

2023 HOUSE APPROPRIATIONS

HB 1232

2023 HOUSE STANDING COMMITTEE MINUTES

Appropriations Committee
Brynhild Haugland Room, State Capitol

HB 1232
1/25/2023

BILL for an Act to provide an appropriation to the department of career and technical education for career exploration software.
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8:34 AM Chairman Vigesaa- Meeting was called to order and roll call was taken:

Members present; Chairman Vigesaa, Representative Kempenich, Representative B. Anderson, Representative Bellew, Representative Brandenburg, Representative Kreidt, Representative Martinson, Representative Mitskog, Representative Meier, Representative Mock, Representative Monson, Representative Nathe, Representative J. Nelson, Representative O'Brien, Representative Pyle, Representative Richter, Representative Sanford, Representative Schatz, Representative Schobinger, Representative Strinden, Representative G. Stemen and Representative Swiontek.

Members not Present: Representative Hanson

Discussion Topics:

- Virtual Reality
- ARPA Dollars
- Career Exploration

Representative Nathe- Introduced HB 1232, testified in favor.

Matt Chausse- CEO- Be More Colorful-Testifies in favor. (Testimony # 15619)

Mike Heilman- Executive Director- ND Small Organized Schools- Testifies in favor. (Testimony #16536)

DJ Campell- Executive Director- Sanford Human Resources- Testifies in favor. (Testimony #16627)

Wade Sick- ND Dept. of Career & Technical Education- Testifies in favor (Testimony #16123)

Dale Hoerauf- Career Technical Education- Bismarck Public Schools- Testifies in favor. (Testimony #15652)

9:15 AM Representative Monson- Move to amend by adding an emergency cause.

Representative Mock- Second the motion

Roll Call Vote was Taken:

Representatives	Vote
Representative Don Vigesaa	Y
Representative Keith Kempenich	Y
Representative Bert Anderson	Y
Representative Larry Bellew	Y
Representative Mike Brandenburg	Y
Representative Karla Rose Hanson	A
Representative Gary Kreidt	Y
Representative Bob Martinson	Y
Representative Lisa Meier	Y
Representative Alisa Mitskog	Y
Representative Corey Mock	Y
Representative David Monson	Y
Representative Mike Nathe	Y
Representative Jon O. Nelson	Y
Representative Emily O'Brien	Y
Representative Brandy Pyle	Y
Representative David Richter	Y
Representative Mark Sanford	Y
Representative Mike Schatz	Y
Representative Randy A. Schobinger	Y
Representative Greg Stemen	Y
Representative Michelle Strinden	Y
Representative Steve Swiontek	Y

Motion Carries 22-0-1

Representative Richter- Move for a Do Pass as Amended

Representative J. Stemen- Second the Motion

Committee Discussion

Roll Call Vote was Taken:

Representatives	Vote
Representative Don Vigesaa	Y
Representative Keith Kempenich	Y
Representative Bert Anderson	Y
Representative Larry Bellew	Y
Representative Mike Brandenburg	Y
Representative Karla Rose Hanson	A
Representative Gary Kreidt	Y
Representative Bob Martinson	Y
Representative Lisa Meier	Y
Representative Alisa Mitskog	Y
Representative Corey Mock	Y
Representative David Monson	Y

Representative Mike Nathe	Y
Representative Jon O. Nelson	N
Representative Emily O'Brien	Y
Representative Brandy Pyle	Y
Representative David Richter	Y
Representative Mark Sanford	Y
Representative Mike Schatz	Y
Representative Randy A. Schobinger	Y
Representative Greg Stemen	Y
Representative Michelle Strinden	Y
Representative Steve Swiontek	Y

Motion Carries 21-1-1 Representative Strinden will Carry the Bill

Additional written testimony: Brady Pelton-ND Petroleum Council #16648, Alexis Baxley, ND School Boards Association #16524, Dustin Monke, Baker Boy #16503, Patrick Bertagnolli- Job Service ND #16462, Cory Steiner- Northren Cass School District # 16419, Jason Ehlert- ND Stae Building & Construction Trades Council #16201, Eddie Monnier XAP Corporation-CEO #15768, Dan Pearson- Northwest Tire President # 15764

Chairman Vigesaa Closed the hearing for HB 1232 at 9:26 AM

Risa Berube, Committee Clerk

JA 1-26-23

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1232

Page 1, line 2, after "software" insert "and to declare an emergency"

Page 1, line 10, replace "biennium beginning July 1, 2023," with "period beginning with the effective date of this Act"

Page 1, after line 11, insert:

"SECTION 2. EMERGENCY. This Act is declared to be an emergency measure."

Renumber accordingly

REPORT OF STANDING COMMITTEE

HB 1232: Appropriations Committee (Rep. Vigesaa, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (21 YEAS, 1 NAY, 1 ABSENT AND NOT VOTING). HB 1232 was placed on the Sixth order on the calendar.

Page 1, line 2, after "software" insert "and to declare an emergency"

Page 1, line 10, replace "biennium beginning July 1, 2023," with "period beginning with the effective date of this Act"

Page 1, after line 11, insert:

"SECTION 2. EMERGENCY. This Act is declared to be an emergency measure."

Renumber accordingly

2023 SENATE WORKFORCE DEVELOPMENT

HB 1232

2023 SENATE STANDING COMMITTEE MINUTES

Workforce Development Committee Fort Lincoln Room, State Capitol

HB 1232
3/9/2023

Relating to an appropriation to the department of career and technical education for career exploration software; and to declare an emergency.

2:08 PM **Chairman Wobbema** called the hearing to order. **Senators Wobbema, Axtman, Elkin, Larson, Sickler, Piepkorn** were present.

Discussion Topics:

- Career and technical education students
- Retained students
- Career exploration in middle and high school
- Virtual reality
- VR technology
- Career pathways
- Be more Colorful
- A day in a life
- Are you ready platform

2:09 PM **Representative Mike Nathe District 30**, introduced HB 1232 and verbally testified in favor.

2:13 PM **Lisa Feldner, Lobbyist, Olson Effertz** introduced **Matthew Chausee**

2:14 PM **Matthew Chausee, Chief Executive Officer, Be More Colorful**, testified in favor. #22297

2:24 PM **Michael Heilman, Executive Director, North Dakota Small Organized Schools**, testified in favor. #23358

2:31 PM **Matthew Chausee** provided additional information

2:36 PM **Lisa Feldner, Lobbyist**, introduced **Matthew Naugle**

2:38 PM **Matthew Naugle, Workforce Development Specialist, Essentia Health**, testified in favor. #23416

2:43 PM **Wayde Sick, State Director, Department of Career and Technical Education**, testified in favor. #22917

2:46 PM **Taylor Lassiter, Membership and Marketing Specialist, North Dakota Schools Boards Association**, testified in favor. #23134

2:48 PM **Wayde Sick** provided additional information

Additional written testimony:

Ann Pollert, Director of Workforce Development, General Equipment & Supplies, Inc
in favor #21896.

Edward Monnier, Chief Executive Officer, XAP Corporation, in favor #21959

Patrick Bertagnolli, Executive Director, Job Service North Dakota, in favor #22128

Dan Pearson, President, Northwest Tire, in favor #22252

Cory Steiner, Superintendent, Northern Cass School District, in favor #22385

Cairn Reisch, Community Relations Manager, in favor #22714

Andrea Pfennig, Director of Government Affairs, Greater North Dakota Chamber, in favor #22788

**Cindy Griffin, Vice President Human Resources, Harvestone Low Carbon Partners
Midwest AgEnergy Group,** in favor #22967

**David Farnsworth, Retired North Dakota Manager of Power Generation and
Engineering, Great River Energy,** in favor #22984

Charles Clairmont, Executive Director, North Dakota Safety Council, in favor #23227

Taya Spelhaug, TechSpark Manager, Microsoft, in favor #23382

2:50 PM **Chairman Wobbema** closed the hearing.

Patricia Lahr, Committee Clerk

2023 SENATE STANDING COMMITTEE MINUTES

Workforce Development Committee Fort Lincoln Room, State Capitol

HB 1232
3/10/2023

Relating to an appropriation to the department of career and technical education for career exploration software; and to declare an emergency.

10:02 AM **Chairman Wobbema** called the meeting to order. **Senators Wobbema, Axtman, Elkin, Larson, Sickler, Piepkorn** are present.

Discussion Topics:

- Other organizations
- Students utilize on technology
- Career exploration middle and high school
- Final cost
- goggles

Senator Wobbema calls for discussion

10:12 AM **Chairman Wobbema** closed the meeting.

Patricia Lahr, Committee Clerk

2023 SENATE STANDING COMMITTEE MINUTES

Workforce Development Committee Fort Lincoln Room, State Capitol

HB 1232
3/17/2023

Relating to an appropriation to the department of career and technical education for career exploration software; and to declare an emergency.

11:58 AM **Chairman Wobbema** called the meeting to order. **Senators Wobbema, Axtman, Larson, Sickler, Piepkorn** are present. **Senator Elkin** was absent.

Discussion Topics:

- Career exploration middle and high school

Senator Wobbema calls for discussion.

Senator Larson moved **DO PASS** and **REREFER** to **APPROPRIATIONS**.

Senator Axtman seconded the motion.

Roll call vote.

Senators	Vote
Senator Michael A. Wobbema	Y
Senator Michelle Axtman	Y
Senator Jay Elkin	AB
Senator Diane Larson	Y
Senator Merrill Piepkorn	Y
Senator Jonathan Sickler	Y

The motion passed 5-0-1.

Senator Larson will carry HB 1232.

11:59 AM **Chairman Wobbema** closed the meeting.

Patricia Lahr, Committee Clerk

REPORT OF STANDING COMMITTEE

HB 1232, as engrossed: Workforce Development Committee (Sen. Wobbema, Chairman) recommends **DO PASS** (5 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). Engrossed HB 1232 was placed on the Fourteenth order on the calendar. This bill affects workforce development.

2023 SENATE APPROPRIATIONS

HB 1232

2023 SENATE STANDING COMMITTEE MINUTES

Appropriations - Human Resources Division Roughrider Room, State Capitol

HB 1232
3/27/2023

A BILL for an Act to provide an appropriation to the department of career and technical education for career exploration software

8:53 AM Chairman Dever called the meeting to order.

Members present: Senators Dever, Davison, Burckhard, Mathern, Kreun.

Discussion Topics:

- Virtual reality production studio
- CareerViewXR development
- People & emotional experience connection
- Career choices
- Real-world
- Career & Technology Education applications
- Immersion technology for workforce initiatives
- Practical, effective, efficient
- Schools & teachers
- Licenses & software compatibility
- ND First Statewide Opportunity
- Established Distribution
- Nationwide ramifications of business model
- Research benefits
- ARPA & State funds
- Self-fund projects
- Multiple applications & promotions
- Edu-Tech & RUPReady
- Leadership Dickinson
- Greater ND groups
- Small school benefits
- Transportation lobby support

8:56 AM Levi Kinnitshke, fiscal analyst for Legislative Council, reviewed a portion of the Career and Technology budget, HB 1232 verbally. General discussion.

9:10 AM Matt Chaussee, CEO and co-founder, Be More Colorful, testified in favor. Testimony #26607.

9:33 AM Mike Heilman, Executive Director, ND Small Organized Schools, verbally testified in favor.

9:51 AM Senator Bekkedahl, spoke on funds available for Virtual Reality.

9:54 AM Senator Burckhard moved DO PASS on HB 1232.
Senator Mathern seconded the motion.

9:54 AM Roll call vote.

Senators	Vote
Senator Dick Dever	Y
Senator Randy A. Burckhard	Y
Senator Kyle Davison	Y
Senator Curt Kreun	Y
Senator Tim Mathern	Y

Motion passed 5-0-0.

9:55 AM Senator Burckhard will carry the bill.

9:58 AM Chairman Dever adjourned the meeting.

Susan Huntington, Committee Clerk

2023 SENATE STANDING COMMITTEE MINUTES

Appropriations Committee Roughrider Room, State Capitol

HB 1232
4/4/2023

A BILL for an Act to provide an appropriation to the department of career and technical education for career exploration software; and to declare an emergency.

9:36 AM Chairman Bekkedahl opened the hearing on HB 1232.

Members present: Senators Bekkedahl, Krebsbach, Burckhard, Davison, Dever, Dwyer, Erbele, Kreun, Meyer, Roers, Schaible, Sorvaag, Vedaa, Wanzek, Rust, and Mathern.

Discussion Topics:

- Virtual reality software
- Career and technical applications
- Career exploration
- Committee action

9:36 AM Senator Burckhard introduced the bill, no written testimony.

9:40 AM Senator Burckhard moved DO PASS.

Senator Kreun seconded the motion.

Senators	Vote
Senator Brad Bekkedahl	Y
Senator Karen K. Krebsbach	Y
Senator Randy A. Burckhard	Y
Senator Kyle Davison	Y
Senator Dick Dever	Y
Senator Michael Dwyer	Y
Senator Robert Erbele	Y
Senator Curt Kreun	Y
Senator Tim Mathern	Y
Senator Scott Meyer	Y
Senator Jim P. Roers	Y
Senator David S. Rust	Y
Senator Donald Schaible	Y
Senator Ronald Sorvaag	Y
Senator Shawn Vedaa	Y
Senator Terry M. Wanzek	Y

Motion passed 16-0-0.

Senator Larson will carry the bill.

9:42 AM Chairman Bekkedahl closed the hearing.

Justin Boone on behalf of Kathleen Hall, Committee Clerk

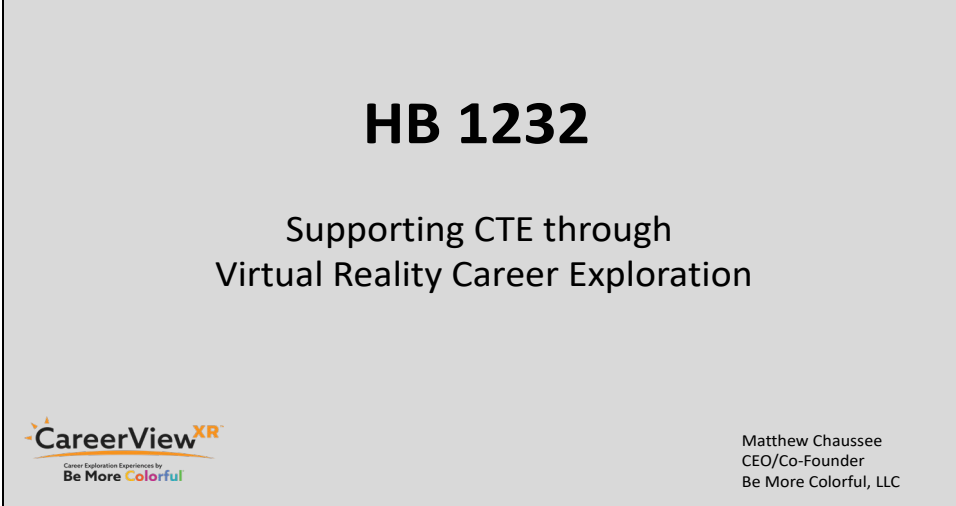
REPORT OF STANDING COMMITTEE

HB 1232, as engrossed: Appropriations Committee (Sen. Bekkedahl, Chairman) recommends **DO PASS** (16 YEAS, 0 NAYS, 0 ABSENT AND NOT VOTING). Engrossed HB 1232 was placed on the Fourteenth order on the calendar. This bill affects workforce development.

