Nebraska Commission for the Blind and Visually Impaired Public Meeting, Friday, July 26, 2024, 9:00 a.m.

Cornhusker Hotel 333 South 13th Street Hawthorne Meeting Room Lincoln, NE **Minutes**

<u>Call to Order. Welcome and introductions. Announcement concerning public comment periods,</u> meeting agendas, open meeting act, proof of publication, recordings and other logistics

Brent Heyen, Chairman of the Board of Commissioners, called the meeting to order at 9:05 a.m. The meeting began with introductions.

Commissioners present: Brent Heyen, Chairperson, Lincoln; Cheryl Livingston, Vice Chairperson, Designee of the National Federation of the Blind of Nebraska, Lincoln; Linda Mentink, Executive Secretary, Columbus; Patti Schonlau, Designee of the American Council of the Blind of Nebraska, Bellevue; Miguel Rocha, Scottsbluff.

Staff present: Carlos Serván, Executive Director; Erin Brandyberry, Deputy Director-Services; Tammie Dunn, Deputy Director-Finance; Kathy Stephens, Administrative Specialist, Kaytlyn Hilligas, VR Counselor; Pam Rademacher, Lincoln District Supervisor; Charli Saltzman, Orientation Counselor; Joshua Golden, Technology Specialist; Amy Buresh, VR Counselor; Charles Anderson, Technology Specialist; Vanessa Kunz, Accountant I; Craig Kneifl, VR Counselor; Candice Dollar, VR Counselor; Timothy Jefferson, Omaha District Supervisor; Gracie Swim, VR Counselor; Hannah Daykan, Home Management Instructor; Nancy Coffman, Technology Instructor; Mark Coleman, Client Resource Counselor; Mickie Saltzman, Technology Specialist; Jason Baker, VR Counselor; Jeff Altman, Cane Travel Instructor; Sarah Vrana, Cane Travel Instructor.

Center Students present: Jose Castro, Damian Eby, Sania Kellogg, Colson Watchorn Newbrey, Emily Coufal.

A copy of the Nebraska Open Meetings Act was available in both print and Braille formats. The Notice of the Meeting was published in the Lincoln Journal Star, the State Government Calendar, NCBVI Website, NFB Newsline® and Radio Talking Book. The Notice was also sent to ACBN, NFBN, and the NCBVI listservs.

Approval of the May 4, 2024, Public Meeting Minutes

Commissioner Rocha moved to approve the Minutes of the May 4, 2024, Commission Meeting. Commissioner Livingston seconded the motion.

Roll call: Ayes: Rocha, Mentink, Heyen, Livingston, Schonlau

Nayes: Abstained: Motion Carried

Report from the Commissioners

Brent Heyen -

Brent reported that he works at a hotel where he demonstrates the abilities of a blind person every day in the work he performs, and he sets a good example of what a blind person can do.

Brent also reported that he attended the National Convention of the National Federation of the Blind in Orlando, Florida. At this convention he was able to experience a lot of new things and see some of the new updates on various things that are going on.

Linda Mentink -

Since our last meeting, Linda has attended a Zoom meeting of the NFB Blind Christians Group (for which she is Chairman), a ZoomUnion of the Alumni Association of the Wisconsin School for the Blind and Visually Impaired (for which she is President, the NFB Convention (at which she had many new responsibilities), the NFBN Historians Committee meeting via Zoom, three lunches with the members of the former NFBN Columbus Area Chapter, and the Friends third quarterly meeting. She does not know many blind people in Columbus, so she is involved in other places!

Friends met Tuesday, July 23. They talked more about getting grants and they continue to work on their website. They currently have six members, but that will change to five when Barbara Loos steps down at their next meeting. They'd like to get back up to ten members, so please contact them if you have any clients or friends whom you think might be interested. Erin Brandyberry also attended their meeting, and said she has a couple ideas. She will check with them and get back to Friends. Linda will be writing guidelines for prospective board members and rewriting their bios to make them stylistically the same. Friends members are: President Robert Newman, Vice President Linda Mentink, Secretary Nancy Flearl, Treasurer Robert Newman and Nancy Flearl until they find someone to replace Joe Buda who had to resign for health reasons, Jan Brandt, Karen Lemmon, and Barbara Loos.

Cheryl Livingston –

Cheryl reported that she is the designee of the NFBN on the Board. She continues to serve as the treasurer of the Senior Division of the NFBN. She also continues to serve as the treasurer of the NFBN and she has served in that position since 1988. She is also secretary of the Lincoln Chapter of the NFBN and she is now serving her second term. She keeps busy within the National Federation of the Blind. Cheryl also attended the National convention of the National Federation of the Blind which was held in Orlando, Florida. Cheryl noted that she learned a lot at convention, and she also attended the Senior Division of the NFB. One of the topics they discussed was the Script Talk, which is an audio labeling system for prescription medications. They talked about the experiences that people were having in getting the Script Talk available in their area and then learning how to use it.

