



2022

AGRICULTURAL LEADERSHIP, EDUCATION AND COMMUNICATION

ACADEMIC PROGRAM REVIEW
SELF-STUDY

DEVELOPING HUMAN POTENTIAL

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2022 Academic Program Review Schedule
Department of Agricultural Leadership, Education and Communication

Sunday, February 20, 2022

<u>Time</u>	<u>Activity</u>	<u>Location</u>	<u>Leader/Group</u>
Varies	Review Team Arrives	The Kindler	Review Team
4:15 PM	Review Team Meet & Greet	The Kindler	Review Team
5:00 PM	Charge Dinner	Tentatively Rodizio Grill	IANR Administration

Monday, February 21, 2022

<u>Time</u>	<u>Activity</u>	<u>Location</u>	<u>Leader/Group</u>
Varies	Breakfast (on your own)	The Kindler	Review Team
7:30 AM	Ride to UNL East Campus	The Kindler	DRIVER
8:00 AM – 8:45 AM	Departmental Overview & Review of ALEC Goals and Objectives	Garden Room, NEU	Dr. Balschweid
9:00 AM – 9:45 AM	Undergraduate Curriculum Committee	Garden Room, NEU	UCC Members & Participants
10:00 AM – 10:45 AM	Brand Enhancement	Garden Room, NEU	Faculty & Staff
11:00 AM – 11:45 AM	Agricultural and Environmental Sciences Communication	Garden Room, NEU	AESC Faculty
12:00 PM – 12:45 PM	Lunch with the Steering Committee	Legacy A - NEU	Steering Committee
1:00 PM – 1:45 PM	Agricultural Education	Garden Room, NEU	Ag Ed Faculty
2:00 PM – 2:45 PM	Leadership	Garden Room, NEU	Leadership Faculty
3:00 PM – 3:45 PM	Minors	Garden Room, NEU	Faculty &
4:00 PM – 4:45 PM	Graduate Curriculum Committee	Garden Room, NEU	GCC & Review Team
5:00 PM – 5:45 PM	Graduate Students	Garden Room, NEU; or Zoom	ALEC 845 Class & Review Team
6:00 PM	Ride to Hotel	The Kindler	Review Team & DRIVER

Tuesday, February 22, 2022

<u>Time</u>	<u>Activity</u>	<u>Location</u>	<u>Leader/Group</u>
7:00 AM	Ride to UNL East Campus	The Kindler	Review Team
7:30 AM – 8:30 AM	Breakfast with the Deans	Sycamore Room (Arbor Suite), NEU	IANR Administration
8:45 AM – 9:00 AM	Break	Garden Room, NEU	Review Team
9:00 AM – 9:30 AM	Campus Tour	Garden Room, NEU	CASNR Ambassador
9:45 AM – 10:30 AM	Graduate Assistants	Garden Room, NEU	Graduate Assistants
10:45 AM – 11:30 AM	Global Engagement	Garden Room, NEU	Faculty/Staff

Tuesday, February 22, 2022 continued

<u>Time</u>	<u>Activity</u>	<u>Location</u>	<u>Leader/Group</u>
11:45 AM – 12:45 PM	Lunch with Unit Heads	Great Plains Room B, NEU	IANR Unit Heads
1:00 PM – 1:45 PM	Recruitment	Garden Room, NEU	Faculty/Staff
2:00 PM – 2:45 PM	Extension Session	Garden Room, NEU	Extension & Interested Faculty
3:00 PM – 3:45 PM	Research Session	Garden Room, NEU	Research & Interested Faculty
4:00 PM – 4:45 PM	Undergraduate Students	Garden Room, NEU	Undergraduate Students
5:00 PM – 5:45 PM	Open Individual Appointments	Garden Room, NEU	Faculty/Staff/Students
6:00 PM	Ride to Hotel	The Kindler	Review Team
Evening	Team Writing	The Kindler	Review Team

Wednesday, February 23, 2022

<u>Time</u>	<u>Activity</u>	<u>Location</u>	<u>Leader/Group</u>
Varies	Breakfast (on your own)	The Kindler	Review Team
8:00 AM – 9:00 AM	Exit Meeting	Garden Room, ECU	IANR Administration
9:00 AM	Break	Garden Room, ECU	Review Team
9:30 AM – 10:00 AM	Exit Meeting with Department Head	Garden Room, ECU	Dr. Balschweid & Review Team
10:15 AM – 11:00 AM	Exit Meeting	Great Plains Room B, ECU	ALEC Faculty, Staff and Graduate Assistants
11:30 AM	Leave for Airport	ECU	Review Team, DRIVER

ALEC 2022 Academic Program Review External Team

Dr. Nicole Stedman, University of Florida
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Acronym Index

AAAE	American Association for Agricultural Education
ACE	Association for Communication Excellence
ALE	Association of Leadership Educators
ACT	Agricultural Communicators of Tomorrow
AESC	Agricultural & Environmental Sciences Communication
AFNR	Agriculture, Food and Natural Resources
ALEC	Agricultural Leadership, Education and Communication
ARD	Agricultural Research Division
CASNR	College of Agricultural Sciences and Natural Resources
CEHS	College of Education and Human Sciences
COE	College of Engineering
COJMC	College of Journalism and Mass Communications
DWFI	Daugherty Water for Food Institute
HRTM	Hospitality, Restaurant and Tourism Management
IANR	Institute of Agriculture and Natural Resources
ILA	International Leadership Association
NCA	National Communication Association
NCTA	Nebraska College of Technical Agriculture
NDE	Nebraska Department of Education
NHS	Nutrition and Health Sciences
NIC	Nebraska Innovation Campus
NHRI	Nebraska Human Resources Institute
NU	Nebraska University System
RPN	Rural Prosperity Nebraska
STEM	Science, Technology, Engineering, and Math
STS	Skilled and Technical Sciences
UNK	University of Nebraska – Kearney
UNL	University of Nebraska – Lincoln
UNMC	University of Nebraska Medical Center
UNO	University of Nebraska – Omaha

Institutional Overview

The [University of Nebraska – Lincoln](#) (UNL) is a comprehensive research land grant university with enrollment of 24,431 students (fall 2021). Founded in 1869, it serves as the flagship institution for the [University of Nebraska’s](#) five campuses and is part of the state’s broader higher education system that includes six community colleges and three state colleges. UNL is the only institution in Nebraska that prepares and certifies agricultural education teachers. ALEC faculty and staff strive to ensure that all programs and processes align within the framework of UNL’s *N2025 Strategic Plan* “where every person and every interaction matters” (<https://go.unl.edu/zh79>).

UNL’s [Institute of Agriculture and Natural Resources](#) (IANR) was created by the Nebraska Legislature in 1973 to ensure that agriculture would be appropriately resourced within UNL given the supreme importance of Nebraska’s agriculture and natural resources to the state’s economy and success. IANR is composed of the [College of Agricultural Sciences and Natural Resources \(CASNR\)](#), the [Agricultural Research Division \(ARD\)](#), [Nebraska Extension](#) and the ARD and Extension components of three departments in the [College of Education and Human Sciences](#). ARD is the only public entity in Nebraska charged with conducting agricultural research vital to Nebraska. And Nebraska Extension boasts the nation’s highest per capita involvement in 4-H with approximately 144,000 Nebraska youth representing one in three age eligible youth enrolled in Extension’s 4-H program.

**INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES
UNIVERSITY OF NEBRASKA**

ORGANIZATIONAL CHART

NU VICE PRESIDENT
IANR VICE CHANCELLOR
Mike Boehm

VICE CHANCELLOR’S OFFICE

SENIOR ASSOCIATE
VICE CHANCELLOR
Ron Yoder

ASSOCIATE VICE
CHANCELLOR
Rich Bischoff

ASSISTANT VICE
CHANCELLOR
For Business & Finance
Jeff Bassford

DEANS

Agricultural
Research Division
Archie Clutter

College of
Agricultural Sciences
& Natural Resources
Tiffany Heng-Moss

Nebraska Extension
Charles Stoltenow

College of Education
and Human Sciences
Sherri Jones

Nebraska College
of Technical
Agriculture
Larry Gossen

IANR ADMINISTRATIVE UNITS

AGRICULTURE & NATURAL RESOURCES ACADEMIC UNITS

AGRICULTURAL ECONOMICS

Larry Van Tassell

AGRICULTURAL LEADERSHIP, EDUCATION & COMMUNICATION

Mark Balschweid

AGRONOMY AND HORTICULTURE

Martha Mamo

ANIMAL SCIENCE

Clinton Krehbiel

BIOCHEMISTRY

Donald Becker

BIOLOGICAL SYSTEMS ENGINEERING

David Jones

ENTOMOLOGY

John Ruberson

FOOD SCIENCE AND TECHNOLOGY

Curt Weller

PLANT PATHOLOGY

Loren Giesler

SCHOOL OF NATURAL RESOURCES

John Carroll

SCHOOL OF VETERINARY MEDICINE & BIOMEDICAL SCIENCES

Scott McVey

STATISTICS

Bertrand Clarke

EDUCATION AND HUMAN SCIENCES ACADEMIC UNITS

CHILD, YOUTH, AND FAMILY STUDIES

Michael Merten

NUTRITION AND HEALTH SCIENCES

Mary Ann Johnson

TEXTILES, MERCHANDISING, AND FASHION DESIGN

Maria de Guzman

IANR PROGRAM UNITS

4-H YOUTH DEVELOPMENT

Kathleen Lodi

ENGLER AGRIBUSINESS ENTREPRENEURSHIP PROGRAM

Tom Field

NEBRASKA FOREST SERVICE

John Erixson

NEBRASKA LEAD PROGRAM

Terry Hejny

NEBRASKA MANUFACTURING EXTENSION PARTNERSHIP

Matthew Allmand

YEUTTER INSTITUTE

Jill O'Donnell

OTHER ORGANIZATIONAL UNITS

CENTERS

CENTER FOR ADVANCED LAND MANAGEMENT
INFORMATION TECHNOLOGIES

Brian Wardlow

CENTER FOR BIOLOGICAL CHEMISTRY

Donald Becker

CENTER FOR BIOTECHNOLOGY

Daniel Schachtman

CENTER FOR PLANT SCIENCE INNOVATION

Edgar Cahoon

CENTER FOR GRASSLAND STUDIES

Walt Schacht

CENTER FOR RESILIENCY IN AGRICULTURAL
WORKING LANDSCAPES

Craig Allen

CONSERVATION SURVEY DIVISION

Matt Joeckel

FOOD PROCESSING CENTER

Terry Howell

FOUNDATION SEED FARM

Jeff Noel

GREAT PLAINS COOPERATIVE ECOSYSTEM STUDY UNIT

Larkin Powell

GREAT PLAINS VETERINARY EDUCATIONAL CENTER

Scott McVey* & Galen Erickson*

HIGH PLAINS REGIONAL CLIMATE CENTER

Rezaul Mahmood

INDUSTRIAL AGRICULTURAL PRODUCTS CENTER

Mark Wilkins

NATIONAL DROUGHT MITIGATION CENTER

Mark Svoboda

NEBRASKA CENTER FOR VIROLOGY

Jennifer Mize Nelson*

NEBRASKA CENTER FOR PREVENTION OF OBESITY DISEASES

Janos Zempleni

NEBRASKA COOPERATIVE FISH & WILDLIFE RESEARCH UNIT

Kevin Pope

NEBRASKA FOOD FOR HEALTH CENTER

Andrew Benson

NEBRASKA REDOX BIOLOGY CENTER

Oleh Khalimonchuk*

NEBRASKA STATE CLIMATE OFFICE

Martha Shulski

NEBRASKA WATER CENTER

Chittaranjan Ray

NEBRASKA VETERINARY DIAGNOSTIC CENTER

Bruce Brodersen

QUANTITATIVE LIFE SCIENCES INITIATIVE

Jennifer Clarke

DISTRICT CENTERS

EASTERN RESEARCH, EXTENSION, & EDUCATION CENTER

Doug Zalesky

PANHANDLE RESEARCH, EXTENSION &
EDUCATION CENTER - Scottsbluff

Mitch Stephenson*

WEST CENTRAL RESEARCH, EXTENSION &
EDUCATION CENTER - North Platte

Kelly Bruns

RESEARCH, EXTENSION & ENGAGEMENT LOCATIONS AND CENTERS

BARTA BROTHERS RANCH - Ainsworth

TBD

GUDMUNDSEN SANDHILLS LABORATORY - Whitman

Andy Applegarth, Operations Manager

HASKELL AGRICULTURAL LABORATORY - Concord

TBD, Professor in Charge

HIGH PLAINS AGRICULTURAL LABORATORY - Sidney

Jacob Hansen, Farm Manager

HORNING FORESTRY FARM

John Erixson

KIMMEL EXTENSION & EDUCATION CENTER - Nebraska City

Tiffany Heng-Moss, Dave Varner

SOUTH CENTRAL AGRICULTURAL LABORATORY - Clay Center

Michael Schlick, Research Farm Manager

STUMPF INTERNATIONAL WHEAT CENTER

Kelly Bruns

EXTENSION PROGRAM LEADS

4-H YOUTH DEVELOPMENT

Kathleen Lodi

AGRICULTURAL ECONOMICS

John Westra

BEEF SYSTEMS

Rick Rasby

COMMUNITY ENVIRONMENT

TBD

FOOD, NUTRITION & HEALTH

Jean Ann Fischer

LIVESTOCK HEALTH

GPVEC Director - TBD

EARLY CHILDHOOD DEVELOPMENT

Holly Hatton-Bowers*

URBAN EXTENSION

Cynthia Zluticky

WATER & INTEGRATED CROPPING SYSTEMS

Daran Rudnick

Daren Redfearn

EXTENSION ENGAGEMENT ZONES

ZONE 1

Robert Eirich

ZONE 2

Jay Jenkins

ZONE 3

Brian Cox

ZONE 4

Benjamin Dutton

ZONE 5

Amy Topp

ZONE 6

Hilary Maricle

ZONE 7

Carrie Gottschalk

ZONE 8

Angi Heller

ZONE 9

Cynthia Zluticky

ZONE 10

Megan Burda

ZONE 11

Karly Black

NU WIDE INSTITUTIONS

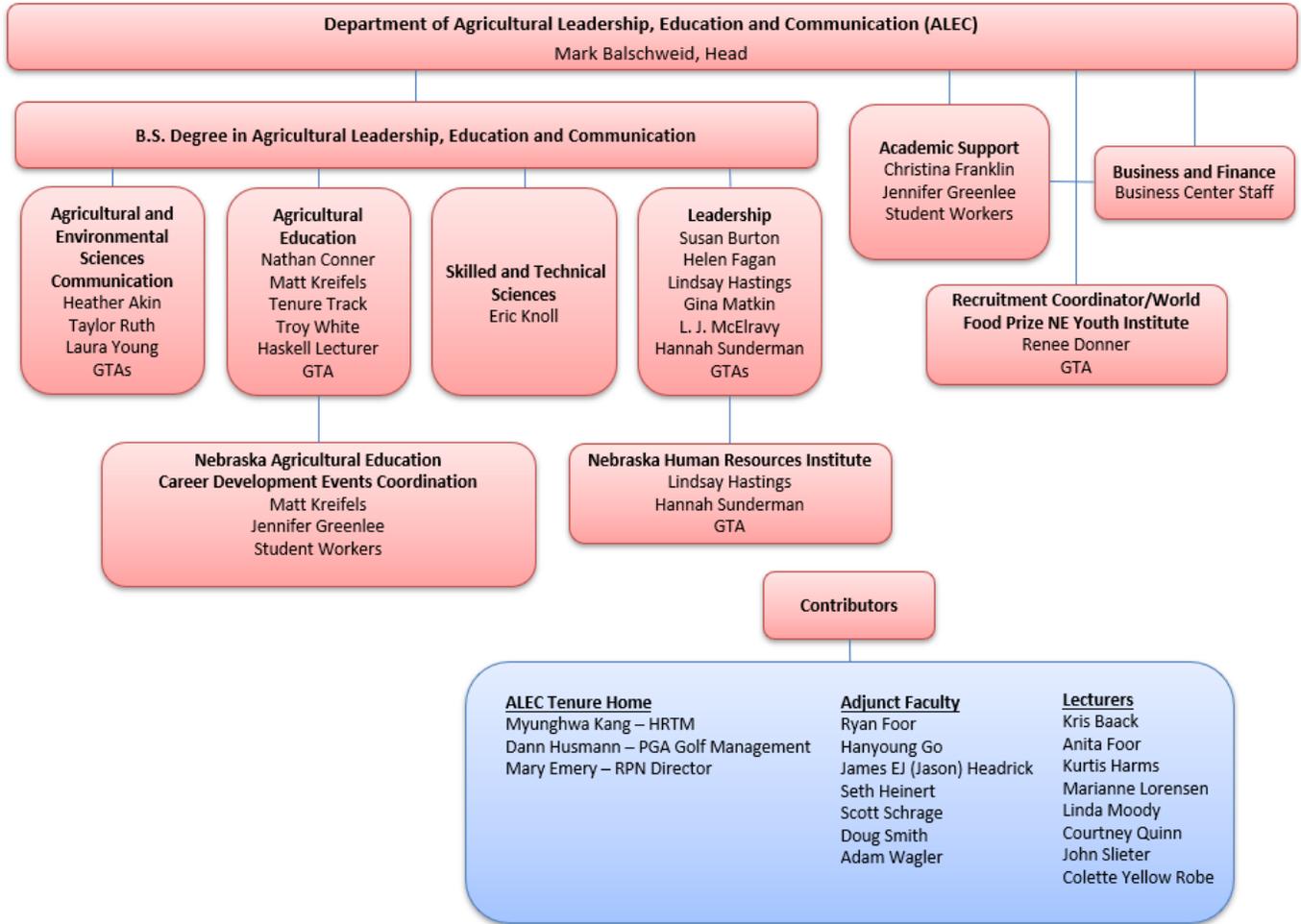
DAUGHERTY WATER FOR FOOD INSTITUTE

Peter McCornick

RURAL PROSPERITY NEBRASKA

Mary Emery

The ALEC department is one of 15 academic units within IANR, and its mission and programs are funded relative to the faculty’s apportionment in teaching (CASNR), research (ARD), and extension (Nebraska Extension). ALEC is comprised of 18 faculty (10 T/TT, six professors of practice, two full-time lecturers), three staff, 11 graduate assistants, and six part-time lecturers. For a list of faculty apportionments across teaching, research and extension, refer to Appendix 1.



ALEC Department Overview

As the quarter mark of the twenty-first century rapidly approaches, global concerns both new (pandemics) and old (food safety and security, immigration, energy, climate) require more than ever talented thought leaders with the ability to communicate, lead and teach across divergent perspectives and realities. It is for such a time as this that the faculty and staff within the [Department of Agricultural Leadership, Education and Communication](#) (ALEC) recognize the increasing opportunities for influence across their teaching, research, and extension activities. Since the last departmental review in 2016, strategic investments and alignments have been made to both focus and expand efforts within ALEC to capitalize on the people and the expertise within the unit for developing human potential. Throughout this self-study you'll read how the 2016 APR Review recommendations informed the current [ALEC Strategic Plan \(2017 – 2022\)](#) and created a systematic scope of work that has influenced faculty and staffing decisions, guided curricular realignment, reimagined graduate programs, expanded partnerships and collaborative efforts, and enhanced ALEC's visibility through greater emphasis on recognition and awards.

Guided by a departmental steering committee representative of programs and people, this self-study is designed around the elements of ALEC's Strategic Plan. In contrast to previous self-studies that have focused on separate academic programs and project areas, the following represents a reflective instrument built from the framework of the unit's dynamic strategic initiatives. This document uses the long-term goals as the backbone for a structure highlighting deep and continuing integration across the leadership, education and communication disciplines of the department while living and working at the intersection of teaching, research, and extension platforms. ALEC faculty and staff believe that to present the self-study in any other format diminishes the cross-cutting efforts and investments made over the course of the past six years by ALEC's faculty and staff, and the CASNR and IANR administration to truly integrate the social science disciplines that make up the ALEC department.

The following long-term goals were borne out of the 2016 external review team's recommendations and were developed through input and support from a broad range of constituents:

- A. Broaden the ALEC Graduate Program to include leadership, education, and communication disciplines and faculty.
- B. Enhance faculty engagement and research productivity.
- C. Expand global engagement to influence teaching, research, and extension.
- D. Strategically collaborate within ALEC to expand our capacity for delivering quality undergraduate programs and enhancing the undergraduate student experience.
- E. Broaden and enhance ALEC's reputation/brand.

Once these five overarching goals were established subsequent shorter-term goals were created in support of, and in alignment with, these long-term goals. The following short-term goals were created:

1. Promote faculty/staff/student achievement using international/national/regional awards.

2. Revise and update departmental structure, policy, and guidelines (committee structure, program areas, internal communications of policies, facilities, etc.).
3. Strategically grow ALEC minors and course offerings.
4. Increase graduate student research productivity through stronger scholarly alignment with ALEC faculty research interests.
5. Increase collaboration and participation in externally funded research and engagement projects that integrate within and/or outside of ALEC program areas.
6. Communicate and manage ALEC's reputation for excellence through an innovative online presence (i.e., website consistent with UNL templates, social media presence, photos, e-mail signatures).
7. Identify opportunities for ALEC undergraduate program integration to optimize teaching resources and to enhance the student experience.
8. Promote faculty teaching excellence through professional development and innovation.

Throughout this self-study the intention is that it be evident how the shorter-term goals have contributed to providing the scaffolding necessary for achieving the longer-term goals. It is with this thought in mind that faculty, staff, and students pose the following questions for consideration:

ALEC Academic Program Review Questions to Consider:

Graduate Programs

1. In what ways could we improve the inclusive culture of our graduate programs, thinking specifically about race, ethnicity, international status, discipline focus (i.e., leadership, education, and communication) and full- and part-time status?

ALEC Department

1. How do faculty maximize their scholarly impact and contributions to IANR's *Communities of Practice* and UNL's *Grand Challenges* given that all ALEC faculty have majority teaching appointments?
2. With many structural changes to ALEC since 2016 (unified undergraduate degree, broadening graduate program, integrated research programs), what day-to-day operational changes should be made to reflect and maximize these structural changes?
3. How should a multidisciplinary department like ALEC structure an advisory group of stakeholders and what recommendations do you have for "best practices" in how the group functions? (i.e., large group meetings? smaller, discipline specific meetings? annual, semi-annual, quarterly meetings? Face-to-face or online?)