TESTIMONY


HB 1232

Slide 1



HB 1232

Supporting CTE through
Virtual Reality Career Exploration

 Career Exploration Experiences by
Be More Colorful

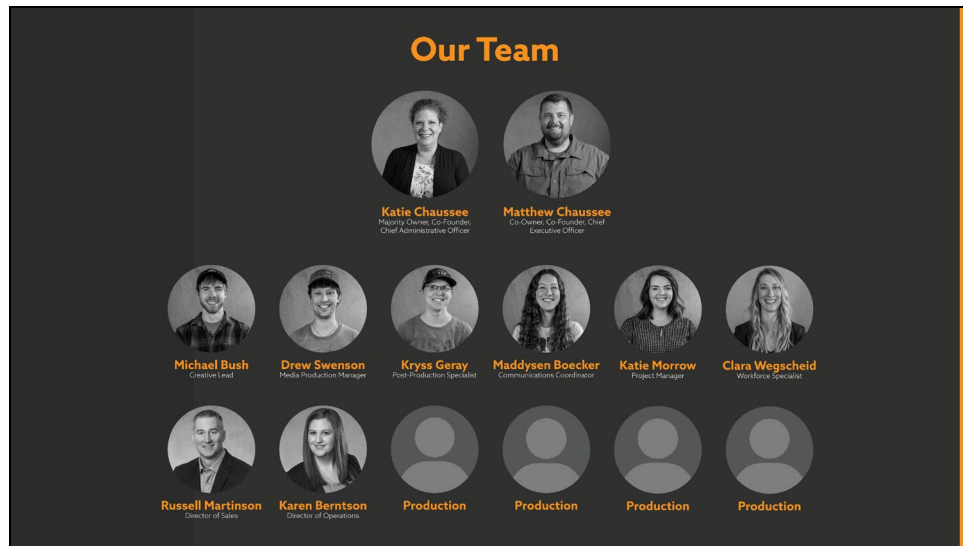
Matthew Chaussee
CEO/Co-Founder
Be More Colorful, LLC

Chairman Vigesaa and members of the House Appropriations Committee:

My name is Matt Chaussee and I am the CEO and co-founder of Be More Colorful.

I was born in Devils Lake, grew up in Bismarck and graduated from Bismarck High School then moved to Fargo in 1999. I went to school at NDSU and following graduation, worked for 15 years in various technology roles supporting both marketing and higher education administration functions. In 2016, my wife (also a lifelong ND resident) and I started Be More Colorful, North Dakota's first and only virtual reality production studio.

Our focus for the past 3 and a half years has been on the development of CareerViewXR, a library of interactive virtual reality career experiences that bring jobsites into the classroom.



We are 100% North Dakota owned husband and wife company and have personally invested substantial time and dollars into creating virtual reality experiences for workforce development initiatives. During the past two years, we have rapidly grown from a “Mom and Pop VR shop” to a team of 11 professionals who are changing the way students and career seekers make informed career choices.

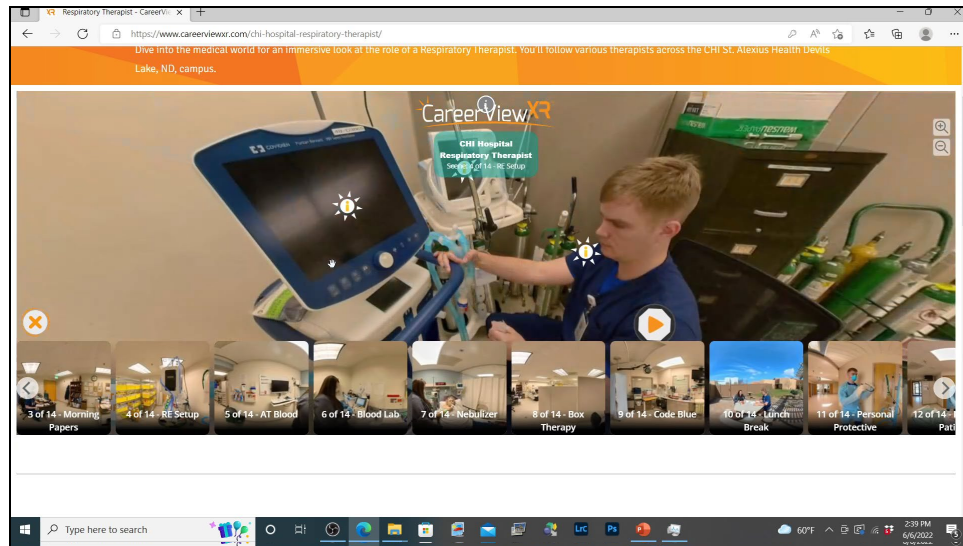
We’ve worked with hundreds of educators and students to understand how to best align our company’s efforts to enable teachers and students to explore careers in a safe and efficient manner.

Slide 3



We are passionate about what we do and about virtual reality's capacity to make emotional connections between people and experiences. Through thousands of hours of testing experiences with both adults and students of all ages, we have learned that the immersive nature of the technology combined with the viewer's ability to choose their own adventure makes a lasting impact. VR experiences give people a sense of presence in a location that helps them make a more informed decision on whether to learn more. (PLAY VIDEO)

Slide 4

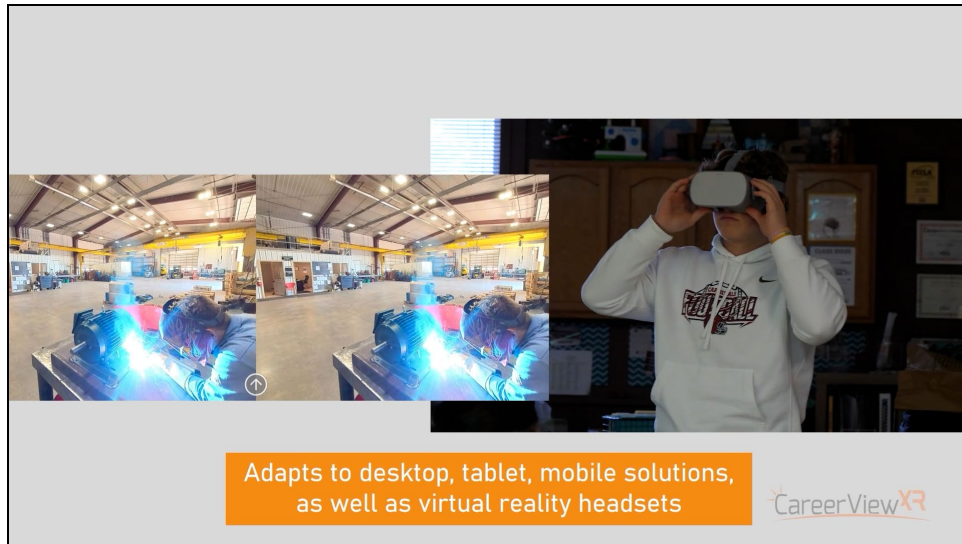


Unfortunately, when many people hear the words “virtual reality” the thought that follows is a misperception that VR and immersive media are gaming technologies and have little application for the real world. The truth is that there is massive untapped potential to use modern technology to capture real-world scenarios allowing us to document and playback experiences that show real people performing real work in real environments.

When approaching VR solutions for schools, its important to keep both accessibility and cost in mind. (PLAY VIDEO) What you are seeing here is a web-based version of a virtual reality video that is accessed on a non-VR device over the internet. This web-based tour allows students to progress at their own pace and is paired with a companion virtual reality video for VR headsets that allows for even deeper immersion. These are real professionals performing work with real patients which is important because kids need authentic career experiences to help them make good career choices.

The combination of both VR headset technology and more accessible web technologies allows schools to take a comprehensive approach to implementing VR media, and one that is not dependent on a massive investment in virtual reality headset hardware.

Slide 5



(image 1) Here you see two students engaging in web-based virtual tours on Chromebooks. The student on the left is learning about a day in the life of a Dental Assistant filmed in Devils Lake ND. The student on the right is learning about a day in the life of a master plumber at a location filmed in Williston, ND.

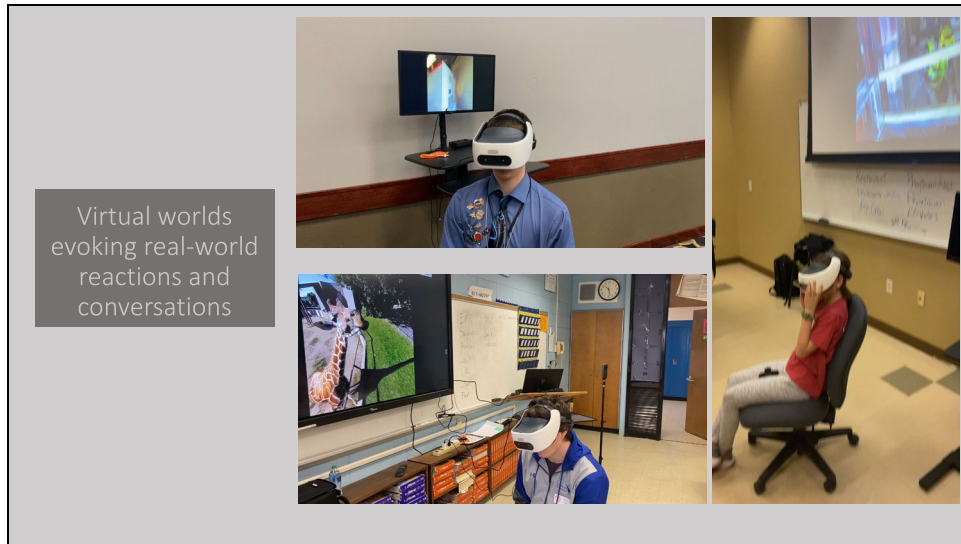
(ADVANCE TO image 2) In this image, you see a student using a headset, getting fully immersed, exploring a day in the life of a welder.

Slide 6



Students inherently understand this technology and the importance of it. Frequently, they make the case for its use in the classroom better than I can. (PLAY VIDEO)

Slide 7




VR video experiences engage people of all ages, but we are particularly excited about their capability to help inform middle and high school students about career pathways they would otherwise never have known about.

On the right is a student inside an elevator shaft. (PLAY VIDEO TO END) This is something she would never be able to see in person but it is readily, and safely, accessible through virtual reality.

North Dakota Opportunity

- **First Statewide Deployment of VR**
- **Connecting ND Students with ND Jobs**
- **Distribution Established**
 - EduTech
 - ND Small Organized Schools
 - RU Ready (CTE and Bank of ND)

A graphic showing a map of the United States with North Dakota highlighted in orange. A white magnifying glass is positioned over North Dakota, with the text "North Dakota" written inside the lens. The map is set against a dark grey background.

Deploying VR career exploration within North Dakota now has the potential to make a big difference in years to come. To date, no other state has implemented a statewide program for virtual reality career exploration. CTE in North Dakota would immediately become a leader in immersive tech for workforce initiatives. Using VR content that has been filmed in North Dakota provides added benefits of helping retain students by making them aware of the amazing career opportunities we have here in the state.

There are already some great mechanisms in place to ensure success of a statewide deployment including EduTech - a division of the state IT Department, ND Small Organized Schools, and the RU Ready Career Resource Network, the existing statewide career information system that is administered by CTE and backed by the Bank of North Dakota.

Producing In-Demand Experiences

- 24 experiences created
- 20 scheduled for Spring launch
- 40 pending site selection in ND
- 100+ on the horizon

Construction
Pilot (Airplanes) Marine

Information Technology

SOCIAL SERVICES

ENGINEERING & ARCHITECTURE

FINANCIAL

MANAGEMENT

VR technology paves the way for making career exploration in our highest demand industries accessible 24/7, not just to students and teachers, but also to their parents, eliminating stereotypes and misperceptions about career pathways to enable more meaningful and engaged conversations about career choice.

Its always eye-opening working with kids. Any time we are in the classroom, we always ask students what they would like to have us create in VR. This has been one of the most surprising things for our team... we get the occasional “Nascar Driver” and “Football Player” but the vast majority of careers that kids want to see in VR are things like: veterinarian, nurse, police officer, welder, farmer, mechanic, and dozens of other trades where great opportunities exist in communities throughout North Dakota.



For the past 4 years, students, teachers, counselors, employers, and industry leaders around the state have been active and involved in testing, developing, and vetting VR solutions as a critical component to solve our workforce development issues. VR technology is a practical, effective, and efficient way to address North Dakota schools' dire need for earlier and more diverse career exploration.

Your support on HB 1232 will provide unprecedented opportunity to connect students with in-state industries while simultaneously demonstrating to the rest of the country that North Dakota is a leader in innovative education.

January 23, 2023

Members of the North Dakota House Appropriations

RE: Support for HB1232

Chairman Vigesaa and members of the House Appropriations Committee. My name is Dale Hoerauf. I am the Director of Career and Technical Education for Bismarck Public Schools. I am reaching out to you in support of HB1232.

Three years ago I sat in on a presentation of BeMore Colorful. I was impressed by the high tech, clear video, and ability to see a 360 walk through of a construction site or a college campus. We hired Mr. Chausee to do a 360 walkthrough of the Bismarck Public School Career Academy. It allows parents, students, and community partners to be able to see all the classes we have to offer and equipment we use. We know that many students do not know what career they want to pursue when they graduate. One of the best ways for students to be able to make a career decision is to somehow experience through job shadows, internships, etc. However that is not always possible. Virtual reality is an incredible way to make careers and job sites available through an interactive 360-degree experience. It allows students to be on top of a wind turbine, in an emergency room on an active wellsite, or in any of the other career environments' industry considers high demand for future workforce.

On February 3rd, I would invite you to the Memorial Hall for a demonstration of one such VR career exploration experience, Career ViewXR. There you will have an opportunity to explore virtual reality and meet some of our Career Academy students to see their excitement in the new game changing technology.

Support for HB 1232 is support for North Dakota's CTE growth and provides the ability to expand access to CTE programs for students across the state.