Miguel Rocha –

Miguel reported that he attended the National Federation of the Blind of Nebraska (NFBN) Board meeting in May and the At-Large Chapter meeting. Miguel stated that he is currently studying for a Certificate through the International Association Accessibility Professionals. The certificate name is called Certification of Professional Accessibility Cor-competence. It is basically for the disability area for the web and applications. Miguel reported that he completed his Spring semester at UNO and he will be going back to UNO this Fall and hopefully graduate in December with his degree in

Management and Information Systems. Miguel reported that he also went to Mexico and he brought back two tortilla warmers. Miguel noted that he would like to donate these to the Center to use in their Home Management classes.

Patti Schonlau -

Patti reported that she moved to Nebraska in April 2023, so everything is very new to her. Patti stated that she has joined Lions International Sunrise Club in Omaha. She has been newly selected to be a Zone leader which is very exciting to her. Patti also noted that she went to the ACB State convention and served as the banquet speaker. Patti stated that she is really excited to get involved more and more. In her past life in Missouri, she was a teacher for the blind and visually impaired for many years, so she is very happy to have the opportunity to serve as a commissioner for NCBVI.

Report from the Executive Director

Executive Director, Carlos Serván, noted that since the Focus Topic is AI and Accessible Devices for the Blind and Visually Impaired, he decided to do the first part of his report using AI. Hugh Phan played the AI recording for the Administration part of the Executive Director report.

I. Administration

During the last quarter, I attended the following meetings and activities:

Special Education Advisory Council (SEAC): The Nebraska Department of Education. Special Education focused on the priorities that the SEAC should have for 2025. They presented fifteen potential areas and the SEAC will determine at the next meeting five priorities.

NCSAB monthly meetings: George Washington University (GWU)-NCSAB DIF grant application was successfully submitted by GWU the week of July 8. This grant would allow GWU to design a program to increase the number of self-employment for blind individuals.

The NCSAB Executive Committee in-person meeting took place on July 23-24, in Denver-Colorado. Plans for the Fall 2024 conference are in place and NCSAB is taking proposals. The Fall conference will be in Seattle, Washington, October 23-25.

We also talked about writing letters to members of Congress to get the cost-of-living adjustment (COLA) increased. The strategy is to focus on the Senate to address this increase.

Star Tran monthly meetings: We talked about dealing with safety and consistency on rides hours.

Attended the Friends quarterly meeting where we talked about writing grant proposals.

A researcher working with the National Science Foundation interviewed me the first week of June to understand the role state commissions play in increasing employment opportunities for people who are blind. This once again is showing that NCBVI is well recognize nationwide.

I provided a presentation to the Bosselman's 2024 Diversity, Equity & Inclusion Week. I talked about disabilities but focused on opportunities for the blind.

I was the Keynote speaker for the 23rd annual conference for Orientation and Mobility (O&M), Contemporary Issues--Structured Discovery, on July 3.

I attended the NFB and ACB national conventions.

Tactile Images-3-D Works met with different museums, and now have four contracts signed, with one more being reviewed. These museums are The Joslyn, Kiewit Luminarium, Great Plains Art Museum, and Hastings Museum Natural & Cultural History Planetarium. The Durham Museum has indicated they will be part of the initiative and are reviewing the contract, which will make the fifth one. There will be around 100 weeks of exposition. The kickoff will be at the Joslyn around August 16; this exhibition will open in concurrence to their grand reopening after being closed for two years of renovation. A Public Service Announcement (PSA) has been developed for each exhibition opening and will be available to each museum to distribute with their PR distribution. 3D PhotoWorks will host the PSA on tactileimages.com and distribute it with their own press release.

The Business Office:

The Business Office has assessed the current budget in response to the flat funding for the Vocational Rehabilitation Grant (VR) for this federal fiscal year and the next. We have identified flexibility within this year's budget, as we are still utilizing funds from the prior fiscal year.

The business office is enhancing the Internal Budget Projection for FFY 2024. This involves meticulously documenting budgeted figures, tracking year-to-date expenditures, projecting fixed expenses for the remainder of the fiscal year, and delineating remaining funds allocated for client services and additional items such as vending machines and technology.

We are currently collecting data to prepare the budget narrative and funding requests for the upcoming biennium, which are due in early September.

Technology:

Hugh Phan worked with the OCIO for the public records hold request from the Attorney General's Office. He assisted Kathy Stephens with sending technology equipment and items to state surplus. He also completed the following:

Updated technology documentation.

Prepared laptops and devices to be used for WAGES.

Ordered new phones and devices for new staff.

Obtained quotes and ordered laptops for clients.

Installed Wi-Fi extenders in the student apartments for improved coverage.

Kathy Stephens:

Completed registration information and hotel reservations for staff and clients to attend the NFB and ACB national conventions, and other conferences.

Kathy has been working with Hugh and Surplus Property to have tech items from the Lincoln office hauled to State Surplus and/or picked up by American Recycling for destruction. She has been working on year-end inventory for the technology items that NCBVI has in E1. This is an on-going project. Our year-end inventory report needs to be submitted to DAS Material Division before August 31 each year.

Tyler Technologies (formerly NIC Nebraska) recently migrated our website to the most current version of their content management system. They have successfully upgraded our website from Drupal 7 to Drupal 10. The launch occurred on June 25.