Undergraduate Programs

1. Now that ALEC has a single degree (B.S. in Agricultural Leadership, Education and Communication) with four options, how do we maintain the viability of individual options while working towards achieving a common degree?
2. As UNL adopts a new budget model (incentive-based budget), what are ALEC's unique strengths and competitive differentiators to be considered to maximize growth?
3. How can faculty promote greater community culture and connection with transfer students since many students enter our programs at different times and through different pathways?

AESC Option

1. What are the best steps for AESC to strategically begin an AESC graduate option within the current ALEC MS graduate program?
2. How can AESC best differentiate the AESC minor from other minors in ALEC, while working to promote and grow the AESC minor?
3. What learning spaces of the future do you recommend (technology required for AESC programs) that peer programs use?
4. How can AESC strategically build relationships with the UNL College of Journalism and Mass Communications (COJMC) that are mutually beneficial for both programs?

Leadership option

1. How should the leadership faculty manage the administrative responsibilities for the growing number of student credit hours and plan for long-term growth knowing we're serving over 1,400 students per year in our courses?

Teaching option

1. How can we best utilize the new statewide lecturers in the areas of agricultural education/STS, STEM, teacher/school relations, recruitment, new teacher support, professional development/curriculum support, and student teacher supervision – while integrating them as full-fledged members of ALEC's culture although they work several hours from campus?

1. Graduate Programs

Evidence from ALEC's 2016 academic review provided straightforward recommendations for expanding the department's graduate programs to 1) include more opportunities for agricultural and environmental sciences communication (AESC) and agricultural education faculty; 2) be more intentional concerning graduate student expectations for research; 3) provide more in-depth training for new GTA's; and 4) ensure that all graduate level courses are taught by qualified faculty. This led to the creation of a long-term goal to "broaden the ALEC graduate program to include leadership, education, and communication disciplines and faculty" and a supporting shorter-term goal to "increase graduate student research productivity through stronger scholarly alignment with ALEC faculty research interests" within the current strategic plan. This parallels the *N2025 Strategic Plan's* aim to "establish a culture at Nebraska committed to increasing the impact of research and creative activity." The following provides evidence for the activities and initiatives that faculty, staff and students engage in to transform ALEC's graduate programs to be more inclusive and representative of the unit's disciplines, to elevate the articulation between graduate students and faculty research and provide more transparency and professional development for all graduate students in the department.

ALEC Graduate Curriculum Committee

All programmatic decisions for ALEC's graduate degree programs are governed by the ALEC Graduate Curriculum Committee (GCC) in alignment with CASNR's *Strategic Framework for Graduate Education*, and UNL's Office of Graduate Studies. This committee is representative of the department's graduate programs with voting members elected by their program faculty. The

GCC is one of two standing committees in ALEC and meets monthly to address issues and transact business relative to student admission, program curricular decisions, student experiences, academic advising, and to consider other department, college and/or university curriculum issues. ALEC's graduate program coordinator (McElravy) sits on the CASNR Graduate Chair's Committee representing ALEC's interests.

Graduate Faculty

Currently, ALEC has eight graduate faculty (Akin, Balschweid, Conner, Hastings, Matkin, McElravy, Ruth, Sunderman.) Of those all are advising graduate students, and seven are teaching graduate courses. Additionally, ALEC has six faculty approved as graduate lecturers (Burton, Fagan, Knoll, Kreifels, Quinn, Young) who teach graduate courses.

General Operations

An ALEC Graduate Education Handbook and a Graduate Assistant Handbook were developed since the 2016 review to clarify policies and procedures within graduate education. Prior to this, there were no unit-specific publications with this level of information detailing the expectations for graduate students and/or those on assistantships.

The ALEC application and admission process is embedded in the university's system and aligns with policies and procedures that direct all graduate education at UNL. A new, university-wide graduate application software system was implemented for Fall 2020 admissions. The implementation of this system allowed ALEC's graduate faculty the opportunity to review the department's own application procedures. Specific changes were implemented to help align graduate student research with faculty research interests. As a result, the application now requires all applicants to identify one to three faculty with whom they would like to work. Additionally, the graduate chair meets with nearly all applicants before they submit their application to help potential students identify the appropriate advisor based on their stated interests.

Furthermore, the graduate committee conducted a detailed quantitative review of admission requirements leading to a change to the GRE from "required" for all applicants to "optional." The analysis suggested that the GRE, when considering other factors (e.g., GPA), was not a significant predictor of admission decisions or progress/graduation in the M. S. degree. For Fall 2022 admissions, the GRE is no longer a requirement for the M.S. degree in Leadership Studies. However, at the Ph.D. level, the GRE was a significant predictor of admissions decisions and progress/graduation, and the GRE is still a requirement for doctoral applicants. A waiver to the GRE requirement may be granted by a vote of the graduate faculty in extreme circumstances (e.g., the GRE is not available in the applicant's country).

Leadership Studies – Ph.D.

The interdepartmental doctoral program in human sciences with a specialization in leadership studies is designed for individuals interested in studying leadership and leadership development theory and practice. It is ideal for those interested in becoming a leadership scholar in a faculty role or in a variety of other contexts, including communities, government agencies, non-profit and private sector organizations. The Ph.D. program growth is limited by the number of faculty

able to serve as advisors. The growth in admissions starting Fall 2020 is a result of both a large number of students graduating in 2019-2020 and additional graduate faculty in the department.

Leadership Education – M.S.

An M.S. degree in leadership education immerses students in three specific areas, 1) leadership scholarship, 2) teaching and outreach, and 3) research methods and program evaluation. Graduates of this program primarily enter careers engaging in leadership development in public and private organizations, community development careers, and graduate school. Similar to the Ph.D. program, the number of admissions in Fall 2021 increased in large part to additional graduate faculty available to serve as advisors. The following table provides greater detail for students entering and matriculating through ALEC’s graduate degree programs.

Academic Year	F 16-Su 17	F 17-Su 18	F 18-Su 19	F 19-Su 20	F 20-Su 21	F 21-Su 22
Total M.S. Applications*	12	9	9	7	4	12
Total M.S. Admissions*	6	4	6	4	3	10
Total Students in M.S.**	9	9	6	11	6	10
M.S. Degrees Conferred	3	5	3	5	3	N/A
Total Ph.D. Applications*	4	8	9	2	17	12
Total Ph.D. Admissions*	1	3	6	2	10	10
Total Students in Ph.D.**	22	27	30	23	14	24
Ph.D. Degrees Conferred	1	0	2	5	1	N/A

*Indicates application and admissions to start the Fall of the listed academic year.

**Indicates active students starting each fall semester.

Leadership Education Graduate Minor

A minor in leadership education is available to graduate students in other programs. Between 2013 and 2017, 36 students earned a graduate minor in leadership education. Based upon the numbers of students subscribed to the leadership education minor, it’s clear that interest exists across campus for graduate credentialing that encompasses leadership development.

Significant Updates/Changes since 2016 Review

In 2021, UNL’s Office of Graduate Studies reduced the minimum master’s credit hour requirement for non-thesis option students to 30 hours, though master’s programs could still require more if deemed necessary. The ALEC graduate faculty voted to change the non-thesis option requirement from 36 hours to 30 hours.

New Programs, Courses, and Growth Areas

ALEC faculty were the first to embrace graduate certificates and established a **Personal Leadership Graduate Certificate**. Initiated campus wide in 2019, UNL graduate certificates comprise a set of credit-bearing graduate courses representing a specific subject area. Graduate

certificates are designed for post-baccalaureate students seeking to enhance their educational portfolio. And admission into a graduate certificate program occurs independently of any other graduate degree programs at UNL. Although ALEC's graduate certificate was approved by the university, it is still in the implementation process, and it is anticipated that faculty will be accepting students to the program no later than Fall 2022.

An accelerated program was created in collaboration with the hospitality, restaurant, and tourism management (HRTM) program to allow undergraduates to apply to the M.S. leadership education degree once they achieve junior status. The **Accelerated Leadership Education and HRTM BA Degree** program proposal was approved by the UNL graduate council in June 2021, and it is currently under review with the Executive Vice Chancellor's Office. This accelerated program builds upon the partnership with the HRTM faculty whereby the HRTM undergraduate degree program already requires one of ALEC's leadership minors for students to complete their HRTM degree program.

The **Rural Economic and Community Vitality Graduate Certificate** conveys economic and social concepts relevant to understanding rural communities, the public decision-making process, and the value of a multicultural and diverse citizenship. Certificate topics were designed in consultation with development professionals to ensure the program is practical and relevant to rural communities. ALEC provides oversight for two courses in the program, ALEC/CDEV 855: *Dynamics of Effective Leadership in Groups and Teams* (3 credit core course required for all students earning the certificate) and ALEC/CDEV: 818 *Community Engagement* (1 credit hour).

The **Teaching and Extension Education Specialization** is one of three specializations for students pursuing the MS in leadership education. This specialization provides a pathway for students for careers in community college or university teaching, public school teaching, outreach programs and cooperative extension. ALEC faculty recently approved new course requirements to be added to this specialization and there is significant opportunity for greater alignment with Nebraska Extension for co-creating more courses to close the gap in programming in areas such as program evaluation and principles of extension education.

Potential Growth

The ALEC graduate faculty have created a framework to provide a **Leadership Development Graduate Certificate**, which would build from the **Personal Leadership Certificate**, to provide specific training and development for individuals working in leadership development professions. And following up on the 2016 review team's recommendations, more opportunities for growth exist to expand course and certificate offerings to include agricultural and environmental sciences communication programming. An AESC graduate certificate, specialization, or degree are all options for consideration moving forward.

New Graduate Courses

Between 2016 and 2021, several new graduate courses were created. These include:

ALEC 809: *Diffusions of Innovations: Through an Extension Context*

ALEC 811: *Principles of Adult Education*

ALEC/CDEV 818: *Community Engagement*

ALEC 819: *Public Information Campaigns*

ALEC/CDEV 855: *Dynamics of Effective Leadership in Groups and Teams*

ALEC 891: *Professional Exploration in Leadership Education and Leadership Studies.*

Much of the growth in new courses allows for the agricultural education and AESC faculty to teach within their primary areas of expertise, ensuring that students are exposed to their specific areas of scholarship.

Master of Applied Science

The **Master of Applied Science** (MAS) degree is designed for those whose educational objective is to pursue a professional degree in agriculture, food, community development and natural resources at the master's level. It is administered through the CASNR Graduate Program's office. The MAS is a flexible and personalized practitioner degree program for individuals directly involved in agriculture, food, community development and natural resource-related industries, as well as working agricultural, community development and natural resource professionals and science educators needing advanced education. As a result, the MAS is the most common route for Nebraska's in-service agricultural education teachers pursuing a graduate degree. ALEC faculty (Conner, Balschweid) advise these teachers with Conner having between 10 – 15 MAS students at any one time.

Graduate Assistantship Growth

ALEC receives permanent funding to support two masters-level and five doctoral-level graduate teaching assistants each year. These GTAs support ALEC's robust teaching portfolio of leadership coursework and programming. ALEC's doctoral GTAs add to the overall teaching capacity by serving as stand-alone 'instructors of record' for two undergraduate courses each semester. This provides GTAs with a unique opportunity to gain valuable teaching experience as sole instructors, while remaining under the tutelage of the faculty course coordinators. Recently, with more faculty success in funded proposals and significant engagement opportunities (Rural Prosperity Nebraska), graduate research assistants have expanded ALEC's ability to recruit and fund graduate students. Lastly, when a staff position was vacated in 2020, faculty were in favor of converting the staff position to two masters-level assistantships and those were awarded to AESC faculty for assistance in teaching AESC courses and helping with ALEC's recruitment effort through social media campaigns and other communication tasks.