Sincerely,



Dale Hoerauf

Director Bismarck Public Schools Career and Technical Education



Northwest Tire

Locations in Bismarck, Bowman, Dickinson, Grand Forks, Jamestown, Mandan, Mapleton, Minot, West Fargo, Williston ND, Bemidji and Fergus Falls MN, and Brandon SD.

January 23, 2023

To Chairman Vigessa and the House Appropriations Committee:

I'm Dan Pearson and I serve as the President of Northwest Tire and as an Executive Committee board member on the Greater North Dakota Chamber of Commerce. Northwest Tire is a North Dakota business founded over 45 years ago. We have retail outlets across North Dakota in the communities of Bismarck, Bowman, Dickinson, Grand Forks, Jamestown, Mandan, Minot, Williston, and West Fargo. We also own retread operations in Minot and Dickinson and tire warehouses in Dickinson and Mapleton. In addition to our extensive North Dakota presence, we also own, operate, and support multiple locations in neighboring states. I am writing to express my support for HB 1232.

Our business and the tire industry as a whole are facing a substantial workforce shortage. While many industries face this issue, the problem we face is a bit more nuanced because of a complete lack of awareness of everything that goes into getting tires onto your vehicle. When I ask people what they think they would do if employed at Northwest Tire, the response 99 times out of 100 is "change tires." The reality is that while we do employ tire techs, we also employ automotive service techs, alignment technicians, inside sales representatives, truck drivers, warehouse staff, retread techs, accountants, customer service techs, marketing personnel, and much more. Each of the roles in our company is an opportunity to have a successful and progressive career in the tire industry. The misperception about limited career opportunities is one of the biggest challenges we need to overcome to develop our workforce.

We have spent many years and countless hours working to re-form the narrative and get people thinking about a career with Northwest Tire as a lifelong opportunity with room for advancement. Our efforts have resulted in some success but we still struggle with a perception issue because when people think about tires, they think about their own experience with them, which 99% of the time is just scheduling rotations and purchasing replacements. We would love to be able to bring people in to see our operations, but the logistics of coordinating on-site visits at scale just don't work.

Last year, we had an opportunity to try something different. Our team invested in creating a series of virtual tour experiences and virtual reality videos that allow us to share more about our facilities and available careers, bringing students and job seekers into our locations to

observe the variety of roles we employ through interactive digital walk-throughs. We recently implemented the experiences on our website and are eagerly seeking opportunities to make our experiences more accessible to students and career seekers in the markets we serve. We are excited to make direct connections with schools and are incredibly optimistic about the opportunity HB 1232 presents, allowing our investment to also become much needed career experiences used in classrooms across the state.

Our workforce problem is not going anywhere anytime soon and its time to get innovative with the solutions we take. Virtual reality technology is an affordable, effective, and safe way to present jobs in industries like ours to help educate and inform about the great lifelong careers students can pursue here at home. Supporting HB 1232 also supports companies like ours who are heavily invested in the growth and success of North Dakota.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Pearson", with a long, sweeping horizontal flourish extending to the right.

Dan Pearson

President

Northwest Tire



600 Corporate Pointe, Suite 220
Culver City, CA 90230

TO: House Appropriations Committee
FROM: Eddie Monnier
DATE: January 25, 2023
RE: Testimony in support of HB 1232

I am Eddie Monnier, the CEO of XAP Corporation. For the past 15 years, XAP has held North Dakota's state contract for administering the RUPrepare.ND.gov Career and College Planning platform. I am writing to express my support for HB 1232.

As an industry-leading technology company, we are constantly looking for ways to improve outcomes for the students, counselors, teachers, parents, and administrators who use our platform. Recently, we have been working to identify opportunities to connect with students earlier in their career journeys to help them better visualize what different careers and industries entail. We want to equip students with the knowledge, tools, experiences, and support they need to make good career decisions including knowledge of work-based learning opportunities and the benefits of aligning their career goals with in-demand careers in growing industries in North Dakota.

Virtual reality and immersive media have huge potential to dramatically improve how students visually explore career pathways. However, the technology was not previously on our radar since VR is typically accessed via virtual reality headsets, and the students accessing our content are using standard devices like Chromebooks, tablets, and mobile phones.

That perspective changed after we visited with Be More Colorful, a North Dakota based company, and learned about their CareerViewXR career exploration platform. VR content, when displayed through web-based virtual tour technologies allows viewers to easily access experiences from any device. This capability shows huge promise for augmenting the career exploration journey we provide to the students we serve. We have had several conversations with this team and are confident this solution is capable of integrating with the RUPrepare.ND platform and would be a great supplement to the career exploration journey we provide to all North Dakota students.

We urge you to pass HB 1232. Passing this bill will further enhance the robust solution RUPrepare.ND provides to students, deliver an exciting new set of tools to help with classroom discussion about career pathways, and put North Dakota on the map as a leader in providing innovative education solutions for career exploration.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'EM' followed by a stylized flourish.

Eddie Monnier
Santa Monica, CA
310-806-1216



**House Appropriations
HB1232**

January 25, 2023

Chairman Vigesaa and members of the House Appropriations, for the record, my name is Wayde Sick, State Director for the Department of Career and Technical Education. I am submitting testimony in support for HB1232.

For approximately 15 years, the Department of Career and Technical Education has provided RUPrepareND, a career exploration platform, to the students of North Dakota. There are resources in RUPrepareND that are appropriate for all ages, elementary, middle, high school and college. We continue to develop upgrades, to further assist students to explore the career opportunities. Most recently, we implemented a work-based learning module that would help educators connect their students to community-based work-based learning experiences, giving students hands on experiences.

HB1232 would provide funding that would provide a virtual reality component to the RUPrepareND platform. The benefit of this resource is to provide experiences to students otherwise would not have the opportunity to have due to limitations. The barriers that often stand in the way are lack of access to a wide variety of industries, transportation costs, safety concerns and the time needed to travel to and visit worksites.

This concludes my testimony, and I am happy to stand for questions.



NORTH DAKOTA STATE BUILDING AND CONSTRUCTION TRADES COUNCIL

2901 Twin City Dr. Suite 201
Mandan, North Dakota 58554
(701) 663-8821

© SCRU 280-C

January 25, 2023

To the Honorable Don Vigessaa and Member Representatives of the Appropriations Committee

RE: House Bill 1232; Appropriation to the Department of Career and Technical Education for career exploration software

Representing workers in the commercial, industrial, and residential construction industries, foundation to finish, we are committed to promoting, recruiting, and developing careers in the skilled trades. Construction is a rewarding career, and we are fully committed to passing this industry along to younger generations.

The challenges of bringing students to construction sites, even if one is accessible, are always a challenge because of hazards in the industry. Yet, displaying images or videos of members in action simply does not show the depth and complexity of the infrastructure that we build every day. For these reasons we were searching for a way to bring the jobsite to the student to see the full range of careers available.

Using virtual reality has enabled us to work towards this goal across the state in a safe, controlled manner while drawing interest in the Building Trades Unions. It has been amazing to see students interact with this technology as we take them from trade to trade, site to site, generating a greater understanding of construction.

However, our system is currently limited to who we can present to when invited to schools, so we have only used this technology on a very limited scope. We feel appropriating funds into RUPReady will address this limitation for careers that are challenged the way the construction industry is. Therefore, we are in support of HB 1232 and recommend its passage.

With Kindest Regards, I am

Jason Ehlert
North Dakota State Building and Construction Trades Council
President
Lobbyist No. 347
Jason@ndbtu.org

**Testimony of Dr. Cory Steiner, Superintendent and Mackenzie Tadych,
Director of College, Career, and Life Readiness
Northern Cass Superintendent
HB 1232: Support of Funding for an Appropriation within the Career and
Technical Education Budget
Wednesday, January 25th, 2023**

Chairman Vigessa and members of the House Appropriation committee:

It is my privilege to submit testimony in support of HB 1232 for an appropriation of \$500,000 within the Career and Technical Education budget to make virtual reality career exploration available statewide through the RU Ready platform.

This letter is co-authored by Dr. Cory J. Steiner, the Superintendent of Schools at Northern Cass School District in Hunter, North Dakota and Mackenzie Tadych, Director of College, Career, and Life Readiness for the Northern Cass School District. -Northern Cass is a PK-12 district with 690 learners located 25 miles northwest of Fargo. We are an innovative school district which is in the midst of a transformation to personalized, competency-based learning.

The issues in education are profound, but more importantly, they are urgent. The structure and function of our schools today must change to meet the needs of a world which is changing at an exponential rate. Every educational system is designed to get the results it gets. Our system is no exception. It is getting the educational results it is supposed to get. -Unfortunately, what is being asked of schools has changed dramatically since the design of the system. In schools, we have been tasked to prepare learners to be productive members of society. We have been asked to prepare learners for college, career, and military. -We are asked to prepare learners of today for jobs that don't exist while also making sure learners have the skills for jobs in the workplace now.- We must develop academic, social, and emotional skills while developing long-lasting relationships in a safe environment. -In other words, we must prepare learners to be choice ready for the future. The list of important things to do and accomplish is never-ending and constantly expanding.

To address workforce shortages, schools must increase opportunities for career exploration and skill development. -Career exploration, however, it is not done with fidelity across our state due to a lack of resources. Barriers preventing access to career exploration are time, financial, safety, and perhaps the most significant barrier for a majority of schools is one of distance. -One effective solution we have

implemented across all grade levels is CareerViewXR, a career exploration platform built by North Dakota company, Be More Colorful.

Our district of 690 students shares access to 4 virtual reality headsets and 2 traveling carts across high school, middle school, and elementary levels to utilize in their classes along with one headset set up in the media center for learners to use at their convenience. The virtual experiences have opened learners' eyes to careers they did not know existed as well as created interest and a deeper understanding of career opportunities.

VR career experiences allow learners to see the career first-hand and opens doors to connecting them to real professionals in the community which leads to a deeper level of understanding. Through HB 1232, learners will have an opportunity no matter the school they attend to be exposed to authentic career exploration at all levels across the state. This appropriation is about equity and accessibility of career exposure for all North Dakota learners.

As part of this testimony, we want to share some of the reflections from our learners.

A senior learner said, "I think that the VR job shadows are a great opportunity for students that may not be able to actually shadow a career they are interested in. The VR job shadows allow for students to explore career choices if they are not sure about what they want to go into. By having the virtual aspect, the job shadows are more personal and real-life than just watching video about what the workers in those fields actually do."

Another senior said, "'It is pretty neat how I could be out on a wind turbine and back in school in seconds."

Finally, a sophomore stated, "It was surreal, thinking I could just witness a day-in-the-life of my possible future career. I wish I had more experience with it, or had access to it earlier, because knowing for sure what kind of things I'd do in so many different careers would help me figure out what I wanted to do so much quicker."

The impact this is having on our learners is significant and we can only imagine the impact it could have if every learner in our state had access to these authentic experiences.

We understand the financial commitment for this aspect of the bill is significant. However, we know first-hand that the value of implementing VR in our schools is exponentially greater than the costs incurred. By supporting funding for this initiative, the legislature will begin addressing the workforce shortage by investing in our PK-12 schools and learners. We ask for a 'do pass' on HB 1232 and further support for this appropriation.

Dr. Cory J. Steiner
Superintendent, Northern Cass School District

Mackenzie Tadych
Director of College, Career, and Life Readiness

**House Appropriations
HB1232
January 25, 2023**

Chairman Vigesaa and members and of the House Appropriations, my name is Patrick Bertagnolli, and I am the Executive Director for Job Service North Dakota. I am submitting testimony in support of HB1232.

I have been a member of the Workforce Development Committee since 2014 and continue to serve on this committee in my current capacity as Executive Director of Job Service North Dakota. Through the work on this committee, we have supported earlier and more diverse career exploration for youth and the need to create a consistent and integrated approach to career exploration. This committee also has a responsibility to ensure collaboration and alignment between students, educators, and employers in North Dakota.

In the Job Service North Dakota Appropriations testimony, I provided examples of how our Workforce Centers conduct outreach throughout the state. These outreach events include Career Fairs, High School outreach, Girl Scout Events, Tribal Reservations, the Department of Corrections, and many more. As an additional tool to help connect job seekers to careers in North Dakota, we entered into a contract with Be More Colorful for two of the Virtual Reality Career Viewers and have been using them at these events for almost a year. These viewers are also used within the Workforce Centers when not slated for an event.

The use of the viewers offers individuals an opportunity to experience careers they may not otherwise have access to due to barriers and limitations such as safety and security concerns, transportation, or invitations to visit a worksite. When paired with North Dakota's In-Demand Occupation list, the Career Viewer would be an asset to the educational community to offer more diverse career exploration and exposure to students.



January 24, 2023

RE: Support of HB 1232

Chairman Vigesaa and members of the North Dakota House Appropriations Committee:

My name is Dustin Monke and I am the marketing manager for Baker Boy, Inc. I am writing to you on behalf of Baker Boy President Guy Moos, in support of HB 1232. We recently worked with Matthew Chaussee and his team from Be More Colorful. Their team spent two separate days at our facility, scouting and then filming "A Day in the Life of a Baker" 360-degree virtual-reality videos for their CareerViewXR website and student learning tool.

We agreed to do this with Be More Colorful because we understand the importance of educating today's young people on what a career at Baker Boy would be like. Having Be More Colorful put our manufacturing plant right in front of a student's eyes – quite literally – through their VR software will undoubtedly help etch Baker Boy in the minds of North Dakota students and, we hope, will be impactful when it comes to them weighing potential career options.

While we regularly host student tours and class field trips to our facility, the ability to have a student put on a VR headset and immediately feel like they're standing on our production line – all from the comfort of their classroom or home – is something we're now proud to say we can offer thanks to Be More Colorful and their VR tools. We are proud to showcase the technology and automation of our plant and hope to use this tool to make students understand that we're more than just a simple bakery where people baked breads and buns, and fry donuts.

Baker Boy has already established itself as a large supporter of Dickinson Public Schools' new Career and Technical Education Center, as we understand that many of our future employees will be coming through these programs. We feel that including our company in the virtual reality career exploration efforts being taken by companies like Be More Colorful will ensure VR deployment in North Dakota is a resounding success statewide.

Again, we ask for your support of HB 1232 moving forward, as it will undoubtedly have a great and positive impact on the futures of many North Dakota students.

Thank you,

Dustin Monke,
Marketing Manager, Baker Boy, Inc.
701-456-1530 dustinm@bakerboy.com

bakerboy.com



NDSBA
NORTH DAKOTA SCHOOL
BOARDS ASSOCIATION

P.O. Box 7128
Bismarck ND 58507-7128
1-800-932-8791 • (701)255-4127
www.ndsba.org

HB 1232
House Appropriations | January 25, 2023
Testimony of Alexis Baxley

Good morning, Chairman Vigessa and members of the House Appropriations Committee. My name is Alexis Baxley, and I serve as the executive director of the North Dakota School Boards Association. NDSBA represents the elected school boards of all 170 public school districts and several special education units in North Dakota.