II. Human Resources

Staff Up-Date:

In the Omaha District: Candice Dollar completed her center training by the middle of May and is working in the field now. Yria Santos-Torres, VR Counselor, started Center training on May 28, and resigned on July 11 for personal reasons. We reopened this position. The rehab tech position was approved by State Personnel and the job is posted.

In the North Platte District: Josh Golden (Technology Specialist) completed Center training on June 14 and is working in the field.

Jason Baker (VR Counselor) started Center training on June 3. We still have one vacancy open, VR position, that Fritz vacated.

In the Training Center: Hannah Dakan finished her Center training this week and is the Home Management instructor. Sarah Vrana finished her certification for O&M by the middle of May.

The Lincoln District, Training Center, and NBE are all now fully staffed.

In Administration: We have one position being advertised, which is for the HR/PR position. We hired Katie Mihulka, who will be an Accountant I for our front desk area. Katie will start on August 12.

Training Opportunities:

Cristal attended the Capacity Building Institute that was held in Charlotte, NC. Several staff attended the 23rd O&M national conference on structured discovery on July 3, in Orlando.

Some staff attended the NFB and ACB national conventions.

Center staff attended a two-part Structured Discovery Terminology seminar hosted by the National Blindness Professional Certification Board. These seminars provided them with CEU's necessary to maintain the CVRCB, NOMC, and/or NCRTB certifications. Jessica renewed her NCRTB in June for another five years.

Cristal Dimas and Tim Jefferson attended their second cohort at the National Rehabilitation Leadership Institute (NRLI).

Gracie completed a Webinar training on stress, Trauma, and Resilience. and The Value of a Mentoring Program.

Pam continues the Leadership Cohort 29 with taking a monthly class. In early June she took an online class through MSU on How to Read an Eye Report.

Charles completed a 4-day East Texas Lighthouse Jaws Bootcamp for increased knowledge of how to teach JAWS to our consumers.

Craig Kneifl attended a townhall meeting with DHHS to learn about updates for the elimination of a wait list for DD services. The elimination of the wait list is supposed to end in October 2025 pending more legislation.

Candice completed a training through the National Research and training Center (NRTC/MSU) named Advice for VR Professionals Evidence for Effective Meetings with Employers.

III. Field Services

Blind Socially Savvy and Social Security Work Incentives training was held the week before WAGES started. This training is designed for blind youth to enhance their social and advocacy skills.

Several staff participated in the Silver Summit which was held in Kearney from May 13 to May 16. It was well attended and the feedback from our consumers has been only positive. Staff provided all the training for our consumers to improve their skills. The Silver Summit also provided an opportunity for our consumers to make connections and start supporting each other.

The Support Service Provider (SSP) pilot project is up and running. We have 18 deaf-blind consumers registered. The goal is to get extra funds from the State to make this a sustainable program.

WAGES again was a success, having the highest number of participants this year (22 clients registered). Besides work experience, students were exposed to adult blind role models, challenge activities, and several activities designed to increase their self-esteem, blindness and advocacy skills.

A committee put together Project Independence (PI), which is taking place this week.

The Lincoln district continues to have GATE teaching programs. These programs are well attended. At times we have a wait list for consumers! In June GATE completed a fishing trip with Go Fish Live Well.

During the summer contact with public schools is very low. However, some counselors still network with a few schools to keep the trusting relationship. Some of the schools we networked with are the Nebraska Center for the Education of Children who are Blind and Visually Impaired (NCECBVI) and the Millard and Omaha Public school TVI's to receive eligible referrals.

Our field staff participated in several presentations and networking events to continue building trusting relationships.

In the Lincoln District:

Open house for Cornhusker State Industries.

Bryan West for education on sudden vision loss for a patient due to injury.

Public Servant Safety Day on June 25th in downtown Lincoln

Employ Columbus, Norfolk Family Collaboration Meeting, Collaborative – Food Access and Security

CFP Community Collaborative Meeting and Rite at Home Opening with Norfolk Columbus Chambers of Commerce.

Presentation at Madison House in Norfolk.

Presentation about NCBVI services to Madison, Stanton, and Tri Country Chamber of Commerce.

Attended the Lincoln Circle monthly meeting to promote inclusion and diversity. Attended an informational interview with Assistive Technology Partners to learn more about what services they provide and how they may benefit our clients.

Most recently the Legacy has invited the Lincoln district to present at monthly forums on different topics rotating among the different buildings.

In the Omaha District:

Collaborative relationship with MCC Disability support Services to provide their staff with training in accessible technology.

Tim and Mickie participated in a live radio interview and Tech it Out pod cast respectively with the Radio Talking Book services on July 19.

Attended weekly BSR & Employ OMA meetings to create business networks with employers and to increase the exposure to employers for NCBVI clients.

Attended the annual Jobapolooza Job Fair and assisted NCBVI clients with introduction to the employers that were on site.

Engaged with employers at a Job Fair to develop further business contacts for NCBVI clients in general.