ALEC Graduate Student Association (GSA)

The ALEC GSA is advised by Dr. McElravy who provides leadership and administrative oversight. The purpose of the ALEC GSA is to 1) promote a true professional spirit of cooperation among graduate students of the ALEC department; 2) develop leadership qualities with national and international dimensions; and 3) enhance relationships, professionally and socially, among faculty, staff members, and graduate students of the ALEC department. The ALEC GSA is responsible for hosting a minimum of two events per year, a spring welcome event for new students and a fall recruitment event. Additional events are planned throughout the year and include socials, professional workshops, bringing speakers to campus, and other activities to enhance the graduate student experience in ALEC.

Efforts Towards Diversity, Equity and Inclusion (DEI)

In 2018 ALEC faculty (Balschweid, McElravy) began discussing efforts towards greater recruitment of underrepresented minorities into ALEC graduate programs. This quickly expanded to a broader graduate faculty group (including Akin, Conner, Hastings, Matkin) and resulted in submitting a proposal to Purdue University and being selected to participate in the **MENTOR Project**. This USDA-NIFA funded project established a mentoring network across 13 land-grant institutions, six historically black colleges and universities (HBCUs) and seven predominately white institutions (PWIs), for the purpose of bringing intentional and inclusive mentoring-based programs to UNL and CASNR through the efforts of ALEC faculty.

This effort helped in the process of **reestablishing the UNL MANRRS** (Minorities in Agriculture and Natural Resources Related Sciences) chapter in 2021, initiated a working group of IANR unit heads in 2019 that meet regularly and engage with the CASNR dean's office to envision greater collaboration with HCBUs and 1994 land-grant universities, and led to the invitation and daylong campus wide interaction with Dr. Zelia Wiley (Kansas State University – interim associate provost for diversity) in September 2021. Dr. Wiley came at the invitation of this group to share the kinds of initiatives she's led and collaborated in during her career and to meet with various groups of faculty, students, and administrators.

Question to Consider:

In what ways could we improve the inclusive culture of our graduate programs, thinking specifically about race, ethnicity, international status, discipline focus (i.e., leadership, education, and communication) and full- and part-time status?

2. Engagement & Research

ALEC faculty and staff recognize an interconnectedness between engagement and research leading to significant contributions to the scholarship of teaching and learning, and the scholarship of engagement. All ALEC tenure track faculty have teaching/research or teaching/extension appointments and engage in scholarly activities at the intersection of theory and best practice. Similarly, ALEC's professors of practice engage in scholarly efforts within their discipline contributing to the unit's overall scholarly enterprise. With a strong theoretical base in social science disciplines, ALEC faculty recognize their unique position for collaborating across campus. Whether in leadership, education, or communication, faculty strive to leverage their scholarship to “broaden Nebraska's engagement in community, industry, and global partnerships” – an aim within the *N2025* plan.

This section provides an overview of ALEC's innovative and collaborative approaches within IANR to contribute in ways that advance Nebraska's contemporary version of extension where co-learning and co-discovery occurs and where relationships are developed that allow for exploring and engaging in discovery with Nebraskans on real issues that matter to them. Faculty regularly partner in five of Nebraska Extension's priority focus areas. These are:

Rural Prosperity Nebraska
4-H Youth Development
Community Environment

*Entrepreneurship
Water and Integrated Cropping Systems*

Funding in Support of Teaching, Research and Extension/Outreach Enterprises

Faculty are expected to pursue extramural funding in support of advancing their scholarship. Regardless of the nature and apportionment of their position, faculty seek funding (grants, contracts, fees, etc.) as principal investigators, Co-PIs, senior personnel, and through state government contracts, and/or funding through private foundations and non-profit organizations in support of their teaching, research and/or extension/outreach programming. Table 1 summarizes these efforts.

Table 1

*Number of Proposals Awarded ALEC Faculty with Research Expenditures Since Last Review**

	2016	2017	2018	2019	2020	2021	Total
Proposals awarded	18	23	26	25	31	19	142
% Credit awarded (\$)	138,173	242,613	326,440	177,346	495,622	774,699	\$2,154,893
Total Research Expenditures (\$)	250,858	251,234	286,463	403,255	522,951	19,346	\$1,734,107

*Data generated from IANR Analytics for all sources: research, public service, student service, instruction/training, fellowship/student aid, donation, administration

ALEC Faculty Scholarly Outputs

Regardless of apportionment, ALEC faculty understand the importance of engaging in the creation and communication of new knowledge. Using the metrics of refereed journal publications, peer-reviewed conference presentations and abstracts, book chapters and other traditional measures of scholarship, faculty engage with graduate students in contributing to the literature in leadership, education, and communication. Table 2 summarizes these efforts.

Table 2

*Number and Type of Scholarly Outputs by Calendar Year Since Last Review**

Scholarly Output – Type	2016	2017	2018	2019	2020	2021	Total
Peer Reviewed Journal Articles	7	4	12	16	27	38	104
Refereed Presentations and/or Papers	27	21	28	57	42	29	204
Poster Abstracts	1	6	6	12	6	12	43
Invited Presentations (state, national, int'l)	17	17	23	35	18	17	127
Other: Books, handbooks, edited reports, etc.	9	6	4	8	7	6	40
Total	61	54	73	128	100	102	518

*Duplicated count of artifacts displayed in faculty (TT/non-TT) curricula vitae during ALEC appointment

Faculty, graduate students, and staff collaborate on a substantial number of extension, outreach and engagement programs and projects with impact across the state of Nebraska. The following provides an overview of those efforts.

Statewide Engagement

ALEC teacher education faculty **provide statewide leadership to Nebraska’s teacher licensure and certification processes** for agricultural education and skilled and technical

sciences. This effort includes coordinating and advising two alternative licensure programs - Transition to Teaching (those with BS degrees in a content-related field who qualify to begin teaching while taking up to three years to complete coursework and full certification requirements) and Provisional Endorsement (those with a current teaching certificate who qualify to add a provisional endorsement in agriculture while completing coursework to become fully endorsed in agricultural education).

ALEC's teacher education faculty also **provide ongoing professional development for in-service teachers of agricultural education and skilled and technical sciences**. These efforts include technical skill and pedagogical practices workshops and are held at a variety of locations across Nebraska and include partner institutions such as [Nebraska College of Technical Agriculture](#) (NCTA) and several community college campuses. Faculty are instrumental in developing and providing training for Transition to Teaching professionals in partnership with the Nebraska Department of Education for those seeking career education permits and this has leveraged to national training opportunities for these faculty (Knoll and Kreifels). A listing of faculty involvement in pre- and in-service professional development workshops can be found in the CVs for Nathan Conner, Eric Knoll, and Matt Kreifels.

To continue expanding efforts in this area, IANR Vice Chancellor Mike Boehm and CASNR's Dean Tiffany Heng-Moss invested in **two statewide agricultural education lecturer** positions for the purpose of expanding CASNR and ALEC's ability to serve the teachers and students in northwest and northeast Nebraska. These two positions (one in Scottsbluff and the other in Concord) are dedicated to stronger alignment with schools, ESU's, and teachers of science, agriculture, skilled and technical sciences, and STEM disciplines. Both are set to begin in June 2022.

The ALEC department serves as the coordinating entity for the **Nebraska Agricultural Education Career Development Events** (CDEs), which are the technical skill events for school-based agricultural education programs and FFA. Nebraska hosts 24 CDEs, 19 of which take place on the campus of UNL during the Nebraska FFA Convention each April. In total, over 4,000 students participate in the events each year. ALEC faculty serve as the superintendents for *Agricultural Communications*, *Agricultural Issues*, and *Agriscience* CDE's. Matt Kreifels, Jennifer Greenlee and a team of undergraduate students coordinate CDEs on behalf of CASNR, interacting with identified superintendents of each event. Superintendents include CASNR faculty and staff across five departments, NCTA, Southeast Community College, and Northeast Community College.

IANR's [Rural Prosperity Nebraska](#) (RPN) was launched in 2020 as the university's commitment to rural development and community prosperity. ALEC faculty and graduate students are heavily invested in RPN through several initiatives. Dr. Helen Fagan serves as the coordinator for the **Rural Fellows** program, a paid summer internship program matching students interested in community development with communities aspiring to greater vitality in areas such as business and workforce development, tourism marketing, community health, inclusive leadership development and early childhood education. In the summer of 2021, 17 communities across Nebraska hosted 42 students for the 10-week internship and the program's goal is to see 200 students embedded in 100 Nebraskan communities each summer.

RPN has six focus areas that help operationalize theory and best practice – placemaking, people attraction, community development leadership, community economic development, regional food systems, and community engagement. Dr. Heather Akin serves on the placemaking team, an interdisciplinary team working to identify and support public spaces in rural Nebraska communities for people to live, work, play, shop, learn and visit. Dr. Lindsay Hastings serves as one of three researchers providing overarching vision to the scholarly direction and activities for RPN.

The [Nebraska Rural Poll](#), now in its 26th year is the longest running survey of its kind, combining the expertise of UNL’s Agricultural Economics department and Nebraska Extension and draws upon faculty interested in the issues that are important to rural Nebraskans. Drs. Heather Akin and L. J. McElravy are part of an interdisciplinary team that designs, administers, and analyzes data from the Nebraska Rural Poll, an annual effort that focuses on Nebraskans’ views about community, government policy, well-being, and work. The results give local and state leaders a better understanding of the issues, challenges, and concerns of Nebraska’s rural citizens. In 2021, an additional Nebraska Metro Poll was administered to residents living in metro areas.

[Strategic Discussions for Nebraska](#) is an annual publication highlighting IANR research and projects and the impact those have on the state of Nebraska and beyond. Students in the AESC program write stories for the *Strategic Discussions for Nebraska* publication as part of their senior capstone seminar course (ALEC 480). Senior students also provide photography for the publication and create promotional content for the website and social media. Dr. Laura Young directs the AESC senior capstone and development of *Strategic Discussions for Nebraska* which reaches across the state and includes readership throughout the region as well as state and national policymakers.

The **World Food Prize Nebraska Youth Institute** (WFP NYI) is coordinated by ALEC’s Ms. Renee Donner. Renee promotes this statewide event in partnership with the WFP Global Youth Institute team and targets high school students from across Nebraska. Through her efforts Renee collaborates with internal and external partners providing rich, globally minded learning experiences for prospective UNL and CASNR students through innovative event platforms and mixing in-person and online opportunities focused on increasing engagement for students from non-agricultural backgrounds exposing them to global opportunities of study in CASNR and ALEC.

Northeast Nebraska Agriculture and Natural Resources Education Compact is a broad coalition of partners committed to educational and career pathways combining the strengths of multiple institutions in the region to meet the needs of youth and lifelong learners and contribute to workforce and talent development supporting economic growth strategies in agriculture and natural resources. ALEC is committed to this effort with one of the two statewide agricultural education lecturers devoted to building stronger ties within this region. The educational partners committed to this initiative include:

Nebraska Indian Community College

Little Priest Tribal College
Northeast Community College
Wayne Public Schools
Wayne State College

The partners involved in this compact are committed to developing workforce development solutions for agriculture and natural resources industries in the region. ALEC faculty and graduate students are uniquely poised to contribute through curriculum development, joint professional development opportunities for teachers across the compact, and development of skills, programming, competencies, and credentials that can be offered by all partner institutions and aligned with labor market demand and workforce development needs.