The North Dakota School Boards Association supports HB 1232. I had the opportunity to watch a presentation by Mr. Chausee as a part of the Leadership ND program in early 2020. I remember thinking, “what a cool opportunity for students to ‘try out’ careers.” This past year, NDSBA was grateful to have BeMore Colorful and Mr. Chausee present at our annual convention and host an exhibit booth. The virtual reality technology BeMore Colorful offers is impressive, and the opportunities to use it in our districts are many. We know that the best way to assist students in finding their path to life after graduation is to expose them to as many careers as possible. This technology is an incredible way for students to “experience” aspects of careers they would not otherwise have access to, and would be a great benefit to North Dakota students.

I respectfully ask the committee to give this appropriation a do-pass recommendation. Thank you.



North Dakota Small Organized Schools

Mr. Michael Heilman
Executive Director
3144 Hampton Street
Bismarck, ND 58504
mheilmandsos@gmail.com
701-527-4621

Mr. Brandt Dick
President
1929 N. Washington Steet. Ste.A
Bismarck, ND 58501
Brandt.Dick@k12.nd.us
701-415-0441

Mr. Steven Heim
Vice-President
PO Box 256
Drake, ND 58736
Steve.heim@k12.nd.us
701-465-3732

HB 1232 Testimony in Support
House Education Committee
Representative Vigesaa – Chairperson
January 25, 2023

Chairman Vigesaa and members of the House Appropriations Committee, my name is Michael Heilman. I am the Executive Director of the North Dakota Small Organized Schools (NDSOS). I represent 150-member school districts of the North Dakota Small Organized Schools. NDSOS stands in support HB 1232.

This bill is about how connecting various segments of our society provides a win/win. By connecting cutting edge technology, with workforce development and putting it in the hands of the future workforce, our students; that is a win for our kids and for workforce development. This technology using the existing RU Ready Platform allows schools to provide realistic career exploration without leaving the school. We all love a good field trip to a power plant, or Baker Boy, or Bobcat. While in Dickinson where I was principal, I and Rich Wardner, mostly Rich set up program called Leadership Dickinson. The program was designed to allow a select group of students to experience the multitude of careers available in Dickinson. It was and I hope it still is, a great program but it served a very small percentage of students. This technology makes a multitude of career experiences available to all and you never have to leave the school.

How does a student in the eastern part of the state see firsthand what it is like to work in the oil field, or a student in Kenmare see what it would be like to work for Tecton in Fargo. Using this technology all of this and more is possible more. Whether it is a location and associated cost of travel, or other funding issues, HB 1232 makes this available in large and small schools alike. This is especially important in our rural schools where travel can be cost prohibitive.

Board of Directors

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Mr. Tim Holte, Supt. Stanley
Mr. John Gruenberg, Supt. Powers Lake

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Mr. Jeff Hagler, Supt. North Star
Mr. Steven Heim, Anamoose & Drake

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Dr. Kelly Peters, Supt. Richardton-Taylor

Region 5

Mr. Rick Diegel, Supt. Kidder Co.
Mr. Brandt Dick, Supt. Burleigh County

Region 6

Mr. Mitch Carlson, Supt. LaMoure
Dr. Steven Johnson, Supt. Lisbon

The mission of NDSOS is to provide leadership for the small/rural schools in North Dakota and to support legislation favorable to their philosophy while opposing legislation that is harmful.

If you've had the opportunity to use or see this technology in use, you understand how amazingly realistic the virtual experience is. When kids remove the headset after experiencing what a wind tower technician does, the look on their face tells the whole story. This technology opens the door for our children, regardless of where they live to have a career exploration experience that could be the difference between a student choosing a great career right here in North Dakota, or thinking they have to leave the state for a very similar career opportunity.

NDSOS urges you to support HB 1232.

Mr. Michael Heilman – Executive Director
North Dakota Small Organized Schools
mheilmandsos@gmail.com
701.527.4621



**House Appropriations Committee
Representative Don Vigesaa, Chair**

Jan. 25, 2023

HB 1232

Good morning, Chairman Vigesaa and members of the House Appropriations Committee. My name is DJ Campbell and I am the Executive Director of Human Resources for Sanford Health Bismarck. Thank you for the opportunity to share information with you today on this important topic.

I am here today to ask for your support of HB 1232. The purpose of this legislation is to appropriate from federal funds to the N.D. Department of Career and Technical Education for the purpose of purchasing career exploration virtual reality software capable of integrating with the RUReady career resource network.

According to Job Service North Dakota, healthcare has the most open positions in the state with almost twice as many openings compared to other industries. At Sanford Health, we have made the decision to focus our attention on organically growing talent right here in North Dakota. We have made significant advancements and investments in our educational partnerships including, employing K-12 coordinators in North Dakota to help students explore and get excited about a potential career in healthcare. Unfortunately, there are limits to what we can show and expose these students to due to privacy, safety, and quality concerns. For example, we will never be able to show a student the inside of an operating room or the many roles involved in a surgery.

Be More Colorful has created an innovative solution to our problem by leveraging virtual reality to create experiences and field trips, in areas and industries, that a student may not be able to explore otherwise. Bringing this tool to our k-12 partners gives our North Dakota students this opportunity. The opportunity to explore a career they have never heard of nor imagined themselves in.

I can also see this tool aiding in our recruitment efforts and as a way to retain our current workforce. Career exploration starts early, but never ends through the employment lifecycle. As we have seen, people of all ages are looking for changes, not just those entering the workforce. As we look to reimagine our workforce, I ask that this committee support HB1232.

Thank you for your time and your consideration. Please feel free to reach out to me anytime for additional information.

DJ Campbell,
Executive Director Human Resources
Sanford Health Bismarck
DJ.Campbell@SanfordHealth.org
701-323-8984



100 West Broadway, Ste. 200 | P.O. Box 1395 | Bismarck, ND 58501-1395
701.223.6380 | ndpc@ndoil.org | www.NDOil.org

House Bill 1232
Testimony of Brady Pelton
House Appropriations Committee
January 25, 2023

Chairman Vigessaa and members of the House Appropriations Committee, my name is Brady Pelton, Vice President and General Counsel for the North Dakota Petroleum Council (“NDPC”). The North Dakota Petroleum Council represents more than 550 companies involved in all aspects of the oil and gas industry, including oil and gas production, refining, pipeline, transportation, mineral leasing, consulting, legal work, and oilfield service activities in North Dakota. I stand today in support of House Bill 1232.

This bill requests an appropriation to the Career and Technical Education Department that will provide an extremely valuable tool in both building career awareness in the youth of North Dakota and allowing those just beginning their careers or already in the workforce to explore career opportunities in an interactive and meaningful way. Children need to be introduced to career options at an early age. Each student has unique interests, aptitudes, and skills that can be explored and developed while they learn about potential jobs available in North Dakota. Sparking interest in a career field at an early age is very likely to make a significant difference in an industry’s ability to hire the next generation of workers. Employers within the oil and gas industry are currently challenged with a workforce shortage, and the funds proposed in House Bill 1232 will help capture the attention of students exploring future career options.

The North Dakota Petroleum Foundation, which facilitates oil and gas industry education and outreach programs across the region, currently sponsors a program known as “Tools, Trades, Torque, Tech” or “T4.” The T4 program features interactive and hands-on summits where middle school and high school students throughout North Dakota communities are introduced to workforce skills, needs, training, and networking opportunities with industry leaders and technicians. This hands-on workforce development program for youth currently reaches several hundred students per year. However, it is limited in its reach due to constraints on available volunteer presenters and schools willing to participate.

Virtual learning can supplement the oil and gas industry's efforts in offering these important career exploration opportunities. Not only will VR options save time and money, but these options can also reach more students without the need to find new facilitators or deal with travel or safety concerns. Our goal is to increase the awareness that quality, high-paying oil and gas jobs are available, show career explorers what workers do within various career areas, and demonstrate that students eager to join the workforce can pursue a fulfilling career in an industry that is viable and necessary for our nation's security and economic future.

Thank you for the opportunity to share information with you today. We are excited about the potential of using career exploration software to help our members recruit new workers and to encourage students to consider a career in oil and gas. We respectfully urge the Committee to give House Bill 1232 a favorable Do Pass recommendation.



P.O Box 2145 ▲ Fargo, ND 58107-2145
701.282.2662 ▲ Fax 701.364.2190
www.genequip.com

Senate Appropriations Committee
Re: Support for HB1232

Chairman Wobbema and Members of the Workforce Development Committee:

I am Ann Pollert, Director of Workforce Development for General Equipment & Supplies, Inc and am writing the Senate Appropriations Committee in Support of HB 1232. We are a heavy equipment dealership with four locations in ND as well as locations in MN, SD, and IA. My job is to attract, recruit and mentor future employees through our Komatsu Program at NDSCS and our Internal Apprenticeship Programs.

We see tremendous value in the supporting of Virtual Career Experiences made possible through the passage and implementation of HB1232.

Through ND Career and Technical Education (CTE), our schools have the RU Ready Career Software Platform coupled with Virtual Reality Career Experiences. These resources can truly introduce and expose all of the students in ND to interesting high demand careers available in our state and attract ND students to consider careers in ND and remain in ND.

As North Dakota students are facing future post-secondary educational options and potential career paths it is our responsibility to adequately prepare them and their parents to make wise and financially responsible choices. Virtual Career Experiences really do open their eyes to everything ND has to offer.

Thank you for your consideration.

A handwritten signature in blue ink, appearing to read "Ann Pollert", written in a cursive style.

Ann Pollert
GES Director of Workforce Development



600 Corporate Pointe, Suite 220
Culver City, CA 90230

TO: Chair Wobbema and Members of the Senate Workforce Development Committee
FROM: Eddie Monnier
DATE: March 3, 2023
RE: Testimony in support of HB 1232

I am Eddie Monnier, the CEO of XAP Corporation. For the past 15 years, XAP has held North Dakota's state contract for administering the RUPReady.ND.gov Career and College Planning platform. I am writing to express my support for HB 1232.

As an industry-leading technology company, we are constantly looking for ways to improve outcomes for the students, counselors, teachers, parents, and administrators who use our platform. Recently, we have been working to identify opportunities to connect with students earlier in their career journeys to help them better visualize what different careers and industries entail. We want to equip students with the knowledge, tools, experiences, and support they need to make good career decisions including knowledge of work-based learning opportunities and the benefits of aligning their career goals with in-demand careers in growing industries in North Dakota.

Virtual reality and immersive media have huge potential to dramatically improve how students visually explore career pathways. However, the technology was not previously on our radar since VR is typically accessed via virtual reality headsets, and the students accessing our content are using standard devices like Chromebooks, tablets, and mobile phones.

That perspective changed after we visited with Be More Colorful, a North Dakota based company, and learned about their CareerViewXR career exploration platform. VR content, when displayed through web-based virtual tour technologies allows viewers to easily access experiences from any device. This capability shows huge promise for augmenting the career exploration journey we provide to the students we serve. We have had several conversations with this team and are confident this solution is capable of integrating with the RUPReady.ND platform and would be a great supplement to the career exploration journey we provide to all North Dakota students.

We urge you to pass HB 1232. Passing this bill will further enhance the robust solution RUPReady.ND provides to students, deliver an exciting new set of tools to help with classroom discussion about career pathways, and put North Dakota on the map as a leader in providing innovative education solutions for career exploration.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'EM' followed by a stylized flourish.

Eddie Monnier
Santa Monica, CA
310-806-1216

Senate Workforce Development Committee
HB1232
March 9, 2023

Chairman Wobbema and members and of the Senate Workforce Development Committee, my name is Patrick Bertagnolli, and I am the Executive Director for Job Service North Dakota. I am submitting testimony in support of HB1232.

I have been a member of the Workforce Development Council (The Council) since 2014 and continue to serve on The Council in my current capacity as Executive Director of Job Service North Dakota. Through the work on The Council, we have supported earlier and more diverse career exploration for youth and the need to create a consistent and integrated approach to career exploration. The Council also has a responsibility to ensure collaboration and alignment between students, educators, and employers in North Dakota.

In the Job Service North Dakota Appropriations testimony, I provided examples of how our Workforce Centers conduct outreach throughout the state. These outreach events include Career Fairs, High School outreach, Girl Scout Events, Tribal Reservations, the Department of Corrections, and many more. As an additional tool to help connect job seekers to careers in North Dakota, we entered into a contract with Be More Colorful for two of the Virtual Reality Career Viewers and have been using the viewers at these events for almost a year. These viewers are also used within the Workforce Centers when not slated for an event.

The use of the viewers offers individuals an opportunity to experience careers they may not otherwise have access to due to barriers and limitations such as safety and security concerns, transportation, or invitations to visit a worksite. When paired with North Dakota's In-Demand Occupation list, the Career Viewer would be an asset to the educational community to offer more diverse career exploration and exposure to students.



Northwest Tire

Locations in Bismarck, Bowman, Dickinson, Grand Forks, Jamestown, Mandan, Mapleton, Minot, West Fargo, Williston ND, Bemidji and Fergus Falls MN, and Brandon SD.

March 6, 2023

To Chairman Wobbema and the Senate Workforce Development Committee:

I'm Dan Pearson and I serve as the President of Northwest Tire and as an Executive Committee board member on the Greater North Dakota Chamber of Commerce. Northwest Tire is a North Dakota business founded over 45 years ago. We have retail outlets across North Dakota in the communities of Bismarck, Bowman, Dickinson, Grand Forks, Jamestown, Mandan, Minot, Williston, and West Fargo. We also own retread operations in Minot and Dickinson and tire warehouses in Dickinson and Mapleton. In addition to our extensive North Dakota presence, we also own, operate, and support multiple locations in neighboring states. I am writing to express my support for HB 1232.

Our business and the tire industry as a whole are facing a substantial workforce shortage. While many industries face this issue, the problem we face is a bit more nuanced because of a complete lack of awareness of everything that goes into getting tires onto your vehicle. When I ask people what they think they would do if employed at Northwest Tire, the response 99 times out of 100 is "change tires." The reality is that while we do employ tire techs, we also employ automotive service techs, alignment technicians, inside sales representatives, truck drivers, warehouse staff, retread techs, accountants, customer service techs, marketing personnel, and much more. Each of the roles in our company is an opportunity to have a successful and progressive career in the tire industry. The misperception about limited career opportunities is one of the biggest challenges we need to overcome to develop our workforce.

We have spent many years and countless hours working to re-form the narrative and get people thinking about a career with Northwest Tire as a lifelong opportunity with room for advancement. Our efforts have resulted in some success but we still struggle with a perception issue because when people think about tires, they think about their own experience with them, which 99% of the time is just scheduling rotations and purchasing replacements. We would love to be able to bring people in to see our operations, but the logistics of coordinating on-site visits at scale just don't work.