Networking opportunity with a local Spanish radio and TV station. This is a promising on the job training opportunity for an NCBVI client to work in his chosen career field.

Worked with Angel Guardians who has contracted with NCBVI to provide milestones for NCBVI supported employment clients.

Working more closely with Nebraska ATP to provide NCBVI clients with equipment that is relevant to their specific needs.

In the North Platte District:

Being involved in employment networking groups such as Employ Kearney, Employ Grand Island, Employ Hastings, and Employ North Platte.

Networked with staff at Central Community College nursing program and Bryan Health.

Involved in the Grand Island and Kearney Project Search sites. networked with employer, Dr. Scrubs for an on-the-job training opportunity.

Networked with Learning Daycare Center and Clevenger's gas station for a work-based learning opportunity. attended the career fair at the National NFB Convention and met with over 20 employers in a variety of career fields.

Provided a presentation about NCBVI services to Kearney Manor with 12 people present. Have ongoing meetings with Nebraska VR regarding Pre-Employment Transition services.

Presented a fall prevention class with 10 people in attendance at a local hospital.

Client Statistics:

Number of Clients in All Statuses Served at the end of the Period:
OIB clients was 650. (This is approximately 300 more clients than five years ago.)
IL clients under 55 was 92. (This is approximately 60 more clients than five years ago.)
VR clients was 487. (This remains very much the same.)
Total of 1229 consumers

Director Serván emphasized that five years, seven years, and before that, when we did not have funds of OIB services, NCBVI not only had less clients, but the number of visits allowed was six visits. Currently, we have no limits on the number of visits we can provide for training.

We had consumers obtain jobs as: Business Operations Specialist, Civil Engineer, Customer Service Representative, Dishwasher, Postsecondary Teacher, Elementary Teacher (2), Farmer/Rancher, Graphic Designer, Information and Record Clerk, Janitor/Cleaner (2), Landscaping/Groundskeeping, Lodging Manager, Massage Therapist (2), Mental Health Counselor, Office Clerk, Project Management Specialist, Psychiatric Technician, Randolph-Sheppard Vendor, Teacher/Instructor, Teaching Assistant (Non-Special Education) and Teaching Assistant (Special Education).

IV. Training Center

We are planning the 50th anniversary celebration of the Nebraska Center for the Blind and it's scheduled for October 15, 2024. The celebration will take place in Lincoln and will include speakers and a tour of the Center. It will be open to the public.

We currently have nine people attending training: Six VR consumers (one being Pre-ETS) and three staff trainees (two who are ending their internship/apprenticeship). Three more consumers are schedule to start training in August.

Activities this quarter included: grilling, traveling at Gateway Mall, kayaking at Holmes Lake, and attending this Commissioners meeting and the WAGES banquet. Center students were given the option to attend a national convention of their choice with counselor approval if they had not previously attended a national convention. Drops and TDL's were also held monthly. Vocational seminars provided by the National Federation of the Blind resumed on May 28 and will occur monthly.

During this quarter, we had one consumer tour, and four 3-day stays.

Representatives from Nebraska Medicine also toured on June 24 seeking input from the blind community regarding accessible design of their new facility in Omaha.

Union University's occupational therapy assistant program came for a Center tour on June 26. WAGES participants divided into two groups to tour the Center on July 11 and 18. A couple of staff from Senator Ricketts office toured the Center on July 24. They showed interest in helping agencies for the blind increase their OIB funds. Center staff also provided instruction in Structured Discovery methods on July 22 to future Certified Orientation and Mobility Specialists (COMS) attending UNL.

V. Nebraska Business Enterprise

VENDI Micro Markets

After many unfortunate delays, the new Micro Markets at the DHHS locations in Omaha, Bellevue, Lincoln, and Hastings were setup and went live in the past few weeks. NBE staff has learned a lot of valuable lessons over the past few months that will serve us well when installing new markets in the future.

Beatrice

NBE is working on establishing a new vending site at a private location in the Beatrice area. This new site should be up and running by mid-August; a further update will be provided for the next Commissioner's meeting.

Lincoln

NBE continues to work with USCIS on designing their services for their new building, scheduled to open in late winter/early spring 2025. USCIS is combining two of their Lincoln offices into one central location.

Offutt AFB

NBE also continues to work on the revamp of the cafeteria, Deterrence Diner, in the

USSTRATCOM Building on Offutt AFB. The second Micro Market in the building is scheduled to open in the fall of 2024. The revamp of the cafeteria should open in the spring of 2025.

NBE Licensed Vendors

There are currently 12 Licensed Vendors in the NBE program and 5 individuals operating sites as Trainees. Our newest Trainee has taken over the Blind Vendor role in Deterrence Diner, the cafeteria operation in the USSTRATCOM building.

There were no complaints this quarter.

There were no questions from the Board of Commissioners.

Public Comment Period

There was no public comment.

<u>Focus Topic: Al and Accessible Devices for the Blind and Visually Impaired –</u> Presented by Hugh Phan, NCBVI Technology Manager

Introduction

Artificial Intelligence (AI) is a field of computer science that aims to create machines capable of performing tasks that typically require human intelligence. These tasks include problem-solving, learning, reasoning, perception, and language understanding. AI is transforming various industries, from healthcare and finance to transportation and entertainment, by enabling systems to analyze vast amounts of data, recognize patterns, and make decisions with minimal human intervention.