Building upon the partnerships that ALEC and CASNR currently have with educational partners in the Northeast Nebraska Agriculture and Natural Resources Education Compact (Northeast Community College 2 + 2 articulation agreement; Wayne Public Schools Agricultural Education Program), ALEC faculty (Conners and Kreifels) are actively collaborating with **Little Priest Tribal College** (LPTC) on program planning and curriculum development to establish a two-year associate of science degree in diversified agriculture. Little Priest Tribal College is a public tribal land-grant community college in Winnebago, Nebraska, and a member of the American Indian Higher Education Consortium. LPTC is primarily supported by the Winnebago Tribe of Nebraska with an enrollment of approximately 150 students each semester. Discussions are currently underway for this degree and the LPTC associate of arts degree in teacher education to be offered in 2 + 2 agreements with ALEC and CASNR degree programs. A partnership between ALEC faculty (Balschweid) and the **Nebraska Indian Community College** (NICC) has focused on collaborating on co-curricular assessment with the intention of creating articulation agreements between NICC, ALEC and CASNR streamlining the transfer process for students pursuing 4-years degrees in ALEC and CASNR degree programs. NICC is a public tribal land-grant community college with three locations in Nebraska: Macy on the Omaha Tribe reservation, Santee on the Santee Sioux reservation, and in South Sioux City.

Campus Engagement

Through ALEC's people and programs, the department plays a significant role in experiential learning and serves as a leader in CASNR for promoting, offering, and collaborating with others in the design and delivery of experiential- and service-learning programming. ALEC is home to the largest and longest-running experiential learning initiative at UNL – the [Nebraska Human Resources Institute \(NHRI\) Leadership Mentoring](#) program. NHRI is a leadership mentoring program that for over 70 years has paired college student leaders with K – 12 student leaders in one-on-one investment relationships. The ultimate intention is to develop the next generation of leaders using positive psychology and direct their leadership toward positive reinvestment in others. Currently, NHRI works with approximately 400 collegiate and K – 12 students in the Lincoln community each year. This program epitomizes ALEC's efforts in developing human potential and serves as the onramp for UNL students participating in ALEC's minors and/or pursuing ALEC's graduate degree programs. Similarly, ALEC serves as the home for the largest and longest-running service-learning course at UNL (**ALEC 102 *Interpersonal Skills for Leadership***). Each semester over 350 undergraduate students enroll in ALEC 102 and experience

a 20-hour service-learning component at a local organization as part of the class. Students from all majors enroll in this course that meets a university core requirement and serves as a foundational class to ALEC's leadership minor. In addition, several sections are reserved each semester for specialized populations (Chancellor's Scholars, First Gen Scholars, Buffett Scholars, etc.) and taught by ALEC approved faculty from other academic and/or administrative units.

Since the last program review considerable effort has focused on providing campus wide leadership in the domain of science literacy, communicating science to broad audiences, and exploring various credentialing opportunities for those interested in developing greater understanding and skills in communicating science to the general public. In 2021, IANR launched a **Science Communication Hub** focused on supporting graduate students in their science communication and scientific writing efforts. Drs. Akin, Ruth, and Young have served as content experts and participated in the strategic planning phase. As part of the hub's programming, Drs. Akin, Ruth, and Young collaborated with the Agronomy and Horticulture department in delivering a day-long science communication workshop for graduate students. Ongoing efforts are focused on innovative ideas for creating and delivering a science communication minor, a digital badge in science communication, and exploring methods for credentialing non-university individuals in science communication. It is noteworthy that AESC faculty are regularly invited to deliver presentations about science communication and strategic communication in courses and seminars across campus. In 2020-2021, AESC faculty presented in the School of Biological Sciences, the Statistics department, the department of Biochemistry, and the Animal Science department.

Members of ALEC's leadership faculty (Burton, Fagan, Matkin, McElravy) **design and deliver leadership development modules** for IANR's *Doctor of Plant Health* professional degree program and *Nebraska Water Leaders Academy*, a non-profit organization established to provide learning opportunities to Nebraskans statewide focusing on cooperative approaches to solving Nebraska's water issues.

Drs. Ruth and Akin are collaborating with faculty from CASNR and the College of Arts and Sciences in developing a **Science Communication Graduate Certificate**. This certificate will leverage existing campus courses and be marketed to post-baccalaureate students interested in gaining credentials in science communication. In addition, Drs. McElravy, Ruth, and Akin are collaborating to develop a **Research Communication Digital Badge** for graduate students to package their academic research/creative activity and communicate those products to broad audiences. Dr. McElravy designed the digital badge along with Dr. Tom Burkey, associate dean of graduate education, and Drs. Akin and Ruth are developing the content.

Dr. Akin serves as a faculty fellow in the Nebraska Governance and Technology Center (NGTC) within the College of Law. Named as a fellow in 2021, Dr. Akin meets with 20 other fellows from across UNL to collaborate on research as a cohort of academics who can understand governance and technology challenges in interdisciplinary terms. Dr. Akin is one of two representatives from CASNR. And Dr. McElravy currently serves as a Honors Fellow supporting the Civic Leadership track within the UNL Honors Program.

ALEC faculty (Akin, Hastings, McElravy, Sunderman) have **advised undergraduate students in UNL’s UCARE (Undergraduate Creative Activity and Research Experience) and FYRE (First-Year Research Experience) programs.** Specifically, Dr. Akin advised two UCARE students in their undergraduate research project *Mental health perceptions in Rwanda*, while Dr. Hastings has advised nine UCARE students through three research projects, namely: *Exploring generativity development among college student leaders who mentor*; *Examining generativity and socially responsible leadership among college student leaders who mentor*; and *Leadership transfer within rural communities*. Dr. McElravy’s FYRE student created a social media campaign for the Rural Poll.

Efforts Towards Diversity, Equity and Inclusion (DEI)

Through ALEC courses, seminars and invited presentations several faculty and graduate assistants are actively involved in campus wide efforts leveraging their scholarly expertise and engagement experience in advancing diversity, equity, and inclusion efforts across IANR and UNL. Drs. Gina Matkin, Helen Fagan and Susan Burton all teach courses and facilitate DEI workshops and seminars, and all faculty, staff and graduate students are committed to ALEC’s core value that all people are valuable and deserve to be treated with dignity. This value, along with ALEC’s other core values, is communicated to all candidates interviewing for ALEC positions (faculty, staff, GTA/GRAs) with the expressed purpose that to be successful in this department they need to possess these values intrinsically.

Questions to Consider:

1. How do faculty maximize their scholarly impact and contributions across campus in such initiatives as [IANR’s Communities of Practice](#) and UNL’s *Grand Challenges* given that all ALEC faculty have majority teaching appointments?
2. With many structural changes to ALEC since 2016 (unified undergraduate degree, broadening graduate program, integrated research programs), what day-to-day operational changes should be made to capitalize on and maximize these structural changes?
3. How should a multidisciplinary department like ALEC structure an advisory group of stakeholders and what recommendations do you have for “best practices” in how the group functions? (i.e., large group meetings? smaller, discipline specific meetings? annual, semi-annual, quarterly meetings? Face-to-face or online?)

3. Global Engagement

ALEC faculty, staff and graduate students are keenly aware of the global opportunities for leveraging their teaching, learning and extension efforts broadly. Embedded in ALEC’s core value of being *globally minded*, is the vision to “build an understanding and appreciation for the global nature of our work through the interconnectedness of people.” More than any other time in the unit’s history, daily decisions are made, and strategies conceived to increase global awareness among faculty, staff and students and to engage in programs with global influence. Marked by this ideal, ALEC embraces opportunities to be a leader in interacting with CASNR’s **CUSP (CASNR Undergraduate Scholarship Program) Scholar** program, **serve as the academic director for UNL’s Mandela Washington Fellowship** program, and provide statewide leadership and coordination for the **World Food Prize Nebraska Youth Institute**.

ALEC faculty and staff recognize the unique contributions they bring to global engagement efforts through their expertise in leading, teaching, and communicating. Arguably, there's never been more urgency for greater cross-cultural understanding, clearer communication, and effective knowledge transfer than present day. And with the responsibility for preparing the next generation of leaders, teachers and communicators, ALEC faculty and staff work to instill a global mindedness and appreciation for the interconnectedness of Nebraska and the world in every student interaction. The following summarizes these efforts.

Rwanda

In 2015 UNL and CASNR embarked on a relationship with the country of Rwanda for the purpose of assisting to transform the country's agricultural production and food security. Through donor support, this program brought 200 students from Rwanda to participate in the college's [CUSP Scholars](#) program. Cohorts of 50 students annually are selected to participate in pursuing a Bachelor of Science degree in *Integrated Science* with a focus on conservation agriculture, entrepreneurship, and leadership. ALEC has been intimately involved in many aspects of this program. Faculty (Balschweid, Conner, McElravy) traveled to Rwanda and promoted the CUSP Scholars program across the country and helped recruit students from secondary schools (2016, 2017, 2018). In 2019, Hastings traveled to Rwanda and served on the CUSP Scholars selection team.

All CUSP Scholars are strongly encouraged to earn an ALEC minor in either *Leadership and Entrepreneurship* (Hastings) or *Agricultural and Environmental Sciences Communication* (Ruth) as part of their CASNR degree program. Faculty routinely recruit CUSP Scholars to apply for the Rural Prosperity Nebraska Rural Fellows program (10 have become Rural Fellows since 2017), and NHRI intentionally works with CUSP advisors and staff to solicit annual nominations of outstanding CUSP student leaders to NHRI Leadership Mentoring – where nine students have served as NHRI counselors since 2018.

ALEC faculty (Conner and McElravy) developed a Rwanda study abroad program for undergraduate and graduate students in 2019. Intended as an annual program with a learning outcome to explore innovation in agriculture, health, community engagement and entrepreneurship through design thinking workshops, the course partners UNL faculty and students with Rwandans to create collaborative solutions to existing problems within these contexts. Another learning outcome is to broaden students' cultural intelligence through venues such as national parks, the National Museum of Rwanda, national and local genocide memorials, and a historic cultural village. The program was suspended in 2020 due to university travel restrictions but is planned for 2023 assuming travel restrictions are lifted. Dr. Akin has joined the faculty team for the Rwanda study abroad and is actively engaged in the planning process.

Rwanda Institute of Conservation Agriculture (RICA)

In concert with the CUSP Scholar program, IANR administration and faculty worked closely with the donor creating a new educational institution in Rwanda dedicated to the country's food safety and security with a vision for sustainability. The [Rwanda Institute of Conservation Agriculture](#) (RICA) is an English-language institution combining research, education and

extension efforts and designed to train Rwanda's next generation of agricultural leaders. ALEC faculty have worked closely with Rwandan leaders in faculty recruitment and selection (Balschweid, Hastings) and have been instrumental in curriculum development (Kreifels) through creating a framework and faculty training to implement work-based learning principles as a strategy across RICA's academic programs. Travel for ALEC faculty to provide in-person professional development with RICA faculty in work-based learning, curriculum assessment, and program evaluation will commence once international travel restrictions are lifted.