Last year, we had an opportunity to try something different. Our team invested in creating a series of virtual tour experiences and virtual reality videos that allow us to share more about our facilities and available careers, bringing students and job seekers into our locations to

observe the variety of roles we employ through interactive digital walk-throughs. We recently implemented the experiences on our website and are eagerly seeking opportunities to make our experiences more accessible to students and career seekers in the markets we serve. We are excited to make direct connections with schools and are incredibly optimistic about the opportunity HB 1232 presents, allowing our investment to also become much needed career experiences used in classrooms across the state.

Our workforce problem is not going anywhere anytime soon and its time to get innovative with the solutions we take. Virtual reality technology is an affordable, effective, and safe way to present jobs in industries like ours to help educate and inform about the great lifelong careers students can pursue here at home. Supporting HB 1232 also supports companies like ours who are heavily invested in the growth and success of North Dakota.

Sincerely,

A handwritten signature in black ink, appearing to read "Dan Pearson", with a long, sweeping horizontal line extending to the right.

Dan Pearson

President

Northwest Tire

March 6, 2023

HB 1232

Supporting CTE through Virtual Reality Career Exploration



Matthew Chaussee
CEO/Co-Founder
Be More Colorful, LLC

Chairman Wobbema and members of the Senate
Workforce Development Committee:

My name is Matt Chaussee and I am the CEO and co-founder of Be More Colorful.

I was born in Devils Lake, grew up in Bismarck and graduated from Bismarck High School then moved to Fargo in 1999. I went to school at NDSU and following graduation, worked for 15 years in various technology roles supporting both marketing and higher education administration functions. In 2016, my wife (also a lifelong ND resident) and I started Be More Colorful, North Dakota's first and only virtual reality production studio.

Our focus for the past 3 and a half years has been on the development of CareerViewXR, a library of interactive virtual reality career experiences that bring jobsites into the classroom.

Our Team



Katie Chaussee
Majority Owner, Co-Founder,
Chief Administrative Officer



Matthew Chaussee
Co-Owner, Co-Founder, Chief
Executive Officer



Michael Bush
Creative Lead



Drew Swenson
Media Production Manager



Kryss Geray
Post-Production Specialist



Maddysen Boecker
Communications Coordinator



Katie Morrow
Project Manager



Cora Sather
Creative Project Manager



Russell Martinson
Director of Sales



Karen Bertson
Director of Operations



Production



Production



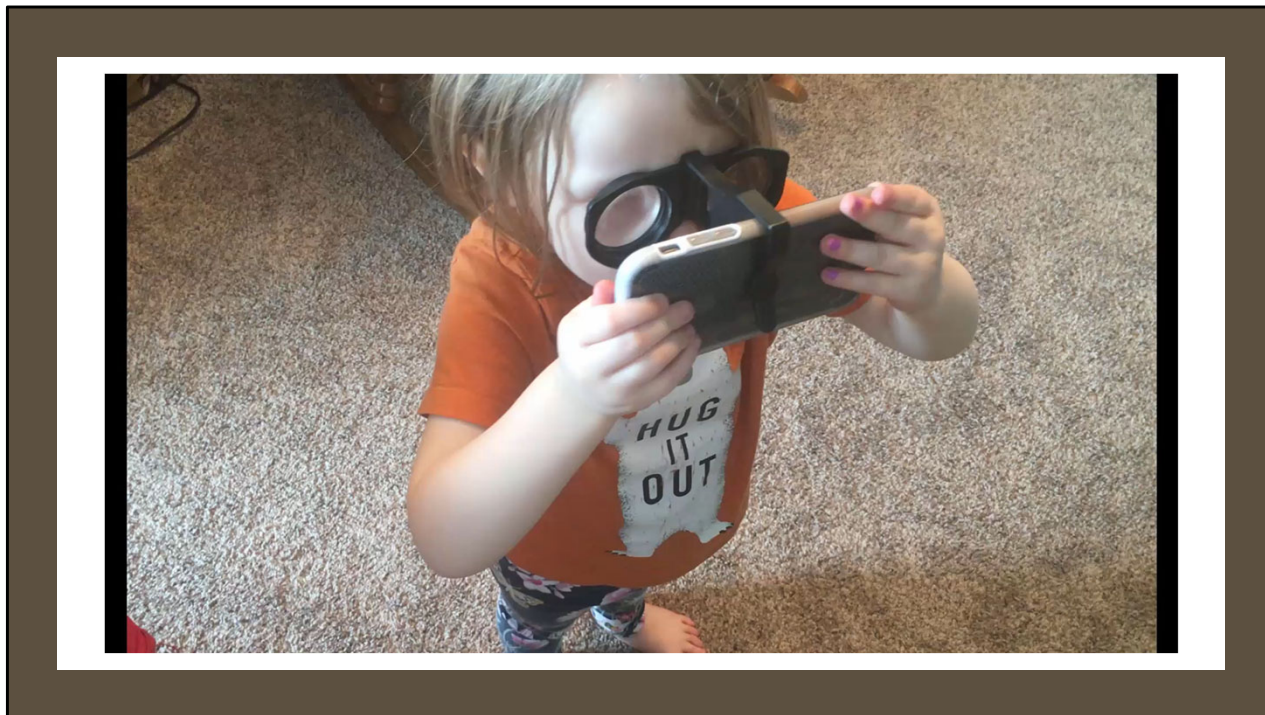
Production



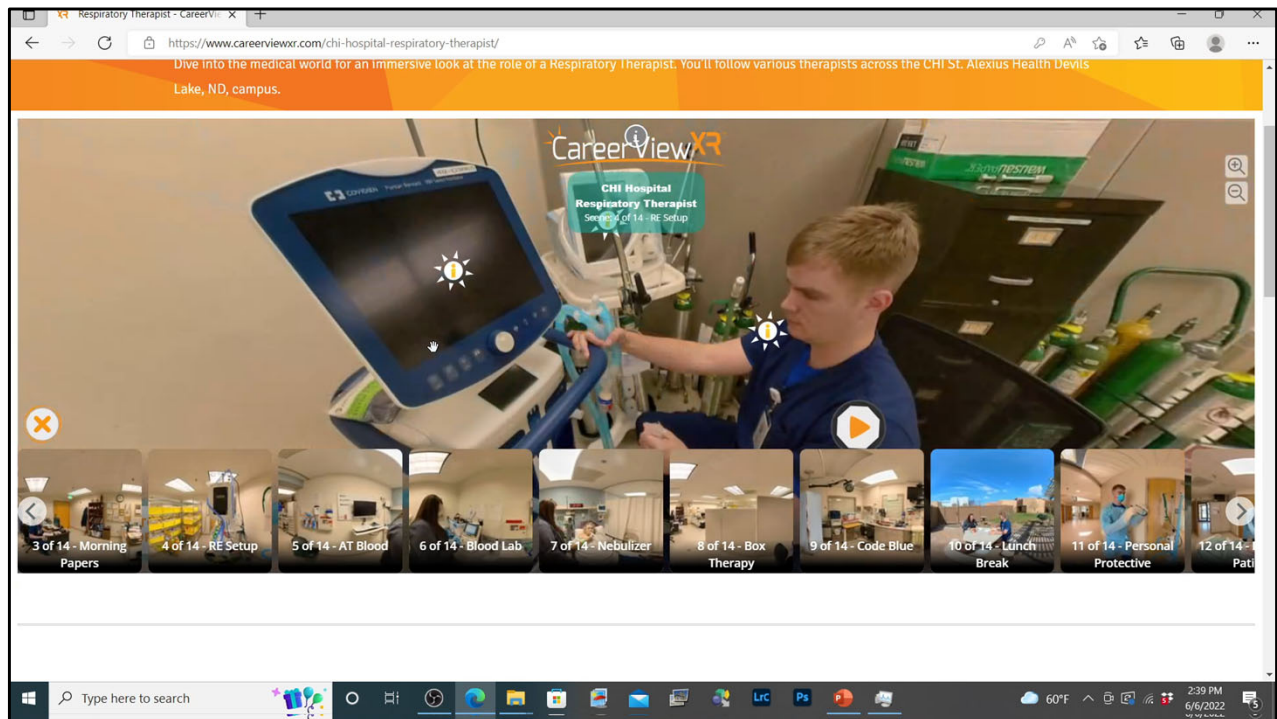
Production

We are 100% North Dakota owned husband and wife company and have personally invested substantial time and dollars into creating virtual reality experiences for workforce development initiatives. During the past two years, we have rapidly grown from a “Mom and Pop VR shop” to a team of 11 professionals who are changing the way students and career seekers make informed career choices.

We’ve worked with hundreds of educators and students to understand how to best align our company’s efforts to enable teachers and students to explore careers in a safe and efficient manner.



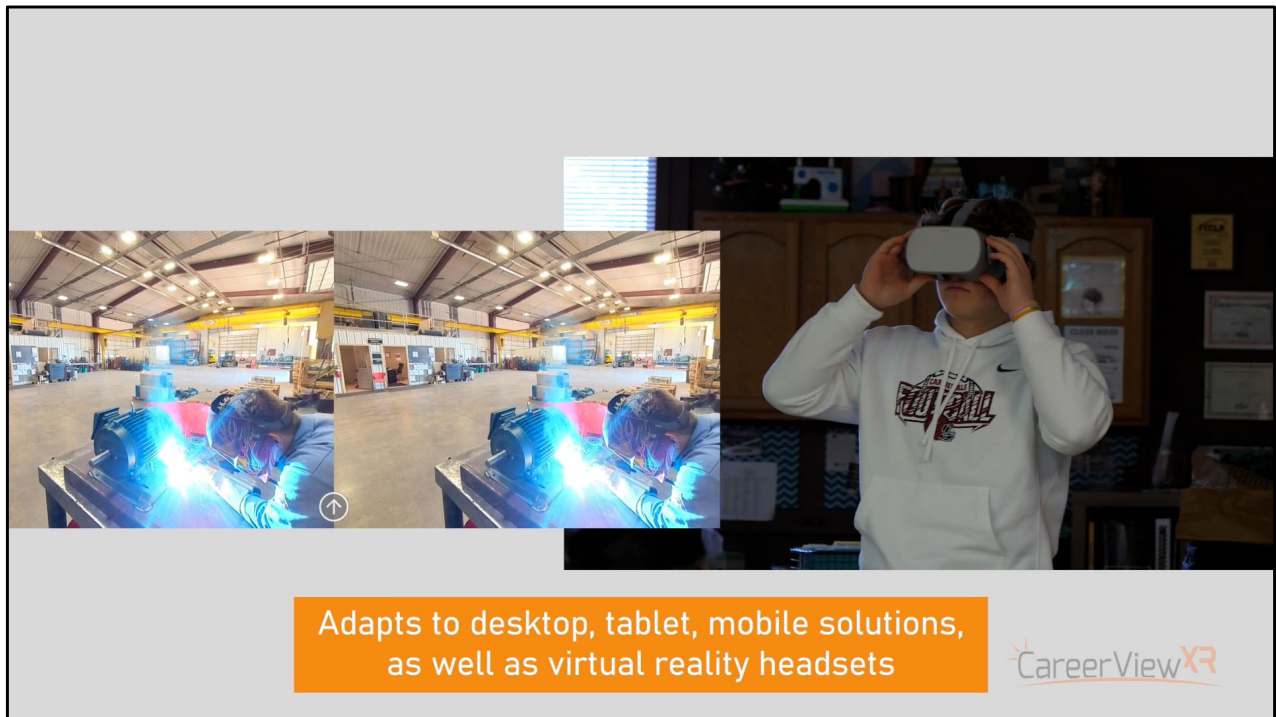
We are passionate about what we do and about virtual reality's capacity to make emotional connections between people and experiences. Through thousands of hours of testing experiences with both adults and students of all ages, we have learned that the immersive nature of the technology combined with the viewer's ability to choose their own adventure makes a lasting impact. VR experiences give people a sense of presence in a location that helps them make a more informed decision on whether to learn more. (PLAY VIDEO)



Unfortunately, when many people hear the words “virtual reality” the thought that follows is a misperception that VR and immersive media are gaming technologies and have little application for the real world. The truth is that there is massive untapped potential to use modern technology to capture real-world scenarios allowing us to document and playback experiences that show real people performing real work in real environments.

When approaching VR solutions for schools, its important to keep both accessibility and cost in mind. (PLAY VIDEO) What you are seeing here is a web-based version of a virtual reality video that is accessed on a non-VR device over the internet. This web-based tour allows students to progress at their own pace and is paired with a companion virtual reality video for VR headsets that allows for even deeper immersion. These are real professionals performing work with real patients which is important because kids need authentic career experiences to help them make good career choices.

The combination of both VR headset technology and more accessible web technologies allows schools to take a comprehensive approach to implementing VR media, and one that is not dependent on a massive investment in virtual reality headset hardware.



(image 1) Here you see two students engaging in web-based virtual tours on Chromebooks. The student on the left is learning about a day in the life of a Dental Assistant filmed in Devils Lake ND. The student on the right is learning about a day in the life of a master plumber at a location filmed in Williston, ND.
(ADVANCE TO image 2) In this image, you see a student using a headset, getting fully immersed, exploring a day in the life of a welder.



Students inherently understand this technology and the importance of it. Frequently, they make the case for its use in the classroom better than I can. (PLAY VIDEO)

Virtual worlds
creating real-world
reactions and
conversations



VR video experiences engage people of all ages, but we are particularly excited about their capability to help inform middle and high school students about career pathways they would otherwise never have known about.

Here, you see a student inside an elevator shaft. (PLAY VIDEO TO END) This is something she would never be able to see in person but it is readily, and safely, accessible through virtual reality.

North Dakota Opportunity

- **First Statewide Deployment of VR**
- **Connecting ND Students with ND Jobs**
- **Distribution Established**
 - EduTech
 - ND Small Organized Schools
 - RU Ready (CTE and Bank of ND)



Deploying VR career exploration within North Dakota now has the potential to make a big difference in years to come. To date, no other state has implemented a statewide program for virtual reality career exploration. CTE in North Dakota would immediately become a leader in immersive tech for workforce initiatives. Using VR content that has been filmed in North Dakota provides added benefits of helping retain students by making them aware of the amazing career opportunities we have here in the state.

There are already some great mechanisms in place to ensure success of a statewide deployment including EduTech - a division of the state IT Department, ND Small Organized Schools, and the RU Ready Career Resource Network, the existing statewide career information system that is administered by CTE and backed by the Bank of North Dakota.