The concept of AI dates back to ancient myths and stories of artificial beings endowed with intelligence. However, it wasn't until the mid-20th century that AI became a formalized field of study. In 1956, the term "artificial intelligence" was coined at the Dartmouth Conference, where researchers convened to explore the potential of machines to simulate human intelligence. Since then, AI has evolved through several stages, from symbolic AI and expert systems to machine learning and deep learning, which are currently the most advanced forms of AI.

Machine learning, a subset of AI, involves the development of algorithms that allow computers to learn from and make predictions based on data. This approach has led to significant breakthroughs in various applications, such as image and speech recognition, natural language processing, and autonomous vehicles. Deep learning, a specialized form of machine learning, utilizes neural networks with many layers to model complex patterns in data. This technique has been particularly successful in tasks like image classification, language translation, and game playing.

With the introduction of OpenAI's ChatGPT in 2022. This became a game changer in the realm of artificial intelligence and natural language processing. Its ability to generate coherent and contextually relevant text has revolutionized various fields, from customer service and content creation to education and healthcare. By leveraging its vast knowledge base and understanding of human language, ChatGPT enables more personalized interactions and efficient information retrieval, significantly enhancing user experiences across diverse applications. As a versatile tool,

it continues to push the boundaries of what's possible in AI-driven communication and accessibility, making complex tasks simpler and more accessible to people worldwide.

Role of AI in Accessibility

Artificial Intelligence (AI) is revolutionizing the field of accessibility by providing innovative solutions that enable blind individuals to navigate the world more easily and independently. AI technologies, such as machine learning, natural language processing, and computer vision, are being integrated into various applications and devices to enhance accessibility in numerous ways.

One significant contribution of AI in accessibility is through speech recognition and natural language processing. These technologies enable voice-controlled assistants like Siri, Alexa, and Google Assistant to understand and execute spoken commands, making it easier for individuals with mobility impairments to control devices, access information, and perform tasks without needing physical interaction. Al-driven speech-to-text applications also aid those with hearing impairments by providing real-time transcriptions of spoken language, thereby facilitating better communication.

Al is also instrumental in image recognition and processing. Applications like Seeing Al and Google's Lookout utilize Al algorithms to describe the environment, read text in images, and even recognize faces and emotions. These tools significantly aid in navigation and social interactions, providing real-time information that enhances situational awareness.

Navigation and mobility have seen substantial improvements due to AI. GPS-based applications, augmented with AI, offer detailed, accessible navigation instructions tailored for the blind. They can provide real-time updates about obstacles, traffic conditions, and the layout of surroundings. Alpowered wearable devices further assist with mobility by giving haptic feedback or auditory cues to guide users safely through their environment.

Moreover, AI contributes to educational and professional accessibility. Tools that convert printed text into braille or audio formats enable blind individuals to access a wider range of learning materials and professional documents. AI-driven transcription services convert spoken words into text, facilitating participation in meetings and lectures.

Al's role in accessibility for the blind is profound and multifaceted. By leveraging voice recognition, image processing, navigation aids, and educational tools, Al significantly enhances the quality of life for blind and visually impaired individuals, promoting independence and greater social inclusion.

Al Powered Accessible Devices

Al-powered accessible devices are becoming increasingly integrated into mainstream technology, ensuring that inclusivity is not an afterthought but a fundamental design principle. Smartphones, tablets, and computers now come with built-in accessibility features powered by AI, such as voice assistants, real-time translation services, and predictive text input. These features make technology more user-friendly and accessible to everyone, regardless of their abilities. The potential of AI-powered accessible devices is vast, and ongoing research and development promise even more innovative solutions in the future. As AI continues to evolve, it will undoubtedly play an even more significant role in breaking down barriers and creating a more inclusive world.

Types of available AI and Accessible Devices

1. Smart Glasses

Smart glasses are wearable devices equipped with cameras and sensors that provide audio
descriptions of the surroundings. These glasses can read text, recognize faces, and
describe objects, significantly aiding navigation and social interaction. ARx AI and Envision
Glasses and OrCam MyEye are currently available on the market.

2. Screen Readers and Magnification Software

Screen readers convert text on a screen into speech or braille, allowing visually impaired
users to access digital content. All enhances these tools by improving text recognition,
contextual understanding, and user interaction. Popular screen readers include JAWS and
NVDA are gradually implementing All features into their software.

3. Voice Assistants

 Basic Al Voice assistants like Amazon's Alexa, Google Assistant, and Apple's Siri provide hands-free interaction with devices, helping visually impaired users perform tasks such as setting reminders, controlling smart home devices, and accessing information through voice commands.

4. Navigation and Mobility Aids

Al-based navigation apps, like AYES's Oko navigation app offer detailed audio instructions
and real-time updates on routes and obstacles. Smart canes like WeWALK equipped with
sensors and GPS provide additional support, helping users navigate safely and confidently.