Mandela Washington Fellowship for Young African Leaders

UNL has been a partner institution for the Mandela Washington Fellowship for Young African Leaders program for several years, serving to host a *Leadership in Civic Engagement Institute*. This U. S. State Department program attracts high-capacity young leaders from sub-Saharan Africa who have proven themselves to be innovative and visionary leaders in their communities. After initial orientation meetings in Washington D.C., cohorts of 25 participants then travel to their host university for a six-week leadership development experience. ALEC faculty have provided programming for the past several years in communication strategies and leadership development (most recently Hastings, Makin, and McElravy, 2019). Although the in-person program was suspended in 2020 and 2021, UNL has been selected as a partner institution again in 2022, and ALEC faculty member Dr. Susan Burton will serve as UNL's academic director for the program. This role enhances ALEC's participation and aligns closely with the department's core values and strategic initiatives. In this role Dr. Burton is responsible for providing rigorous and interactive hands-on academic and leadership building experiences that expose Fellows to the development, implementation, and impact of leadership in civic engagement in the U.S. from multiple perspectives and approaches. This effort will engage multiple ALEC faculty and staff in support of this program.

Other International Programs and Projects

Malawi Extension Professional Development – Dr. Nathan Conner collaborated with Lilongwe University of Agriculture and Natural Resources, and the Feed the Future Malawi Strengthening Agricultural and Nutrition Extension (SANE) project creating workshops helping extension workers and stakeholders redesign their educational programming and critique educational programs based on andragogy and principles of teaching and learning. His efforts provided participants with the knowledge and skill to apply adult learning principles, experiential learning concepts, and learning style preferences to current and future programming. This effort led to published research in collaboration with Lilongwe University faculty focused on the process of collaborating with Malawi Extension agents to redesign their programming utilizing principles of andragogy.

Australia Study Abroad – Dr. Laura Young has partnered with UNL's School of Natural Resources in developing an Australia study abroad program intended to expose undergraduate students to new ways of thinking about agriculture and ecosystem services, as well as the economic, aboriginal, and immigrant background of a former British colony. Issues are centered on human needs for food and shelter versus the needs for ecosystem and wildlife conservation to

maintain functioning systems. This program was suspended for winter 2020/2021 due to international travel restrictions but is scheduled for winter 2022/2023.

Faculty International Professional Development Leave – In 2019 Dr. Myunghwa Kang successfully completed an international professional development leave. Dr. Kang worked in England at the University of Surrey collaborating with faculty exploring effective analytical methods of tourism and environmental big data mining to track and predict tourist movement utilizing text processing, geographical data clustering and visual content processing.

Fulbright Fellowship – Dr. Conner has made it through the initial peer review process for the 2022 – 2023 Fulbright Fellow program in Jamaica. The year-long professional development opportunity would allow Dr. Conner to collaborate with Jamaica’s College of Agriculture, Science and Education (CASE) to design and develop a M. Sc. Degree program in Agricultural Education, and another in Extension Education. This builds on his current efforts partnering with CASE faculty and administration in the creation of a needs assessment instrument for Jamaican Extension professionals to be used within the Extension system of Jamaica.

International Leadership Seminar for Nebraska State FFA Officers Study Abroad – For several years ALEC faculty (Conner, Kreifels) have designed and delivered a 3-credit study abroad course for the Nebraska state FFA officers focused on issues such as science integration and cultural adaptation. This effort aligns with the National FFA Organization’s international travels and has taken the state FFA officers to places such as South Africa, Spain, and Portugal.

4. Undergraduate Programs

ALEC faculty, staff and graduate assistants are supremely positioned within CASNR to provide leadership in the theory and best practices for formal and non-formal teaching and learning environments, create effective educational programming across a continuum of learners (from 4-H youth to teacher professional development), embed inclusive excellence practices within curricula, and access Nebraska’s network of over 200 school-based agricultural educators who daily touch the lives of 20,000 middle- and high-school students across the state. No other academic unit has the history and expertise in experiential education and service-learning, and ALEC faculty recognize the significance of this experience in working across departments and colleges at UNL to provide “innovative student experiences that prepare graduates to be life-long learners and contributors to the workforce in Nebraska and the world” (*N2025 Strategic Plan*).

ALEC Undergraduate Curriculum Committee

All programmatic decisions for ALEC’s undergraduate degree programs are governed by the ALEC Undergraduate Curriculum Committee (UCC). This committee is representative of the department’s undergraduate programs with voting members elected by their program faculty. The UCC is one of two standing committees in ALEC and meets monthly to address issues and transact business relative to program curricula, student experiences, academic advising and consider other department, college and/or university curriculum issues. A member of the UCC (Sunderman) sits on the CASNR Curriculum Committee representing ALEC’s interests.

ALEC Unified Degree

A recommendation from ALEC’s 2016 review challenged faculty and staff to consider ways of minimizing individual academic program “silos” that inhibited cooperation and collaboration among faculty. As a result, faculty, staff, and students addressed this situation in the strategic planning process by focusing on program integration to “expand our capacity for delivering quality undergraduate programs and enhancing the undergraduate student experience” (ALEC Strategic Plan 2017 – 2022). Subsequently, a unified ALEC degree was designed to enhance the undergraduate experience through creating a single overarching degree named for the department (B. S. in Agricultural Leadership, Education and Communication) with four options representing ALEC’s academic programs (Agricultural and Environmental Sciences Communication option; Leadership option; Agricultural Education option; Skilled and Technical Sciences option).

This process, started in 2018, built upon the shared expertise of program faculty in leadership, education, and communication. A short pause occurred in the process due to a complete turnover in AESC faculty in 2018 – 19 (two retirements and one faculty relocating) and resumed once the current faculty (Akin, Ruth, Young) were in place. Specifically, faculty created a department core of three, three-credit courses representing leadership, education and communication and capturing student learning outcomes critical for all ALEC graduates. The unified degree allows for a shared set of learning outcomes common to all ALEC undergraduate students while also providing learning outcomes specific to each of the four options. This collaboration among faculty across disciplines has evolved to greater discussions and opportunities in graduate education, research projects, and funding proposals.

Questions to Consider:

1. Now that ALEC has a single degree (B.S. in Agricultural Leadership, Education and Communication) with four options, how do we maintain the viability of individual options while working towards achieving a common degree?
2. As UNL adopts a new budget model (incentive-based budget), what are ALEC’s unique strengths and competitive differentiators to be considered to maximize growth?
3. How can faculty promote greater community culture and connection with transfer students since many students enter our programs at different times and through different pathways?

B.S. in Agricultural Leadership, Education and Communication Department Core

ALEC 102 *Interpersonal Skills for Leadership* was selected as a core class representing the leadership option. This course provides an examination of interpersonal skills as well as an opportunity to observe and practice the skills via a 20-hour service-learning experience. Major components of the class include exploring and clarifying values and strengths, practicing goal setting, working in groups, and learning group/team skills, creating a personal mission statement, and writing a personal leadership philosophy. This course fulfills UNL’s ACE 2 general education requirement.

ALEC 300 *Teaching and Learning Design* was selected as a core class representing the agricultural education and skilled and technical sciences option because it will allow all ALEC students to gain a basic understanding of how educational psychology impacts learning and how

it is used to design learning opportunities. Upon completion of the course, students will be able to design and facilitate educational programming based on learning theory. ALEC graduates will be able to transfer the skill learned in this course to both formal and non-formal teaching opportunities.

ALEC 305 Presentation Strategies for Communicating Agricultural and Environmental Sciences was selected as a core class representing the AESC option because it could provide all students in the major with relevant skills related to communication. These skills include public speaking, visual communication, online communication, interviewing techniques, and discussion facilitation.

B.S. in Agricultural Leadership, Education and Communication Options

Agricultural and Environmental Sciences Communication

Program Description

Communicating agricultural information to Nebraskans had its first historical mention in 1887. Agricultural journalism courses were offered in the College of Agriculture as early as the 1920s. The university's first agricultural journalism graduate was in 1927. In 1992 the academic program of the agricultural communications service unit merged with agricultural education, vocational education, and leadership into one department (ALEC). In 2013, the agricultural journalism program was renamed to agricultural and environmental sciences communication (AESC). The AESC option is unique in that it employs a systems approach to understanding and addressing issues related to food, fuel, water, and environmental stewardship using experiential and project-based learning experiences.

The AESC program prepares students to communicate in a variety of ways about issues related to agriculture, food, fuel, water, and energy using a multitude of communication strategies and forms such as written, multi-media, and social media. The AESC option prepares students to engage others in discussions about life sciences issues, to think critically about the challenges related to food, fuel, water, landscapes, and people, and communicate about these challenges on a global scale using innovative means and strategic thinking. The program also allows students the opportunity to interact with a wide variety of professionals – interviewing them, interpreting their research for consumer/lay audiences, helping to articulate the key ideas and information that can help citizens make informed decisions – all as a part of the educational environment.

Program Outcomes

Graduates of the AESC option will be able to:

1. Demonstrate competence in visual and written communication techniques.
2. Apply communication concepts, theories, and principles of critical thinking to real world issues facing agriculture and the environment.
3. Understand diverse perspectives related to food, fuel, water, landscapes, and people in Nebraska, nationally and globally.
4. Communicate agricultural and environmental science information in lay language to targeted audiences.

Faculty

Heather Akin, Ph. D., assistant professor of strategic communication

Taylor Ruth, Ph. D., assistant professor of the science of science communication

Laura Young, Ph. D., assistant professor of practice

Student Enrollment – Trends since 2016

As of Fall 2021, AESC currently has 54 majors and 13 minors. The *Agricultural and Environmental Sciences Communication* minor was established in 2016 and more information for this credential is listed in the section on minors below. Table 3 provides greater detail of this information.

Table 3

Student Credit Hour Generation from Students Enrolled in ALEC's AESC Courses

Academic Year	F 16-Su 17	F 17-Su 18	F 18-Su 19	F 19-Su 20	F 20-Su 21	F 21 Only	Total
Total Student Credit Hours*	401	338	371	569	600	541	2820
Students Served*	133	113	124	190	200	180	940
% Change in Students from Previous Year	N/A	-15.0%	+9.7%	+53.2%	+5.2%	N/A	+50.3%

*Generated from 6-day census.

Efforts toward Diversity, Equity, and Inclusion (DEI)

Dr. Ruth secured a UNL Center for Transformative Teaching (CTT) grant focused on pedagogical interventions to enhance equity and inclusion in the classroom. The project titled, “Promoting Inclusive Learning Through Virtual Reality to Increase Students’ Confidence and Competence in Public Speaking” will be integrated in ALEC 305 in Spring 2022. Dr. Akin delivered a workshop in Summer 2021 for Cultivate ACCESS (Agriculture Career Communities to Empower Students in STEM) student workers and Rwanda Institute for Conservation Agriculture (RICA) students on analyzing data from the students’ community needs assessment.

Teaching Support (e.g., funded teaching assistants, lecturers, etc.)

For the first time, two graduate teaching assistants were funded and dedicated to assist with AESC courses in 2021 – 2022. The GTA’s are utilized in ALEC 305, 350, and 388. Their time is shared with the ALEC department recruiter (Donner) and they assist with managing ALEC’s social media sites. One lecturer (Harms) is currently hired to teach ALEC 361: *Advanced Video and Audio Communication*.

Student Experience and Career Placement

Approximately 15 AESC students complete an internship each year. AESC graduates complete an average of three internships before graduation. Notable internship placements include United States Meat Export Federation, U.S. Department of Agriculture, Certified Angus Beef, U.S. House of Representatives, Bayer Crop Science, Aurora Cooperative, Nebraska Corn Growers Association, Nebraska State 4-H Office, Natural Resources Conservation Service, Union Pacific, Nebraska Conservation Voters, and Farm Bureau Financial Services, among others.