For the past 4 years, students, teachers, counselors, employers, and industry leaders around the state have been active and involved in testing, developing, and vetting VR solutions as a critical component to solve our workforce development issues. VR technology is a practical, effective, and efficient way to address North Dakota schools’ dire need for earlier and more diverse career exploration.

Your support on HB 1232 will provide unprecedented opportunity to connect students with in-state industries while simultaneously demonstrating to the rest of the country that North Dakota is a leader in innovative education.

Thank you for your time and consideration.

Sincerely,

Matthew Chaussee
CEO/Co-Founder
Be More Colorful, LLC

Testimony of Dr. Cory Steiner, Superintendent of Northern Cass School District and Mackenzie Tadych, Director of College, Career, and Life Readiness

HB 1232: Support of Funding for an Appropriation within the Career and Technical Education Budget

Thursday, March 9th, 2023

Chairman Wobbema and members of the Senate Workforce: It is my privilege to submit testimony in support of HB 1232 for an appropriation of \$500,000 within the Career and Technical Education budget for \$500,000 to create a partnership with CareerViewXR.

My name is Dr. Cory J. Steiner and I'm the Superintendent of Schools at Northern Cass School District in Hunter, North Dakota. My name is Mackenzie Tadych, Director of College, Career, and Life Readiness for the Northern Cass School District. Northern Cass is a PK-12 district with 690 learners located 25 miles northwest of Fargo. We are an innovative school district which is in the midst of a transformation to personalized, competency-based learning.

The issues in education are profound, but more importantly, they are urgent. The structure and function of our schools today must change to meet the needs of a world which is changing at an exponential rate. Every system is designed to get the results it gets. Our system is getting the results it is supposed to get.

Unfortunately, what is being asked of schools has changed dramatically since the design of the system. In schools, we have been tasked to prepare learners to be productive members of society. We have been asked to prepare learners for college, career, and military. We are asked to prepare learners of today for jobs that don't exist while also making sure learners have the skills for jobs in the workplace now. We must develop academic, social, and emotional skills while developing long-lasting relationships in a safe environment. In other words, we must prepare learners to be choice ready for the future. The list of important things to do and accomplish is never-ending.

To address workforce shortages, schools must increase opportunities for career exploration and skill development. Learners in our districts are exposed to career exploration and skill development. However, it is not done with fidelity across our state due to a lack of resources. However, the most significant barrier for a majority of schools is distance. We have seen benefits of CareerViewXR across all grade levels. We have 4 virtual reality headsets and 2 traveling carts for high school, middle school, and elementary levels to utilize in their classes. One headset

is set up in the media center for learners to use at their convenience. The virtual experiences have opened learners' eyes to careers they did not know existed as well as created interest and a deeper understanding of careers. It allows learners to see the career first-hand and opens doors to connecting them to real professionals in the community which leads to a deeper level of understanding. Through a partnership with CareerViewXR, learners will have an opportunity no matter the school they attend to be exposed to authentic career exploration at all levels. This appropriation is about equity for all North Dakota learners.

As part of this testimony, I want to share some of the reflections from our learners. A senior learner said, "I think that the VR job shadows are a great opportunity for students that may not be able to actually shadow a career they are interested in. The VR job shadows allow for students to explore career choices if they are not sure about what they want to go into. By having the virtual aspect, the job shadows are more personal and real-life than just watching video about what the workers in those fields actually do." Another senior said, "'It is pretty neat how I could be out on a wind turbine and back in school in seconds.'" Finally, a sophomore stated, "It was surreal, thinking I could just witness a day-in-the-life of my possible future career. I wish I had more experience with it, or had access to it earlier, because knowing for sure what kind of things I'd do in so many different careers would help me figure out what I wanted to do so much quicker." The impact this is having on our learners is significant and I can only imagine the impact it could have if every learner in our state had access to this authentic experience.

I understand the financial commitment for this aspect of the bill is significant. However, I believe the negative impact by not doing this is far greater. By supporting funding for this partnership, the legislature will begin addressing the workforce shortage by investing in our PK-12 schools and learners. I ask for a 'do pass' on HB 1232 and further support for this appropriation.

Dr. Cory J. Steiner
Superintendent, Northern Cass School District

Mackenzie Tadych
Director of College, Career, and Life Readiness



March 7th, 2023

To: Senate Appropriations Committee, North Dakota Legislature, Bismarck, ND 58505

RE: Support for HB1232

Chairman Wobbema and Members of the Workforce Development Committee,

Marvin is a fourth-generation, family-owned and operated business, headquartered in Warroad, MN. Marvin's product portfolio offers an extensive selection of made-to-order window and door solutions, providing homeowners with a premier line of replacement windows sold and installed by local professionals. With 9 facilities and over 2,000 employees in North Dakota, we continue to reinvest in the state, which includes creating new job opportunities.

In my role as Community Relations Manager, I work alongside our Human Resource teams to not only attract and recruit talent but also engage youth/young adults in learning more about careers within manufacturing. Stereotypes that we are constantly addressing are the beliefs that manufacturing jobs are "dirty", "hard labor" and "unsafe". While we know that's not true, it can be hard to convince folks unless we are able to physically have them in a facility. This is where we see tremendous value in Virtual Career Experiences which would be made possible through the passage and implementation of HB1232.

Through ND Career and Technical Education (CTE) our schools can have access to resources that can expose students to interesting high demand careers available in our state. Marvin has agreed to film two Virtual Career Experiences, one focusing on manufacturing careers and another on truck driving/logistics. We believe that both will not only increase the number of students who are able to see inside a facility but expose them to things tours can't facilitate due to safety, time constraints, staffing capacity, and/or transportation issues.

We believe that HB1232 is an important component to our statewide workforce development to ensure a strong and skilled workforce within North Dakota for the future. Therefore, we are in support of HB1232 and recommend its passage.

On behalf of Marvin, thank you for your consideration.

Sincerely,

A handwritten signature in black ink that reads "Cairn Reisch". The signature is fluid and cursive, with the first name "Cairn" and last name "Reisch" clearly distinguishable.

Cairn Reisch, CVA
Community Relations Manager



GREATER NORTH DAKOTA CHAMBER
HB 1232
Senate Workforce Development Committee
Chair Mike Wobbema
March 7, 2023

Mr. Chairman and members of the Senate Workforce Development Committee, my name is Andrea Pfennig with the Greater North Dakota Chamber. GNDC is North Dakota's largest statewide business advocacy organization, with membership represented by small and large businesses, local chambers, and trade and industry associations across the state. We stand in **support** of House Bill 1232.

Recently, GNDC partnered with the NDSU Challey Institute for Global Innovation and Growth to complete a survey about the business climate in North Dakota. The survey found that 62% of respondents felt the number one factor holding businesses back is difficulty attracting and retaining qualified workers. The results of the survey were reflected in the discussions held by our members in our policy position development process.

Our members feel it is important to maximize the flexibility and responsiveness of K-12, two and four-year educational institutions, and provide expanded educational opportunities to meet local training needs and demands.

HB 1232 would provide North Dakota students with access to career exploration virtual reality software. This provides industries the ability to create awareness of the various opportunities within each field, benefiting both students and North Dakota businesses.

We respectfully request a Do Pass recommendation on HB 1232.



**Senate Workforce Development
HB1232**

March 9, 2023

Chairman Wobbema and members of the Senate Workforce Development Committee, for the record, my name is Wayde Sick, State Director for the Department of Career and Technical Education. I am submitting testimony in support for HB1232.

For approximately 15 years, the Department of Career and Technical Education has provided RUPrepareND, a career exploration platform, to the students of North Dakota. There are resources in RUPrepareND that are appropriate for all ages, elementary, middle, high school, and college. We continue to develop upgrades, to further assist students to explore the career opportunities. Most recently, we implemented a work-based learning module that would help educators connect their students to community-based work-based learning experiences, giving students hands on experiences.

HB1232 would provide funding that would provide a virtual reality component to the RUPrepareND platform. The benefit of this resource is to provide experiences to students otherwise would not have the opportunity to have due to limitations. The barriers that often stand in the way are lack of access to a wide variety of industries, transportation costs, safety concerns and the time needed to travel to and visit worksites.

This concludes my testimony, and I am happy to stand for questions.



Harvestone
2841 3rd St SW
Underwood, ND 58576
(701) 442-7513

March 8, 2023

To Chair Wobbema and Members of the Senate Workforce Development Committee:

I am writing in support of **HB 1232**. I currently work for Harvestone Low Carbon Partners, formerly known as Midwest AgEnergy Group. Our company owns and operate Blue Flint & Dakota Spirit, which employees 80+ people in rural North Dakota. A large majority of our positions are in the career and technical fields, employing people that have certificates and degrees in engineering, instrumentation, process operations and control or mechanical maintenance, just to name a few.

We have long been a supporter of career and technical education. We have engaged youth by providing onsite tours, education, and college sponsorships for local students. We recently participated in creating virtual learning videos in partnership with Matt Chaussee and his Be More Colorful team. Given employers have significant workloads with limited time, along school's limited calendar availability, it is extremely difficult, if not impossible, to engage in physical presentations whether at our facility or at the schools.

I support bringing learning to the students in a manner that works for all parties. That is exactly what **HB 1232** does. It creates a platform for business and education to merge, while utilizing technology that can reach a whole host of students. It also gives students an opportunity to see insight into career paths that are uncommon or unknown. The ND Workforce Development Council has data supporting the high retention rate of HS students and ND residents if we can keep them in the state. What better way to showcase career paths in ND and assist with retention of our upcoming workforce, than by adding this powerful new tool to the RU Ready platform that is already in the hands of every student. This is money well spent!

Thank you for your attention on this matter and again, for your support of HB 1232.

Sincerely,

A handwritten signature in black ink that reads "CINDY GRIFFIN". The signature is written in a cursive, slightly slanted style.

Cindy Griffin
VP, Human Resources & Corporate Services

March 7, 2023

RE: LETTER IN SUPPORT OF HB 1232 ON APPROPRIATIONS FOR CAREER EXPLORATION SOFTWARE

Dear Chairman Wobbema and Members of the Senate Workforce Development Committee:

My name is David Farnsworth, recently retired North Dakota Manager of Power Generation and Engineering for Great River Energy. For the past two decades I have been heavily involved in creating a skilled and technically advanced workforce for the North Dakota Energy industry. My efforts have included helping to create new and updated Energy programs within K-12, Higher Education, and Organized Labor. I have worked hard with multiple Industry partners, parents, career counselors, instructors, and students in promoting the high paying and high demand occupations that exist in North Dakota. Through my chairmanships of the BSC Polytechnic Business and Industry Leadership Teams and the Workforce Development Council, I have developed a strong understanding of the broader workforce shortages across all the business sectors in the State.

As members of the Senate Workforce Development Committee, you are well-attuned to the large labor shortages being experienced in nearly all occupations and regions of the State. A young person is faced with a vast variety of options for which career to choose, and they can spend years trying to figure out which careers best fit their interests and aptitudes. One of the great advancements in career awareness in recent years has been the introduction of virtual reality software that enables the student to place themselves in the midst of very realistic job situations. They can virtually observe a person performing their normal job duties in a variety of situations without exposing them to the hazards of the job. For example, a student can be virtually placed upon a tall structure being constructed and “look around” to observe ironworkers lift steel and attach structural members together. They can be placed atop a 350 foot wind tower and observe wind technicians performing maintenance on the nacelle. Or a student can be virtually placed in an operating room and observe the various interactions of the staff performing a major surgery. The use of virtual reality can help the individual determine whether they could be a good fit in the career they are exploring.

It should also be noted that virtual reality can be coupled with simulators to provide safe, realistic job training. I have personally donned a pair of virtual reality goggles with a set of controls before me and practiced “driving, maneuvering, and parking” a self-propelled manlift on a job site --- all in the safety of a classroom setting.

I highly recommend the approval of HB 1232 in appropriating money for use in virtual reality software for career exploration training.

Sincerely,

David E. Farnsworth
Bismarck, North Dakota



NDSBA
NORTH DAKOTA SCHOOL
BOARDS ASSOCIATION

1224 West Owens Avenue
Bismarck ND 58501
1-800-932-8791 • (701)255-4127
www.ndsba.org

HB 1232

Senate Workforce Development | March 9, 2023

Testimony of Taylor Lassiter, North Dakota School Boards Association

Good morning, Chairman Wobbema and members of the Senate Workforce Development Committee. My name is Taylor Lassiter, and I serve as the membership and marketing specialist of the North Dakota School Boards Association. NDSBA represents the elected school boards of all 170 public school districts and several special education units in North Dakota.

The North Dakota School Boards Association supports HB 1232. This past fall, I had the opportunity to experience Mr. Chausee's BeMore Colorful virtual reality career exploration technology at our annual convention. It was a phenomenon I had not experienced before – something I wish was available to me as a student years ago. The expanse of opportunities that districts, particularly rural, have in using virtual reality technology that BeMore Colorful offers is immense on the impact of workforce and ensuring equity in schools across the state. Although not physically in the setting of the “experience” or “potential career path”, this technology immerses your visual sense and allows you to interact with the scenes. The exposure can spark an interest in a student's future work life – their bread and butter. The technology allows for districts with smaller budgets to be level with larger budget districts, meets time, transportation, cost, staffing issues, and helps solve safety concerns that some jobsite hazards may have. HB 1232 is a statewide workforce development solution.

I respectfully ask the committee to give this bill a do-pass recommendation. Thank you.



Written Testimony Provided To:

Senate Workforce Development Committee

Charles P. Clairmont

Executive Director, North Dakota Safety Council

March 7, 2023

Regarding: House Bill No. 1232

Mr. Chairman and members of the committee,

My name is Chuck Clairmont, and I am the Executive Director and CEO of the North Dakota Safety Council (NDSC). I am writing to express the NDSC's support for HB 1232.

The NDSC provides community and workplace safety training and advocacy throughout North Dakota. We operate in four key areas: workplace safety, community safety, driver safety, and first aid/emergency response. Most of our member companies are in industries including healthcare, skilled trades, energy, manufacturing, and construction, but companies in virtually every industry within the state rely on the NDSC as a resource for helping them prevent injuries and save lives.

While the NDSC does not explicitly list career exploration as one of our key areas, we have a vested interest in the passing of HB 1232. We know that safety concerns and facility liability are two of the leading reasons that many job shadows and field trip opportunities cannot be offered to students in many industries. Additionally, we believe the early-stage career exploration activities facilitated by ND Career and Technical Education are a critical component in helping the NDSC achieve our vision of making North Dakota the safest state in the nation. There are three primary ways that HB 1232 will help us achieve better safety outcomes.

First, workplace safety is only possible when workers are knowledgeable, informed, and attentive within their work environments. When an individual is misaligned in a career, that misalignment often leads to career dissatisfaction causing additional stress and fatigue, both significant factors in workplace incidents and injuries. We believe HB 1232 will provide students with a broader understanding of their available career pathways and put them on a path to select a career they will find meaningful. People who are interested in their work are more thoughtful and attentive, factors we know reduce workplace incidents and injuries.