5. Image Recognition and Object Identification

 Devices and apps that utilize image recognition can identify objects, read text, and provide descriptions of the environment. Applications like Seeing AI and Be My AI use AI systems that provide visual assistance through their smartphone cameras.

Challenges and Limitations of Al

Artificial Intelligence (AI) has made remarkable strides in recent years, driving innovation across various sectors. However, despite its potential and successes, AI still faces significant challenges and limitations that impede its full potential. These issues span technical, ethical, and practical dimensions, and understanding them is crucial for responsible development and deployment.

Technical Challenges

1. Data Quality and Quantity

Al models, particularly deep learning algorithms, require vast amounts of high-quality data to function effectively. Poor data quality, including incomplete, biased, or inaccurate data, can

significantly impact the performance of AI systems. Additionally, obtaining sufficient data for training can be challenging, especially in specialized or emerging fields.

2. Generalization

Al models often struggle to generalize from training data to real-world scenarios. They can perform exceptionally well on data similar to their training sets but fail when faced with novel situations. This limitation is partly due to the models' overfitting to training data, where they learn to recognize specific patterns rather than underlying principles.

3. Explain-ability and Transparency

Many AI systems, especially those based on deep learning, are often considered "black boxes" because their decision-making processes are not easily interpretable. This lack of transparency can be problematic in critical applications like healthcare or finance, where understanding the reasoning behind decisions is essential for trust and accountability.

4. Robustness and Security

Al models are vulnerable to adversarial attacks, where slight modifications to input data can lead to incorrect outputs. Ensuring robustness and security against such attacks is a significant challenge, especially for applications in security-critical fields.

Ethical and Social Challenges

1. Bias and Fairness

Al systems can inadvertently perpetuate or even amplify biases present in training data. This issue raises concerns about fairness and discrimination, particularly when Al is used in sensitive areas like hiring, law enforcement, or lending. Addressing bias requires careful dataset curation and algorithmic adjustments to ensure equitable outcomes.

2. Privacy

Al systems often rely on large datasets that include personal information. Protecting privacy while utilizing such data is a critical concern, especially with increasing regulations like General Data Protection Regulation (GDPR). Balancing data utility and privacy protection is a complex and ongoing challenge.

3. Autonomy and Control

As AI systems become more autonomous, ensuring that they align with human values and can be controlled by their users is essential. This includes establishing safeguards to prevent misuse and ensuring that AI systems can be shut down or overridden if necessary.

4. Job Displacement

The automation capabilities of AI threaten to displace jobs across various industries. While AI can create new opportunities, the transition period poses challenges for workers who need reskilling and adaptation to new roles.

Practical Challenges

1. Scalability

Deploying AI systems at scale requires substantial computational resources and infrastructure. This can be cost-prohibitive for many organizations, particularly small and medium-sized enterprises.

2. Interoperability

All systems need to integrate seamlessly with existing technologies and workflows. Ensuring interoperability across different platforms and standards is crucial for widespread adoption.

3. Regulation and Governance

The rapid pace of AI development often outstrips the ability of regulatory frameworks to keep up. Establishing appropriate regulations and governance structures that promote innovation while protecting public interests is an ongoing challenge.

Despite these challenges and limitations, the potential benefits of AI are immense. Addressing these issues requires a multi-faceted approach involving technical advancements, ethical considerations, regulatory frameworks, and societal adaptation. By acknowledging and tackling these challenges head-on, we can pave the way for more robust, fair, and beneficial AI systems that serve the broader good.

Conclusion

Al is revolutionizing accessibility for the blind and visually impaired, offering tools that significantly enhance their independence and quality of life. As Al continues to evolve, its potential to transform accessibility and empower visually impaired individuals will only grow. The emerging trends are pointing towards more integrated and intuitive devices. Advances in Al technology will likely result in more accurate and reliable assistive tools. While challenges remain, the continued advancement of Al technology and collaborative efforts among stakeholders hold the promise of a more inclusive future. Policymakers and industry stakeholders play a vital role in ensuring these technologies are accessible and affordable for all. Collaboration between tech companies, accessibility advocates, and the blind community is essential to address existing challenges and drive innovation.

References

□ Dartmouth College. (n.d.). *Artificial Intelligence Coined at Dartmouth*. https://home.dartmouth.edu/about/artificial-intelligence-ai-coined-dartmouth

