification Keywords

H.5.2. [Information interfaces and presentation]: User Interfaces.

Introduction

American Indian identity is a complex, evolving and debated topic linked to the interests of individuals,
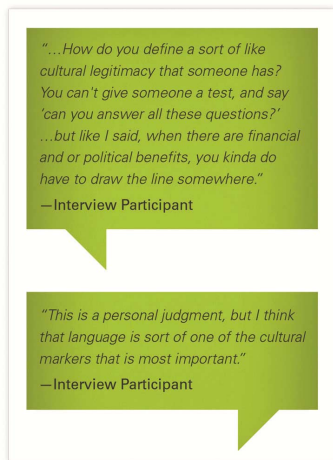
Figure 1: Quotes from interview participants.

Figure 2: A diagram of potential users of the system.

organizations, and governments. Perceptions of American Indian identity draw upon society, culture, law, ancestry, and self-identity. American Indians are one of the few ethnic minorities in the United States (U.S.) whose community membership can be determined under tribal laws by a blood quantum. A blood quantum is a documented and government verified proof of American Indian ancestry. Meanwhile, regardless of tribal affiliation, American Indians are denoted as "American Indian" or "Alaska Native" on U.S. Census forms.

However one defines American Indian identity, the survival of American Indian culture depends greatly on maintaining tribal membership in order to pass on tribal traditions from one generation to the next. A necessary condition for maintaining tribal affiliation is the self-identification by individuals as American Indians and the acceptance of those individuals as members by their American Indian communities. At times, American Indian communities require members to have knowledge of cultural customs, and American Indian cultural centers are limited to a specific geographic location. Individuals who live far away from their American Indian communities (e.g., for school, work, or other reasons) often have difficulty achieving or maintaining identity and acceptance as American Indians [4]. In this paper, we use the term "Peripheral American Indians" to refer to individuals who want to strengthen their connections with their American Indian communities in order to solidify their self-identity and maintain acceptance within those communities.

Our initial user research revealed that there are many Peripheral American Indians who are dissatisfied with the options for connecting with their American Indian

communities. We also learned that a key indicator for being perceived as American Indian by others is the ability to speak the indigenous language associated with their respective tribe. A review of the relevant literature [5, 6, 7] confirms that language is a key cultural element and that it can shape an individual's self-identity.

Based on these findings, we sought to design an online community called Minowe that would enable Peripheral American Indians to learn the Ojibwe language by interacting with fluent Ojibwe speakers. We chose Ojibwe, a language with fewer than 50,000 speakers, because there is already a grassroots effort to cultivate new speakers [8]. In addition, direct interviews with representatives of the Sault Ste. Marie Tribe of Chippewa Indians, a Michigan-based American Indian tribe, provided insight into how Ojibwe helps shape its members' identities.

We envision Minowe as a powerful tool for revitalizing the Ojibwe language. Therefore we believe it is a meaningful component in the survival of American Indian culture.

Design Research

For our initial needs assessment research we selectively recruited individuals with knowledge of American Indian culture. We met with the University of Michigan Native American Student Association and conducted interviews with two members of the group who are part of American Indian tribal communities. We interviewed a prominent political member of the Sault Ste. Marie Tribe of Chippewa Indians. We also interviewed a professor of Native American Studies at the University of Michigan. In total we conducted five face-to-face,

Figure 3: Examples of scenarios explaining how potential users might discover the Minowe app.
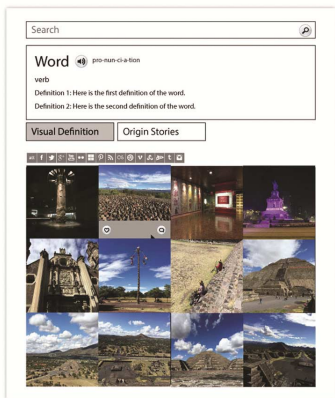

Figure 4: Wireframe for the preliminary design for Minowe.

60-minute interviews with our subjects in November 2014. We wanted to understand how American Indian tribes determine membership and why Peripheral American Indians could feel disconnected from their American Indian communities. In addition to our interviews, we surveyed social media forums (such as Facebook pages and Twitter feeds) that focus on American Indian concerns. We also attended a concert and workshop put on by an American Indian singer and activist. We organized our findings using an affinity wall that revealed five major themes:

- There are many Peripheral American Indians who feel disconnected from their American Indian communities because they are not perceived as American Indian.

- Speaking, or learning, an indigenous language is a key cultural indicator and contributes to the perception of American Indian identity.

- Many of the cultural centers for American Indian communities are tribal reservations that are geographically dispersed and may be difficult for potential users to access.