In addition to completing an internship, AESC students also complete a senior capstone experience writing the stories, taking photos, and creating promotional videos for the *Strategic Discussions for Nebraska* publication. This capstone course provides a learning experience similar to what students may encounter in the workplace, emphasizing accurate, clear and objective communication of science-based information. During the course, students learn about scientific research being conducted at the university and the diverse funding sources required to support that research. Throughout one semester, the students interview scientists from a variety of disciplines and write stories, take photos, create videos, and design social media content based on those interviews. The stories in this publication are reviewed by the sources and approved for publication.

Equipment and Resources Available Through ALEC

Students have access to 10 new Canon Mirrorless Cameras and 10 new lavalier microphone sets. Additionally, a new reservation system for equipment was implemented in 2020 called CHEQROOM. This program allows students to reserve and checkout equipment using an app on their phone. Previously, students were given a camera kit for the semester during their class, which limited class sizes to the number of cameras AESC owned. This checkout system has allowed AESC to increase class sizes by simply allowing students to check out cameras for 48 hours at a time to work on class projects.

Job Placements for Graduates

AESC has increased the number of students graduating steadily since 2018, with eight students graduating in 2019, 11 graduating in 2020, and 14 in 2021. AESC is projected to have 17 graduates in 2023, doubling the numbers of AESC students graduating in that time. Notable placements of AESC graduates include Nebraska State Senator Office, Center for Rural Affairs, Nebraska Rural Radio Network, Syngenta Agrochemical, Nebraska FFA Foundation, Barkley, and Orthman Manufacturing. Students have also begun entering graduate school after completing the AESC degree.

Program Partnerships and Relationships

AESC faculty have partnered in collaborative curriculum efforts with other academic programs over the past several years. Examples of these partnerships include several AESC courses that are cross listed with other departments (e.g., Advertising and Public Relations; School of Natural Resources) including ALEC/ADPR 207: *Communicating Science with Public Audiences*, ALEC/ADPR 417: *Issues Management and Crisis Communications in Agricultural and Environmental Sciences*, and ALEC/NRES 393: *Digital Imaging and Storytelling in Agriculture and Natural Resources*. AESC courses also support the Beef Industry Scholars minor in the animal sciences department.

All AESC faculty (Akin, Ruth, Young) have contributed to the IANR Science Communication Hub and are actively collaborating with others across campus on a Science Communication Graduate Certificate as well as a Research Communication Digital Badge. And Dr. Akin participated in the UNL Sustainability Curriculum Infusion workshop series with faculty across campus through the Chancellor's Environment, Sustainability and Resilience Commission to develop course materials on sustainability and resilience concepts for ALEC 388: *Ethics in Agriculture and Natural Resources*.

Industry Partnerships

Faculty connect informally with individuals working in the industry, and Dr. Young has leveraged conversations with students' internship supervisors to share insights into industry needs and trends with other faculty.

Alumni Relations

Faculty recently became involved with a student-created AESC alumni Facebook group and use that platform to share job opportunities and other updates. Alumni are regularly invited to connect with ALEC 90 and ALEC 136 freshman courses through interviews and guest speaking.

Significant Updates/Changes since 2016 Review

Considering the recommendations from the previous review (clarify identity, curricular scope and sequence, develop scholarship focus to attract students, explore strategies for a graduate program) the AESC program has undergone significant changes since 2016, completely changing the way this program is offered. Some of these changes include:

A complete turnover of AESC faculty since 2016. The seven AESC faculty from 2016 either retired (Terry, Garbacz), moved to another university (Cannon, Loizzo), or transitioned to different UNL departments/colleges (Waite, Forsberg, Farrell). As a result, three new faculty were hired in 2019. The new faculty team was tasked with taking the 2016 review recommendations, coupled with the ALEC Strategic Plan and bringing their expertise and experiences to bear in completely reviewing and revising the program. These changes resulted in the creation and addition of seven new classes, the revision of four existing classes, adding prerequisites to classes to support the scope and sequence of the program, restructuring the required and elective course to ensure students graduate with both technical and strategic communication skills, and streamlining the AESC option in the unified ALEC degree to have a single option with a required CASNR minor opposed to offering three different options (in the previous curriculum). The addition of two MS level graduate assistants providing support for ALEC 388, ALEC 350, and ALEC 305 provides additional capacity and represents the initial investment in expansion towards graduate courses and programming in AESC.

Areas of Growth and Opportunity for the Future

Classroom Space: One of the greatest challenges for the AESC program is the absence of a student computer lab to use for skill classes. Students currently use their own computers, which causes issues when teaching students how to use the Adobe Creative Cloud Suite. Some students' computers do not have the power to run these programs, and the different types of computers (Mac vs PC) makes it difficult for instructors to effectively teach lessons that students can follow along with during class. A computer lab would ensure all AESC students had the computing resources necessary to run editing programs (and other communication software applications) and would provide a uniform interface for students to use while tracking with the instructor.

Teaching Support: The AESC program currently has three full-time faculty who teach most of the classes in the program and advise all undergraduate AESC students. While there is one part-time lecturer who teaches one class a year and two master's level teaching assistants, the faculty

are at capacity with their teaching load. There has been an increased demand for graduate education related to science communication across the university and AESC faculty do not have the capacity to offer a critical mass of graduate level courses in this area to initiate a program. The need and demand for a graduate program is clear, but the AESC program will need more support through teaching assistants, lecturers, and/or full-time faculty if a graduate program is to be developed.

Science Communication: Use of the phrase “Science Communication” holds different meanings across campus and became a sticking point when AESC faculty proposed offering a Science Communication minor. There exists an opportunity to partner with others across campus to provide students with academic credentialing in this space, but to date that effort has been stalled. Implementation of a proposal to change the name of the AESC minor to Science Communication has delayed this effort for over a year.

Needs toward Diversity, Equity, and Inclusion (DEI)

The AESC program is committed to increasing diversity, equity and inclusion practices in the classroom and enhancing the diversity of the program overall. AESC faculty have participated in campus-wide initiatives and training opportunities yet are limited in their capacity to do additional recruiting with current advising, teaching, research/extension, and service obligations. Developing coursework and experiential opportunities in the area of environmental communication is one avenue faculty have considered to draw a greater diversity of students into the option or minor.

Questions to Consider:

1. What are the best steps for AESC to strategically begin an AESC graduate option within the current ALEC MS graduate program?
2. How can AESC best differentiate the AESC minor from other minors in ALEC, while working to promote and grow the AESC minor?
3. What learning spaces of the future do you recommend (technology required for AESC programs) that peer programs use?
4. How can AESC strategically build relationships with the UNL College of Journalism and Mass Communications (CoJMC) that are mutually beneficial for both programs?

Leadership

Program Description

Undergraduate students have been taking leadership coursework in ALEC since the early 1980s when ALEC 102 *Interpersonal Skills for Leadership* was first offered. This was followed in the late 1980s with ALEC 202 *Leadership Development for Small Groups and Teams*, and eventually led to the *Leadership and Communication* minor, which began in the mid 1990s. A “non-teaching” option under the agricultural education major was developed in the mid-1990s and was renamed to the leadership option in 2000. This option has grown from approximately six students in 2002 to 30 today. The program offers two minors: *Leadership and Communication* and *Leadership and Entrepreneurship*.

The leadership option prepares students for careers requiring leadership skills, communication expertise, an understanding of human development, teaching and facilitation expertise, and solid

interpersonal skills. Students completing the leadership option are well prepared to pursue careers in state cooperative extension services, human resources, training, public relations in the agribusiness industry and many more career options. Producing high quality leaders capable of educating others about agriculture both within and outside of the formal classroom is imperative. The leadership option produces organizational and community educators and other professionals who can help lead Nebraska forward and provide leaders with a broad understanding of the needs of an agriculturally focused state.

Program Outcomes

Graduates of the leadership option will be able to:

1. Apply knowledge of leadership theories, models, and behaviors to solve problems in agricultural and environmental sciences fields and beyond.
2. Develop competence to apply leadership skills at the individual, team, and organizational/community levels.
3. Develop critical thinking skills to analyze and evaluate leadership issues in complex and global environments.
4. Develop a level of self-awareness as well as the cognitive and emotional ability to effectively work with and develop people from diverse backgrounds and perspectives.
5. Develop and implement a personal plan for transfer of knowledge, skills, and behaviors gained to career/professional life via a guided capstone internship.

Faculty

Susan Burton, Ph.D., assistant professor of practice

Helen Fagan, Ph.D., assistant professor or practice

Lindsay Hastings, Ph.D., associate professor

Gina Matkin, Ph.D., professor

L.J. McElravy, Ph.D., associate professor

Hannah Sunderman, Ph.D., assistant professor of practice

Student Enrollment – Trends since 2016

In 2016 there were 30 students enrolled in the leadership option. These numbers decreased slightly between 2017 and 2020 when there were consistently between 24 and 28 students in the option. During the summer of 2020, student numbers increased to 33 students due, in part, to the opportunity for students to take all online classes. Currently there are 23 student majors in the leadership option reflecting a large number of students graduating in the past two semesters.

The number of students in the leadership option does not adequately articulate the entire story of the program as the leadership classes attract students seeking the leadership minors (see Minor section below) as well as other programs seeking leadership and/or ACE 2 courses for their students. Because the leadership courses are heavily subscribed and serve a number of different needs on campus (e.g., minors, ACE requirement), student credit hour generation provides a more accurate overview of program growth in addition to the total number of students enrolled in leadership courses (ALEC 102, 153, 165, 202, 302, 337, 407, 410, 422, 433, 455, 466, 477, 495A, 496A) are provided. Table 4 provides greater detail of this information.

Table 4

Student Credit Hour Generation from Students Enrolled in ALEC Leadership Courses

Academic Year	F 16-Su 17	F 17-Su 18	F 18-Su 19	F 19-Su 20	F 20-Su 21	F 21 Only	Total
Total Student Credit Hours*	4066	4432	4627	4593	4312	2243	24273
Students Served*	1351	1471	1538	1527	1429	745	8060
% Change in Students from Previous Year	N/A	+8.9%	+4.6%	-0.01%	-6.9%	N/A	+5.7%

*Generated from 6-day census.

The credit hour and student registration trends show increases from 1,351 registered students in 2016-2017 through a peak of approximately 1,530 students in 2019 – 2020. The overall growth in students served per year from 2016 – 2021 is 5.7%. The number of students registered for leadership courses in fall 2021 is the second highest fall student registration rate on record.

Efforts toward Diversity, Equity, and Inclusion (DEI)

ALEC faculty (Fagan, Matkin) were invited by the CASNR dean to create and lead the CASNR *Difficult Conversations* Community of Practice. This effort led to collaborating with other CASNR faculty to create and lead a 6-week summer series (*Urgency of Inclusive Classrooms*) attended by almost 50 faculty and staff. From that effort both Drs. Fagan and Matkin were invited as inaugural members of the newly created CASNR Diversity Equity and Inclusion team. And both were invited to help with the creation of the JEDI (Justice Equity Diversity and Inclusion) Digital Badge for IANR Graduate students. Dr. Matkin was also invited as one of three faculty members campus-wide to present during the Grand Challenges session on Anti-Racism and Racial Equity. Lastly, Drs. Matkin (Co-PI) and McElravy (Senior Personnel) are participants on a National Science Foundation Noyce Grant titled *Meeting the Needs of Diverse Students through a Next Generation of Science Teacher – Leadership in Nebraska*.