□ Engadget. (2023). How OpenAl's ChatGPT Has Changed the World in Just a Year. https://www.engadget.com/how-openais-chatgpt-has-changed-the-world-in-just-a-year- 140050053.html
□ Slate. (2023). AI Image Tools for Blind and Low Vision Users. https://slate.com/technology/2023/10/ai-image-tools-blind-low-vision.html
□ National Industries for the Blind. (n.d.). <i>Artificial Intelligence is Making a Big Difference for People Who Are Blind</i> . https://nib.org/press/artificial-intelligence-is-making-a-big-difference-for-people-who-are-blind/
□ ReadWrite. (n.d.). <i>How AI Is Giving Blind People Freedom and Independence</i> . https://readwrite.com/how-ai-is-giving-blind-people-freedom-and-independence/
□ Forbes. (2023). How Al's Explosive Growth Opened Up the World for the Blind in 2023. https://www.forbes.com/sites/gusalexiou/2023/12/15/how-ais-explosive-growth-opened-up-the-world-for-the-blind-in-2023/
□ AT&T. (n.d.). <i>How AI Helps Accessibility</i> . https://about.att.com/sites/accessibility/stories/how-ai-helps-accessibility
□ CBS News. (2022). <i>Artificial Intelligence: Risks and Dangers</i> . https://www.cbsnews.com/news/artificial-intelligence-risks-dangers-geoffrey-hinton-60-minutes/
□ ScaleFocus. (n.d.). <i>Top Challenges in Artificial Intelligence You Need to Know</i> . https://www.scalefocus.com/blog/top-challenges-in-artificial-intelligence-you-need-to-know
☐ Open Access Government. (n.d.). <i>The Future of Artificial Intelligence in Accessibility</i> . https://www.openaccessgovernment.org/the-future-of-artificial-intelligence-in-accessibility/165188/

Miguel Rocha – Miguel noted that he enjoyed the Focus Topic presentation. Miguel commented that the ethical portion of AI is also technology. There are multiple courses that talk about AI. For example, he had to take an ethical course on technology. It is important to understand how technology is involved with everyone's personal life whether you are a developer, a consumer, or someone else. AI is very complex and it is very difficult to have one law that can fix one ethical issue. Miguel stated that he had to do some research on the autonomous connection for electric vehicles and they are becoming more advanced. One of the major issues with technology is the security of it. Hackers can break into that type of system and can control your vehicle. This will probably be an issue with technology forever. Miguel stated that he thinks that a human being will always need to be monitoring vehicles while driving.

Cheryl Livingston – Cheryl asked how AI was used in the first part of the Executive Director report.

Hugh reported that he used a software called ElevenLabs which uses Chat GPT as the AI. You feed it a clip of a person's voice speaking for a minute or two and it will learn that voice. Then, you can put any text you want into it and it create an audio of the text.

There is an ethical part to this as well, as you can also create music and movies using someone else's likeness.

Break: A break was taken at 10:22 a.m. The meeting resumed at 10:40 a.m.

Client Assistance Program (CAP) Complaints or issues

There were no CAP complaints or issues.

NFB Newsline Update – by Jamie Richey

Summer is well underway, bringing people outdoors and enjoying the season. While this is fantastic for our health, it has impacted our numbers. However, with the Summer Olympics starting this week it's the perfect opportunity to log in to Newsline for all the latest updates. Plus, you can check out the TV Listings to find out when your favorite events are airing!

This quarter's report will be short on statistics due to the meeting being held at the end of July, so only data from May and June are available. In May, 604 calls were made, totaling 8,884 minutes, with an average call duration of 12.93 minutes. In June, 707 calls were made, totaling 10,405 minutes with an average call duration of 13.80 minutes. Online content was accessed 7,690 times in May and 8,002 times in June. In both months, Nebraska publications were the most accessed followed by national newspapers. The other content accessed, in order, was: TV listings, breaking news online, magazines, local weather and emergency alerts, and international newspapers.

The subscriber numbers for this quarter may appear inconsistent. I reported last quarter that Nebraska NFB-Newsline® had 2,272 subscribers. As of this writing the count stands at 2,144. I added five new subscribers in May, and seven in June, but the subscriber list is currently undergoing an update. Several subscribers have either passed away or moved, and their names had not yet been removed from the system. I am working to resolve this issue and expect it to be completed by the next meeting. Additionally, I am updating contact information for many subscribers. If you have moved or changed your phone number, or you know someone who has, please reach out to me so I can update the records.

In conclusion, this wraps up my Nebraska NFB-Newsline® quarterly report. Should you have any questions or require further clarification, please don't hesitate to reach out. Wishing you a wonderful summer and happy reading!

New Business

Officer Elections

Chair Heyen reported that every year at this time, the Board conducts officer elections. The positions on the Board are Chairperson, Vice Chairperson and Executive Secretary. Chair Heyen noted that the commissioners only make decisions related to NCBVI when they are together at a Commission Board meeting.

Commissioners who currently hold an office gave an overview of their position.

Chair Heyen stated that the Chair oversees the proceedings of the meetings, and they work closely with the Vice Chair to put the Commission meeting agendas together. The Chair also works closely with the executive director who keeps him informed on everything he needs to know in order to make sure that NCBVI is headed in the right direction.

Vice Chair Livingston noted that the Vice Chair works with the Chair to put together an agenda for the Commission meetings. Cheryl noted that the administrative specialist has been assisting with putting the agenda together. After a draft agenda is completed, they reach out to the other commissioners, the executive director, and the administrative specialist to get their input. The Vice Chair is also responsible for facilitating the Commission meetings if the Chair is not available. It was noted that when putting together the agenda, many of the agenda items are a repeat from the year before since there are certain issues that must be dealt with on a yearly basis.