Second, our members in the energy sector, particularly oil and gas, have informed us that the perception of unsafe work environments keeps many students from considering careers in the field. Lack of applicants leads to a shortage of workers and worker shortages are a significant risk to workplace safety. There is real risk of this situation becoming a self-fulfilling prophecy. The oil and gas industry is in desperate need of authentic and accessible career experiences that show the preventative measures that are in place ensuring worker safety. The experiences provided through

We are dedicated to preventing injuries and saving lives.

PHONE: (701) 223-6372 • TOLL FREE: (800) 932-8890 • WEBSITE: www.ndsc.org

ADDRESS: 1710 Canary Avenue, Suite A • Bismarck, ND 58501

A chapter of the
nsc

HB 1232 can help reduce misperceptions about safety in the oil and gas industry, enabling more effective and constructive conversations about careers and increasing familiarity and interest in this industry that is critical to the economy of our state.

Last, we have had the opportunity to collaborate with Be More Colorful, the North Dakota team who has developed a cutting-edge virtual reality career exploration solution, CareerViewXR. The continued adoption of this technology will provide new opportunities for us to think differently, serving as a starting point for furthering not just career exploration but also immersive workforce training. We see opportunities emerging on the horizon that would allow immersive VR media to enable environmental safety awareness training in a variety of industries. With the ease of access to these experiences, training can be performed right in the CTE classroom, helping ensure that even before a student steps foot onto an actual jobsite, they are aware of how to mitigate risk and operate safely.

The NDSC is excited to see such forward-thinking legislation being introduced and see only upside benefits of a statewide adoption of VR career exploration experiences. On behalf of the NDSC and our member companies, we respectfully request that you recommend a “DO-PASS” for HB 1232.

Thank you for your time.

Sincerely,

Charles P. Clairmont - Executive Director/CEO
North Dakota Safety Council

We are dedicated to preventing injuries and saving lives.

PHONE: (701) 223-6372 • TOLL FREE: (800) 932-8890 • WEBSITE: www.ndsc.org

ADDRESS: 1710 Canary Avenue, Suite A • Bismarck, ND 58501



North Dakota Small Organized Schools

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President
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Vice-President
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Drake, ND 58736
Steve.heim@k12.nd.us
701-465-3732

HB 1232 Testimony in Support
Workforce Development Committee
Senator Wobbema– Chairperson
March 9, 2023

Chairman Wobbema and members of the Senate Workforce Development Committee, my name is Michael Heilman. I am the Executive Director of the North Dakota Small Organized Schools (NDSOS). I represent 150-member school districts of the North Dakota Small Organized Schools. NDSOS stands in support HB 1232.

This bill is about how connecting various segments of our society provides a win/win. By connecting cutting edge technology, with workforce development and putting it in the hands of the future workforce, our students; that is a win for our students and for workforce development. This technology using the existing RU Ready Platform allows schools to provide realistic career exploration without leaving the school. We all love a good field trip to a power plant, or Baker Boy, or Bobcat. While in Dickinson where I was principal, I and Rich Wardner, mostly Rich set up program called Leadership Dickinson. The program was designed to allow a select group of students to experience the multitude of careers available in Dickinson. It was and I hope it still is, a great program but it served a very small percentage of students. This technology makes a multitude of career experiences available to all and the students or adults for that matter never have to leave the school or community.

How does a student in the eastern part of the state see firsthand what it is like to work in the oil field, or a student in Kenmare see what it would be like to work for Tecton in Fargo. Using this technology all of this and more is possible more. Whether it is a location and associated cost of travel, or other funding issues, HB 1232 makes this available in large and small schools alike. This is especially important in our rural schools where travel can be cost prohibitive and career exploration opportunities may be limited.

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Mr. Brandt Dick, Supt. Burleigh County

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Mr. Mitch Carlson, Supt. LaMoure
Dr. Steven Johnson, Supt. Lisbon

The mission of NDSOS is to provide leadership for the small/rural schools in North Dakota and to support legislation favorable to their philosophy while opposing legislation that is harmful.

If you've had the opportunity experience or see this technology in use, you clearly understand how amazingly realistic the virtual experience is. When kids remove the headset after experiencing what a wind tower technician does, the look on their face tells the whole story. This technology opens the door for our children, regardless of where they live to have a career exploration experience that could be the difference between a student choosing a great career right here in North Dakota, or thinking they have to leave the state for a very similar career opportunity.

As you have heard students can use any device, computer, tablet, phone, I-pad or VR googles to access the library of career video's. A guidance or career counselor, or a classroom teacher can use this technology to create clear picture of the relevance of a curriculum to existing high paying careers here in North Dakota. Imagine finishing a lesson on electricity and electrical generation and immediately taking a virtual trip to a North Dakota power plant or to the top of a wind tower. What a great tool for our students and teachers.

Chairman Wobbema and members of the Workforce Development Committee, NDSOS urges you to support HB 1232.

Mr. Michael Heilman – Executive Director
North Dakota Small Organized Schools
mheilmanndsos@gmail.com
701.527.4621

From: Taya Spelhaug

Date: 3/9/2023

Subject: Support for HB 1232

Chair Wobbema and Members of the Senate Workforce Development Committee:

My name is Taya Spelhaug and I have been the TechSpark Manager for Microsoft's North Dakota initiatives since August 2017. TechSpark is a program that builds partnerships across sectors to understand the unique regional challenges and to explore solutions, programs, and partnerships that will be most effective at the local level. It is under this context that I am writing to encourage you to support passing of HB 1232.

Career awareness is one of the most important components in aligning students with appropriate career pathways. However, there is limited opportunity for students to have real on-site experiences due to time, geographic, financial, safety, liability, and privacy concerns. A lack of career awareness opportunities leaves our rural communities and our state as a whole struggling to retain our youth. There is an unfortunate perception that, in order to find a "good job," students need to leave their small towns or even leave the state entirely. Interactive media and virtual reality have huge potential to help solve this critical problem by providing students and career seekers of all ages with a first-person glimpse of high demand careers via interactive virtual experiences in industries including healthcare, technology, skilled trades, engineering, and more.

When strategically implemented, these experiences can be accessed 24/7 through both virtual reality headsets and on any standard internet connected device. We believe leveraging virtual reality to visualize authentic career pathways will demonstrate how technology intersects with jobs in every sector, promoting digital skills and employability, a key TechSpark initiative.

I have had the pleasure of both observing partnerships form and to help make connections between private companies, schools, and industry leaders through the development of a homegrown platform called CareerViewXR. Although this initiative is not directly affiliated with TechSpark, the effort has truly embodied the spirit of the TechSpark program. I was eager to nominate the CareerViewXR program for TechND's Premier Technology Business Award and was delighted when they were awarded the honor in the Fall of 2022.

North Dakota is full of innovation and to solve our rural workforce issues, we need to utilize cutting edge technology and CareerViewXR is just the tool to do so. Career awareness is one of the most fundamental areas that needs to be addressed. There has already been wonderful momentum building over the past 3 years through collaborative grassroots efforts using virtual reality an established and effective model that excites students, engages employers, and provides teachers with resources they desperately need.

I encourage you to support HB 1232 and take advantage of this unique and powerful opportunity for the state to have a positive impact on our rural students' knowledge of amazing career opportunities here in North Dakota.

Thank you for your time and consideration.

March 9, 2023

To Chairman Wobbema and the Senate Workforce Development Committee:

My name is Matt Naugle and I am a workforce development specialist with Essentia Health in Fargo. Prior to that, I was an educator and education administrator for over 20 years. I am writing to express my support for HB1232.

I am honored to speak on behalf of two of my greatest professional passions. First, developing meaningful and authentic experiences for our communities of learners in career exploration. Second, creating programs that lead to a well-informed and prepared workforce.

Many communities experience a variety of barriers when developing and implementing programs for career readiness. School districts often have limitations due to the cost of transportation, limited areas of teacher licensure, budgets for expanding student resources, and limited availability to first-hand experiences with local employers. Many of our talented students become disengaged with a curriculum and content that is highly driven by 4 year degree pathways. Student experiences are limited by industry standards, such as safety measures and privacy expectations while making connections for apprenticeships and job shadowing opportunities.

HB 1232 would leverage technology and software tools to give a lift to all communities of learners in the field of career development. The technology will assist us in developing programs that bring equity to the student experience, regardless of their community resources. Sparsity and transportation costs are reduced through the development of hybrid models of content delivery. Schools with smaller populations are provided more access to content that would normally be limited by the size of their staff and number of electives available. Students will become engaged with exposure to authentic experiences that would not be available locally, are limited by industry standards, and not part of their career awareness curriculum. Further, HB 1232 will allow career experience touch points become regular and embedded in their curriculum as opposed to "one and done" experiences such as career fairs. HB 1232 will bring real world experiences to classroom conversations that improve student career outcomes and create opportunities for more meaningful career discussions.

Essentia Health has collaborated with Be More Colorful, to create engaging, authentic, and meaningful immersive classroom content. We have created video experiences that provide a journey in the day of a professional's life. Students are interacting with the setting, duties, and the professional pathways of specific, and lesser known careers in health care. We are excited to see what the future holds for our workforce development efforts with new technology to make careers experiences more accessible.

I strongly encourage you to recommend a do-pass for HB 1232.

Sincerely,

Matthew Naugle

Workforce Development Specialist

Essentia Health

HB 1232

Supporting CTE through Virtual Reality Career Exploration



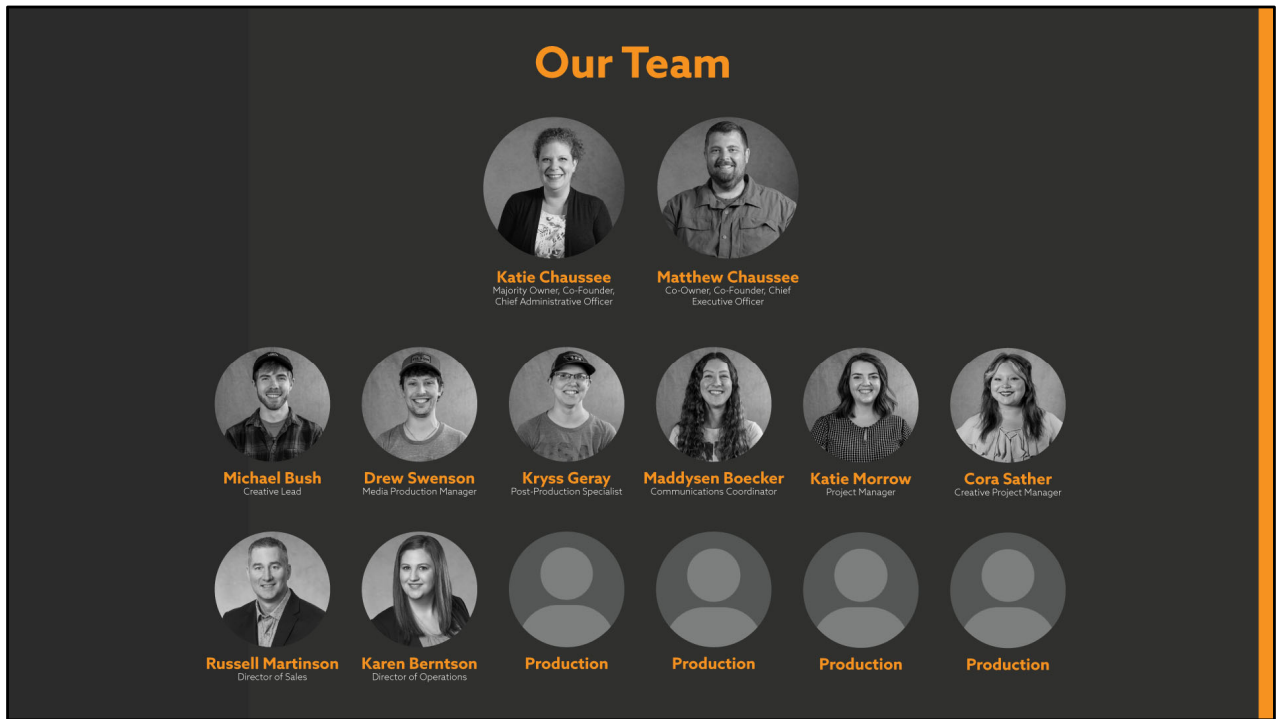
Matthew Chaussee
CEO/Co-Founder
Be More Colorful, LLC

Chairman Sorvaag and Members of the Committee:

My name is Matt Chaussee and I am the CEO and co-founder of Be More Colorful.

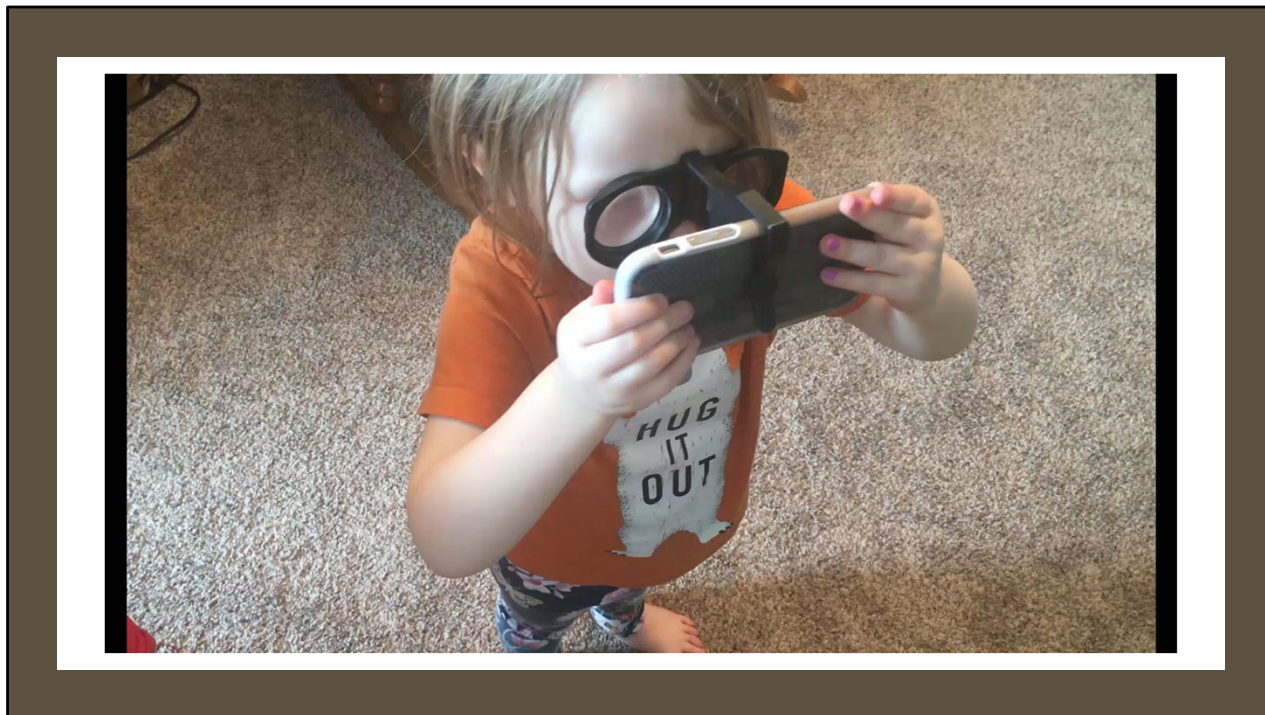
I was born in Devils Lake, grew up in Bismarck and graduated from Bismarck High School then moved to Fargo in 1999. I went to school at NDSU and following graduation, worked for 15 years in various technology roles supporting both marketing and higher education administration functions. In 2016, my wife (also a lifelong ND resident) and I started Be More Colorful, North Dakota's first and only virtual reality production studio.