- Many American Indian communities use social media sites and online communities to facilitate communication among their members, especially those who are separated by long distances. Many users prefer Facebook, describing it as a collection of individual voices, similar to how their Native American communities operate, rather than a single voice of authority.

- There is general distrust of government within American Indian communities due to historical abuses of power by tribal governments and injustices by the U.S. state and federal governments.

Based on these findings and on prior research showing that indigenous language speakers have better access to the community and its culture [5], we wanted to create an accessible online forum for connecting Ojibwe speakers and Ojibwe learners.

Design Process
We followed an iterative design process. Building on our interview data, we created personas and scenarios, and then developed our concepts through sketches and wireframes. We built lo-fi prototypes to test with users and revised our design based on feedback.

There are many online language learning tools, but few of them teach Ojibwe. There are several American Indian online dictionaries, but these collections are static. To address this gap, we initially developed a design to enable users to integrate existing Ojibwe online dictionaries with social media sites by creating an Ojibwe hashtag library. Users could tag images or posts on existing social media sites with Ojibwe words from the hashtag library and all users would be able to view the images or posts related to such words. Our goal was to increase the recognition and use of Ojibwe by Peripheral American Indians, and enhance their self-identification as members of their American Indian communities.

Feedback from peers and advisors showed two major flaws in our preliminary design: the system did not develop language proficiency and did not help users engage with each other. This led us to investigate current indigenous language learning and revitalization efforts.
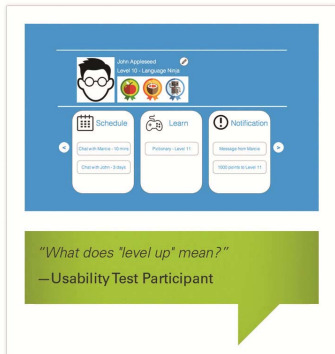
Figure 5: Prototype of user's dashboard on Minowe with feedback from a test participant.
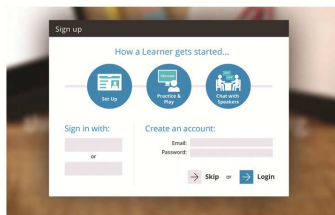

Figure 6: How a learner gets started using Minowe.

Linguistics research by Leanne Hinton at University of California, Berkeley shows that effective models for learning indigenous languages include: the master/apprentice model, situational learning, and non-verbal cues [3, 4]. Hinton's work highlights the differences between teaching "endangered languages" (like Ojibwe and other indigenous languages) and "majority languages" (like English, Chinese or Spanish). There are many available resources for majority languages, while endangered language teachers and learners have far fewer resources. The primary method for teaching indigenous languages is through oral communication.

Based on this additional research, we conceived a design to engage users through community-based language learning addressing the deficits in our prior design. We incorporated the historical context and cultural significance of the Ojibwe language, learning games for language beginners, and situational based learning. Our system also included elements of social interaction, community building, and crowdsourced content. We named our design "Minowe," Ojibwe for one who speaks well. As part of the iterative design process we built a lo-fi prototype to test with users. We then refined our idea based on user feedback.

Proposed Design

Minowe is an online video chat community dedicated to spreading the knowledge, use, and appreciation of Ojibwe. Users can utilize the site as a "learner" or a "speaker" and either set a goal to improve their Ojibwe language skills or help others improve their language competency. Minowe guides learners through a three-stage process in which they first learn basic vocabulary by playing games, then chat with other novice learners,

and finally converse with fluent Ojibwe speakers. The three stages of the learner path provide structure and, through a point-accrual system, illustrate a commitment to learning the language. A learner joins the Minowe community with the goal of engaging in informal conversations with Ojibwe speakers. Speakers have the opportunity to contribute to the language database by adding new words and recording their pronunciation. Minowe facilitates the connection between speakers and learners (who are often geographically distant from each other), creates a community around the culturally-significant Ojibwe language, and empowers users to revitalize the Ojibwe language. To illustrate how Minowe works, we will guide you through the three stages using two personas: Sam a learner, and Marcie a speaker.

Stage One
Learner: Sam is a 20-year-old student studying in Chicago. He was enrolled in the Sault Ste. Marie Tribe of Chippewa Indians when he was 5-years old, but knows little about the tribe. He received an American Indian scholarship to attend college and wants to explore his American Indian heritage. Sam isn't sure where to start so he searchers online and learns Ojibwe is the language of the tribe. During a break in class, Sam looks up Ojibwe on his mobile phone and finds the Minowe app. He explores the app as a non-registered user and begins playing a vocabulary game.