Executive Secretary Mentink reported that the main duty of the Executive Secretary is to take notes and record the motions at each meeting. The commissioners have an ongoing document which shows all the motions made at each meeting. This document must be updated after each meeting. The document is then sent to the Chair, the Vice Chair and the Administrative Specialist. Executive Secretary Mentink added that it is the duty of all commissioners to stay informed on the activities of NCBVI. The Executive Secretary also reviews the draft minutes and notes any corrections that need to be made.

Commissioner Livingston moved to elect Commissioner Heyen as Chairperson.

Commissioner Heyen accepted the nomination.

There were no additional nominations. Commissioner Mentink moved that nominations cease and Commissioner Heyen be elected by acclamation. Commissioner Livingston seconded the motion.

Roll call: Ayes: Mentink, Heyen, Livingston, Rocha, Schonlau

Nayes:

Motion Carried

Commissioner Mentink moved to elect Commissioner Livingston as Vice Chairperson.

Commissioner Livingston accepted the nomination.

There were no additional nominations. Commissioner Mentink moved that nominations cease and Commissioner Livingston be elected by acclamation. Commissioner Schonlau seconded the motion.

Roll call: Ayes: Mentink, Heyen, Livingston, Rocha, Schonlau

Nayes:

Motion Carried

Commissioner Livingston moved to elect Commissioner Mentink as Executive Secretary. Commissioner Mentink accepted the nomination.

There were no additional nominations. Commissioner Livingston moved that nominations cease and Commissioner Mentink be elected by acclamation. Commissioner Schonlau seconded the motion.

Roll call: Ayes: Mentink, Heyen, Livingston, Rocha, Schonlau

Nayes: Motion Carried

Schedule New Commissioner Orientation Training

Commission Chair Heyen noted that in years past when the commissioners began having new commissioner training, it was often referred to as a new commissioners retreat to allow the Board of Commissioners to get together and have a team building event. In most recent years, it has been the tradition to have the new commissioner training as an open meeting. This also allows for past commissioners, former and current employees, and other people to be involved and share their experiences and knowledge. This training includes going over such items as the history of NCBVI, commissioner job duties, the role of the commissioners, and their communications between meetings.

The commissioners discussed whether to have the orientation training for our new commissioner held in-person or virtual.

Commissioner Livingston moved to hold the new commissioner training in-person as an open meeting.

Commissioner Mentink seconded the motion.

Roll Call: Ayes: Livingston, Mentink, Heyen, Rocha, Schonlau

Nayes: Abstained: Motion Carried

The commissioners discussed when and where to have the training.

After discussion, Commissioner Rocha moved to have the training on Saturday, September 14, in Kearney.

Commissioner Livingston seconded the motion.

Roll Call: Ayes: Livingston, Mentink, Heyen, Rocha, Schonlau

Nayes: Abstained: Motion Carried

Director Serván noted that he feels it is appropriate for NCBVI to pay for former commissioners to attend this training (travel, hotel room and meal reimbursement). The commissioners agreed.

Public Comment Period.

Erin Brandyberry – Erin stated that she had a comment to make about the AI topic. Erin noted that she loves exploring new things and figuring out what can help us work smarter and not harder. We have seen a trend of consumers starting to use AI technology, and therefore, she wanted to share that when using a common form of AI such as Chat GPT, which basically generates a text for you to copy and paste or edit as needed. Erin wanted everyone to be aware that the formatting does carry over if you do an automatic CTRL C to a CTRL V. Therefore, there are times when a consumer may send an email and it will be very broken up formatting which takes away some of

the integrity of the context being sent. All is a great tool to use as a starting point, but proofreading should be completed. Also, when you paste the text, you should use plain formatting.

Jeff Altman – Regarding AI, Jeff noted that we have all seen what came about with Braille when computers were introduced. He stated that as an agency he feels we need to be very thoughtful about introducing technology of this type to our clients and students. He feels we should encourage them to learn the basics and not simply rely on the technology. While technology has a lot of benefits, he thinks that learning to use the GPS between your ears is just as important.

Final Announcements

The next NCBVI Commission Board meeting is scheduled for November 2, 2024, in Omaha. The Focus Topic will be SSP Program.

NCBVI will have a Fall State Staff meeting on September 16-18. Commissioners should notify NCBVI if they wish to attend. Commissioner Livingston stated that she would like to attend.

Commissioner Rocha requested NCBVI support to attend the Fall NCSAB Conference in Seattle, Washington.

Commissioner Livingston moved to support Commissioner Rocha's request to attend the Fall NCSAB Conference. Commissioner Mentink seconded the motion.

Roll call: Ayes: Rocha, Mentink, Heyen, Livingston, Schonlau

Naves:

Motion Carried

Adjourn

The meeting adjourned at 11:05 a.m.

If you have an item that you would like to have placed on the agenda of the November 2, 2024 Commission Board meeting, please email it to the NCBVI Commission Board at ncbvi.commission-board@nebraska.gov.

Respectfully submitted,

Kathy Stephens, Administrative Specialist NCBVI

Brent Heyen, Chairperson NCBVI Board of Commissioners