Our focus for the past 3 and a half years has been on the development of CareerViewXR, a library of interactive virtual reality career experiences that bring jobsites into the classroom.

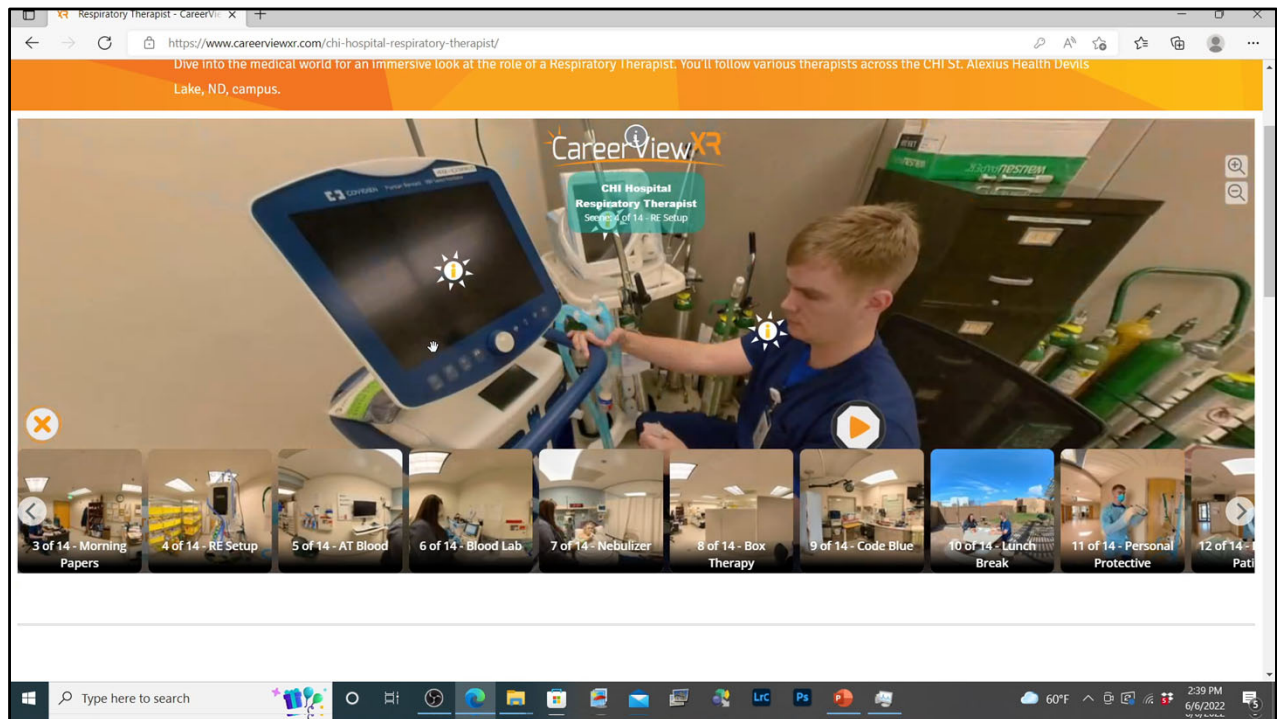


We are a 100% North Dakota owned husband and wife company operating in NDSU’s Research and Technology Park. We have personally invested substantial time and dollars into creating virtual reality experiences for workforce development. During the past two years, we have rapidly grown from a “Mom and Pop VR shop” to a team of 11 professionals who are changing the way students and career seekers make informed career choices.

We’ve worked with hundreds of educators and students to understand how to enable teachers and students with VR technologies for career exploration.



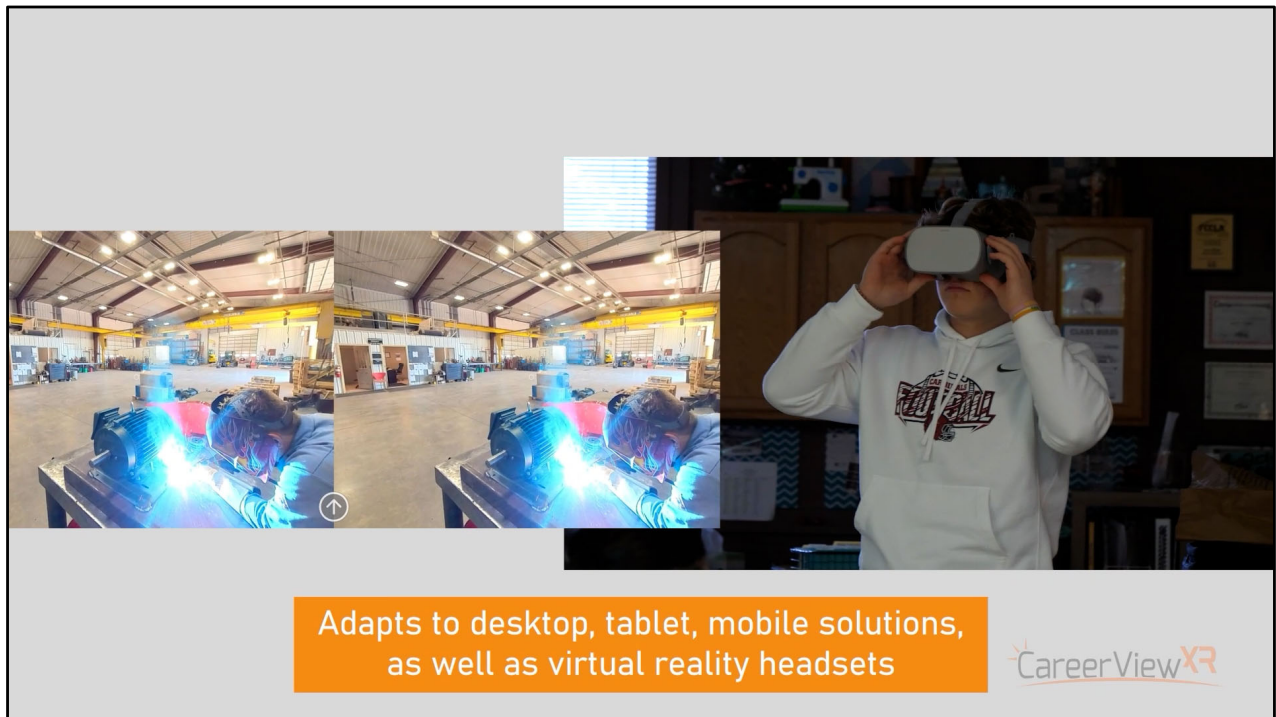
We are passionate about what we do and about virtual reality's capacity to make emotional connections between people and experiences. I did my career exploration in college... an incredibly expensive and inefficient way to figure out what I wanted to do. That experience is a major part of why our company is so passionate about promoting earlier and more diverse career exploration. We have spend thousands of hours of testing experiences adults and students of all ages. Through those interactions, we have learned that the immersive nature of the technology combined with the viewer's ability to choose their own adventure makes a lasting impact. VR experiences give people a sense of presence in a location that helps them make a more informed decision on whether to learn more. (PLAY VIDEO)



Unfortunately, when many people hear the words “virtual reality” the thought that follows is a misperception that VR and immersive media are gaming technologies and have little application for the real world. The truth is that there is massive untapped potential to use modern technology to capture real-world scenarios allowing us to document and playback experiences that show real people performing real work in real environments.

When approaching VR solutions for schools, its important to keep both accessibility and cost in mind. (PLAY VIDEO) What you are seeing here is a web-based version of a virtual reality video that is accessed on a non-VR device over the internet. This web-based tour allows students to progress at their own pace and is paired with a companion virtual reality video for VR headsets that allows for even deeper immersion. These are real professionals performing work with real patients which is important because kids need authentic career experiences to help them make good career choices.

The combination of both VR headset technology and more accessible web technologies allows schools to take a comprehensive approach to implementing VR media, and one that is not dependent on a massive investment in virtual reality headset hardware.



(image 1) Here you see two students engaging in web-based virtual tours on Chromebooks. The student on the left is learning about a day in the life of a Dental Assistant filmed in Devils Lake ND. The student on the right is learning about a day in the life of a master plumber at a location filmed in Williston, ND.

(ADVANCE TO image 2) In this image, you see a student using a headset, getting fully immersed, exploring a day in the life of a welder.



Students inherently understand this technology and the importance of it. Frequently, they make the case for its use in the classroom better than I can. (PLAY VIDEO)

Virtual worlds
creating real-world
reactions and
conversations



VR video experiences engage people of all ages, but we are particularly excited about their capability to help inform middle and high school students about career pathways they would otherwise never have known about.

On the right is a student inside an elevator shaft. (PLAY VIDEO TO END) This is something she would never be able to see in person but it is readily, and safely, accessible through virtual reality.

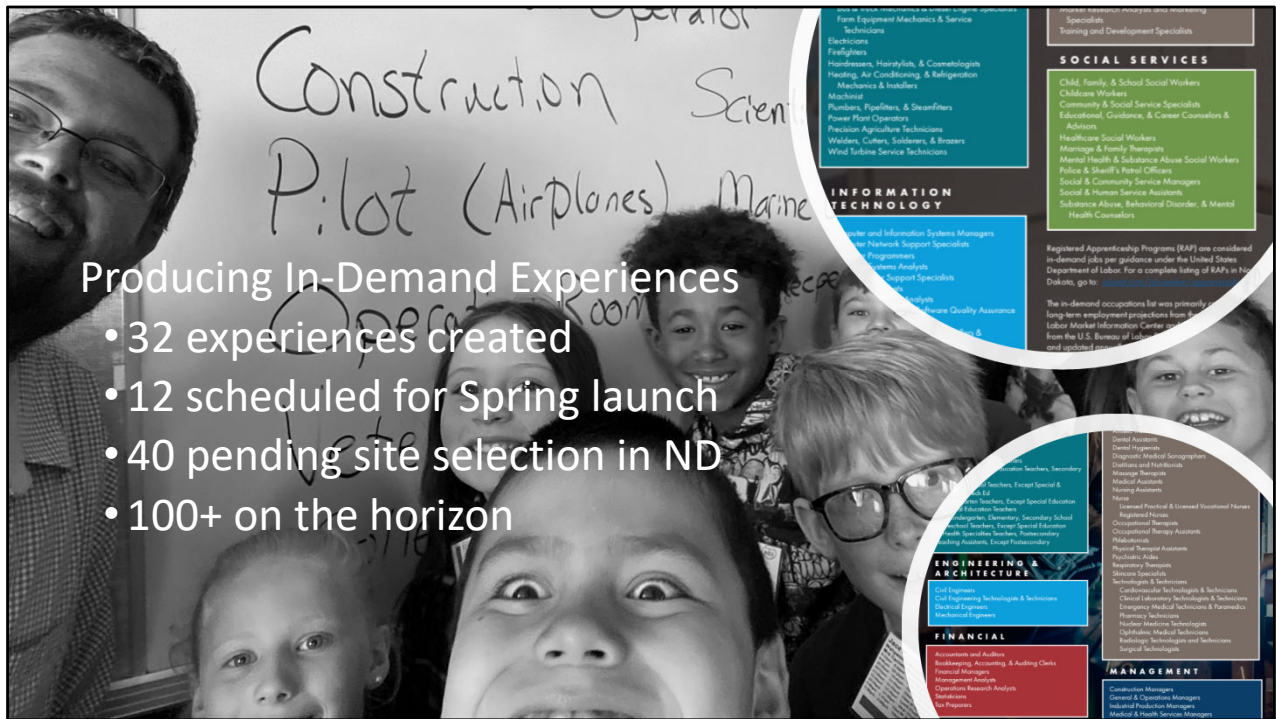
North Dakota Opportunity

- **First Statewide Deployment of VR**
- **Connecting ND Students with ND Jobs**
- **Distribution Established**
 - EduTech
 - ND Small Organized Schools
 - RU Ready (CTE and Bank of ND)



Deploying VR career exploration within North Dakota now has the potential to make a big difference in years to come. To date, no other state has implemented a statewide program for locally produced virtual reality career exploration. CTE in North Dakota would immediately become a leader in immersive tech for workforce initiatives. Using VR content that has been filmed in North Dakota provides added benefits of helping retain students by making them aware of the amazing career opportunities we have here in the state.

There are already some great mechanisms in place to ensure success of a statewide deployment including EduTech - a division of the state IT Department, ND Small Organized Schools, and the RU Ready Career Resource Network, the existing statewide career information.



VR technology paves the way for making career exploration in our highest demand industries accessible 24/7, not just to students and teachers, but also to their parents, eliminating stereotypes and misperceptions about career pathways to enable more meaningful and engaged conversations about career choice.

Its always eye-opening working with kids. Any time we are in the classroom, we always ask students what they would like to have us create in VR. This has been one of the most surprising things for our team... we get the occasional “Nascar Driver” and “Football Player” but the vast majority of careers that kids want to see in VR are things like: veterinarian, nurse, police officer, welder, farmer, mechanic, and dozens of other trades where great opportunities exist in communities throughout North Dakota.



For the past 4 years, students, teachers, counselors, employers, and industry leaders around the state have been active and involved in testing, developing, and vetting VR solutions as a critical component to solve our workforce development issues. VR technology is a practical, effective, and efficient way to address North Dakota schools' dire need for earlier and more diverse career exploration.

Your support on HB 1232 will provide unprecedented opportunity to connect students with in-state industries while simultaneously demonstrating to the rest of the country that North Dakota is a leader in innovative education.

Thank you for your time and consideration.

Sincerely,

Matthew Chaussee
CEO/Co-Founder
Be More Colorful, LLC