We designed Minowe as a mobile app and a website to ensure that users could practice Ojibwe in different environments. In addition, we wanted users to be able to explore the system without setting up an account. Research shows that users are more likely to engage
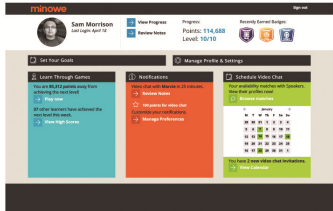
Figure 7: The dashboard where users can keep track of their progress in Minowe.
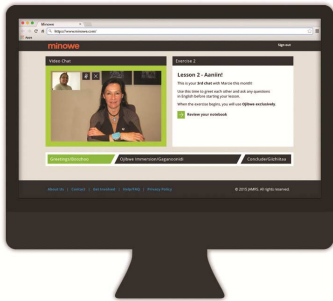

Figure 8: Minowe's video chat interface.

with a system if they are not initially obligated to set up an account [1].

Speaker: Marcie is a 65-year-old retiree living in Michigan's Upper Peninsula, a rural and sparsely populated area. She is a member of the Sault Ste. Marie Tribe of Chippewa Indians. While visiting her local library she sees a poster for an Ojibwe event taking place that night. Marcie, a fluent speaker doesn't have anyone to speak Ojibwe with at home, so decides to attend the event. A librarian helps Marcie create a Minowe account, and Marcie joins an existing group video chat. She does not participate much, but enjoys seeing and hearing others speakers.

We envision Minowe being used by Ojibwe speakers who are interested in sharing their appreciation of the language with others. We designed Minowe as a video chat because there are non-verbal elements of the language that can be better understood through visual interaction rather than text alone [3].

Stage Two
Learner: Sam has accrued some points. He feels good about his progress, which he can see displayed on his dashboard. He receives a prompt to create an account in order to save his points. Later that evening Sam sets up a profile and a practice schedule that has him committing to four hours of Ojibwe practice each week.

Minowe uses a dashboard and "gamification" principles to motivate users to practice Ojibwe. HCI research shows that gamification can be a powerful motivator and can help encourage habitual use [2].

Speaker: Marcie enjoyed her video chat experience and continues to explore the site. She sees that she can create vocabulary words for learners to practice. She likes thinking about different scenarios in which additional words might be helpful.

Based on our research about the role of grassroots organizations in American Indian communities, we designed Minowe to "crowdsource" vocabulary from users. We believe users are more likely to feel ownership of the system and be engaged if they view their participation as important to others.

Stage Three
Learner: Sam continues to practice his vocabulary and gains confidence. He accrues enough points to unlock the video chat feature. Sam is matched via the scheduling tool with a fluent Ojibwe speaker, named Marcie.

Minowe has multiple levels that learners must reach prior to a video chat. This tiered process is designed to encourage learning but also to require learners to demonstrate a commitment to learning the language. We wanted to avoid "trolling" and encourage learners to use the video chat in a productive manner.

Learner and Speaker: Sam and Marcie are preparing to engage in a guided video chat together. Before they can participate, each of them reads the chat etiquette screen. Making note of these suggestions they enter the chat. A progress bar guides them through the three stages of the video chat.

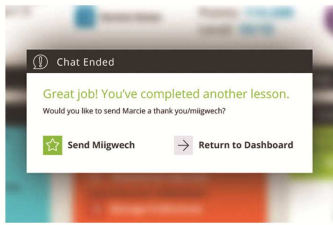We designed Minowe to be a casual chat system, but with some scaffolding to guide conversation. To

Figure 9: How a learner can thank a speaker after a video chat session.
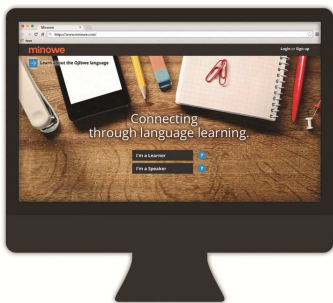

Figure 10: The homepage of Minowe where users can sign up as a "speaker" or "learner" or just explore the system.

encourage conversations we broke the system into three stages. In the first stage, participants greet each other. In the second stage, participants discuss a topic exclusively in Ojibwe. In the third and last stage, participants can use English or Ojibwe to discuss remaining questions, schedule another video chat, and bid each other farewell. After the chat ends, the learner has an option to thank the speaker. The number of thank yous provides a way for the speaker to increase his or her status and credibility within the Minowe community.

Conclusion

Through an iterative design process we developed Minowe from a static Ojibwe hashtag library into a platform for an interactive community. The design process was essential in identifying potential improvements to our design and guiding our revisions. The final design for Minowe connects immersed American Indians and Peripheral American Indians through a video chat language learning system. This new community enabled by technology helps to revive indigenous languages and strengthen American Indian Identity. The use of crowdsourced content allows the community to develop Minowe as their needs change. In addition, it can be adapted for other endangered indigenous languages.

Acknowledgements

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