Teaching Support (e.g., funded teaching assistants, lecturers, etc.)

ALEC has the support of five (.50 FTE) doctoral level assistantships devoted to the leadership option teaching enterprise. In addition, depending on the demand, five to seven lecturers are hired to teach one to three classes each semester. This additional flexibility provides the necessary capacity to continue offering all leadership courses and helps in preventing bottlenecks for students matriculating in one of ALEC’s minors.

The current list of lecturers and number of course assignments per semester include:

- Baack** 1 Spring, 1 Fall
- Lorensen** 3 Spring, 1 Fall, 1 Summer
- Quinn** 2 Spring, 1 Fall, 1 Summer
- Slieter** 2 Spring, 2 Fall
- Yellow Robe** 1 Spring, 1 Fall

Student Experience and Career Placement

In addition to service-learning experiences from coursework (ALEC 102, 202, 466, etc.), all leadership option students are required to complete a professional internship related to their

course of study in leadership. The internship is the capstone experience in the leadership option and consists of a minimum of 200 hours. Prior to their internship experiences, students take a seminar course to prepare to apply leadership development coursework in field settings. During the internship experience, students complete bi-weekly reflections and are formally evaluated twice. Upon return from their internship experience, leadership option students prepare an oral presentation for the leadership faculty demonstrating their mastery-level understanding of leadership theory and its application (in both observation and practice) during the internship experience. Internship placements since the last program review have included: Nebraska Extension, human resources, student affairs, talent management, agricultural sales, non-profit organizations, commodity boards, education consulting, and rural community development.

Equipment and resources available through ALEC

Does not apply.

Job Placements for Graduates

Job placements for leadership option graduates have generally been very consistent with internship program placements highlighting the success of the internship program. Placements have been noted in the following areas: Nebraska Extension, human resources, student affairs, talent management, agricultural sales, non-profit organizations, commodity boards, education consulting, and rural community development.

Program Partnerships and Relationships

The program has established formal collaborations with the Nebraska Human Resources Institute Leadership Mentoring (NHRI) and the College of Engineering which have both led to dedicated courses and development of new academic minors, as well as renewed interest in the leadership option. In addition, all hospitality, restaurant and tourism management (HRTM) students are required to obtain a leadership minor. As previously noted, ALEC's leadership faculty are consistently in demand for a variety of presentations, seminars, workshops and invited presentations all based within a leadership context. There is no shortage of groups and individuals interested in topics such as effective leadership in teams, supervisory leadership, leading in a changing world, and working across cultures. As a result, ALEC's leadership faculty continue to build relationships and find new partners in growing the undergraduate and graduate leadership programs.

Industry Partnerships

Industry partnerships are primarily student driven through interest in internship placements. The ALEC Advisory Council, a group comprised of program stakeholders, has specific leadership members representing a variety of industries, organizations, and non-profit entities.

Alumni Relations

The majority of alumni relations for the leadership option are informal. More connections with alumni of the leadership graduate program are made through professional societies and research meetings. Alumni representation is solicited for the ALEC Advisory Council.

Significant Updates/Changes since 2016 Review

Based upon recommendations from the previous review, the most significant change is the creation of leadership as a stand-alone option within the unified B. S. in Agricultural Leadership, Education and Communication. This represents a significant shift, allowing for the leadership academic program to come out from under the agricultural education degree and provides greater visibility and access for students interested in this space.

Additionally, the 2016 review team stressed the natural “fit” with community leadership and encouraged program faculty to investigate the opportunities available. Considerable effort and investment have been made with the hiring of leadership faculty (Fagan) to coordinate the Rural Fellows program, partnering with CASNR faculty in the creation of the *Community Development Specialization* within the Master of Applied Science Degree, greater scholarly linkage with Rural Prosperity Nebraska (Hastings) and significant time invested in the Nebraska Rural Poll (McElravy).

Areas of Growth and Opportunity for the Future

Teaching Capacity: The single greatest concern is the steady increase in demand for leadership courses. Almost every college and degree program recognize the need for high-quality, relevant leadership programming to ensure their students are adequately prepared for a competitive job market and to guarantee they can be successful in a fast-changing world. As the number of leadership option students continues to rise, it will be difficult to maintain the same level of quality across the undergraduate option, undergraduate minors, and the MS and Ph.D. programs. Although there is strong support at the college level, it’s difficult to maintain program consistency with GTA’s, lecturers, and non-tenure faculty. This concern is further exacerbated by the high demand placed on leadership faculty for outside presentations (especially in the DEI space), administrative appointments, etc. Although faculty recognize this as a strength, from a workload perspective it is challenging.

Incoming freshmen don’t often view the leadership option as a destination. Rather, the majority of students in the program start somewhere else before “finding” this option, usually through one of the entry-level courses (e.g., ALEC 102, ALEC 202). Thus, creating community within the leadership option is challenging since many of the students are transfer students and enter the program at various points in their degree programs. As such, the structure is not a “cohort program” that can move students through together. Additionally, students come from a variety of backgrounds and have a diversity of career objectives, so identifying a common area to form a student organization or other development experience is challenging.

Needs toward Diversity, Equity, and Inclusion (DEI)

The faculty in the leadership option are very committed to diversity and inclusion in their classrooms and programs. Many are frequently called upon to address this issue/topic in other departments or across the college/university. That said, there is not a great deal of visible (racial, ethnic) diversity among leadership option undergraduates in the program. Faculty believe the program would be strengthened by the presence and inclusion of greater diversity and see the need to be proactive about addressing any barriers the program might be presenting to students from marginalized populations. Leadership faculty welcome the APR review team’s input on this issue.

Question to Consider:

How should the leadership faculty manage the administrative responsibilities for the growing number of student credit hours and plan for long-term growth knowing we're serving over 1,400 students per year in our courses?

Agricultural Education

Program Description

Since 1918 UNL has been the sole agricultural education endorsement institution within the state of Nebraska. Positioned in CASNR, with direct access to the Agricultural Research Division, and partnering alongside Nebraska Extension, ALEC is supremely positioned within IANR as Nebraska's only institution capable of offering world-class pre-service teacher preparation and in-service professional development for school based agricultural education.

The agricultural education option embodies a four-year endorsement program. Students complete requirements for a cooperative education supplemental endorsement and have the prerogative to complete a subject area endorsement in biology. Specific subject matter requirements for these endorsement programs can be found at: http://alec.unl.edu/alec_undergraduate_programs. Presently there are approximately 70 undergraduate students in the agricultural education option.

Program Outcomes

Graduates of the agricultural education option will be able to:

1. Understand the central concepts, tools of inquiry, and structures of the disciplines he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.
2. Understand how children learn and develop and can provide learning opportunities that support their intellectual, social, and personal development.
3. Understand how students differ in their approaches to learning and create instructional opportunities that are adapted to diverse learners.
4. Understand and use a variety of instructional strategies to encourage student's development of critical thinking, problem solving, and performance skills.
5. Use an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.
6. Use knowledge of effective verbal, nonverbal, and media communication techniques to foster active inquiry, collaboration, and supportive interaction in the classroom.
7. Plan instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
8. Understand and use formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.
9. Be a reflective practitioner who continually evaluates the effects of his/her choices and actions on others (students, parents and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.
10. Foster relationships with school colleagues, parents, and agencies in the larger community to support students' learning and well-being.

Faculty

Mark Balschweid, Ph. D., professor

Nathan Conner, Ph. D., associate professor

Eric Knoll, associate professor of practice

Matt Kreifels, associate professor of practice

TBD, Ph. D., assistant/associate professor

Troy White, Ph. D., lecturer, (located at Panhandle REEC)

TBD, lecturer, (located at Haskell Agricultural Lab)

Student Enrollment – Trends since 2016

The enrollment trend in the agricultural education option trended upward from 2012-2018. Since 2019 the enrollment has decreased. agricultural education student teaching field experience numbers are shown in Table 5. Table 6 provides greater detail of this information.

Table 5

Number of Agricultural Education Student Teacher Placements by Year: 2019 – 2022

Academic Year	Agricultural Education Student Teacher Placements
2019 – 2020	26
2020 – 2021	21
2021 – 2022	22

Table 6

Student Credit Hour Generation from Students Enrolled in ALEC’s Agricultural Education Courses

Academic Year	F 16-Su 17	F 17-Su 18	F 18-Su 19	F 19-Su 20	F 20-Su 21	F 21 Only	Total
Total Student Credit Hours*	438	472	415	366	373	125	2189
Students Served*	146	157	138	122	124	42	729
% Change in Students from Previous Year	N/A	+7.5%	-12.1%	-11.6%	+1.6%	N/A	-15.0%

Professional development support provided for practitioners has included planned graduate programs, provisional licensure, and technical/professional education workshops. A popular graduate program pathway for in-service teachers is CASNR’s [Master of Applied Science](#). Approximately 15-20 teachers pursue this online degree program at any given time. In some instances, the MAS program is an appropriate pathway for provisional licensure teachers. Provisional teachers are advised through personalized programs according to their specific circumstances. Approximately 15 teachers are currently being mentored in this program through technical agriculture professional education course work selection.

Efforts toward Diversity, Equity, and Inclusion (DEI)

ALEC faculty in the agricultural education option have invested heavily in relationships across Nebraska’s community colleges and two-year institutions developing 2+2 and 3+1 articulation agreements with five of Nebraska’s six community colleges, the Nebraska College of Technical Agriculture (NCTA), and Chadron State College. These relationships often yield students transferring into agricultural education as first-generation students and/or those from low socio-

economic backgrounds. The opportunity for students to attend a two-year institution, pay reduced tuition while living at home, and obtain their general education and technical skill courses prior to arriving at UNL has been an attractive gateway for pursuing the agricultural education option for many students.

As mentioned in section #2, ALEC faculty (Balschweid, Conner, Kreifels) are actively engaged with educational partners in the Northeast Nebraska Agriculture and Natural Resources Education Compact collaborating with **Little Priest Tribal College (LPTC)** on program planning and curriculum development to establish a two-year associate of science degree in diversified agriculture, and with the **Nebraska Indian Community College (NICC)**. NICC administration is focusing on collaborating on co-curricular assessment with the intention of creating articulation agreements between NICC, ALEC and CASNR, streamlining the transfer process for students pursuing 4-years degrees in ALEC and CASNR degree programs.

Teaching Support (e.g., funded teaching assistants, lecturers, etc.)

The IANR and CASNR administration has funded two, full-time agricultural education lecturers to be stationed in northeast and northwest Nebraska. These positions are the first of their kind in the history of Nebraska agricultural education and represent an investment in the future with a vision for providing statewide support for the agricultural education enterprise. The significance of these positions is that one will focus on the northwest portion of the state and be housed at the Panhandle Research Extension and Education Center (PHREEC) in Scottsbluff, Nebraska while the other will office at the Haskell Agricultural Lab in Concord, Nebraska and have responsibilities for the northeast portion of the state. These statewide lecturers are tasked with partnering with local school based agricultural education programs and teachers in supporting enhanced educational opportunities and experiences for students in agriculture and STEM related programs. They will also collaborate with Nebraska schools and teachers providing comprehensive agricultural education programs to assist in coordination, development, and distribution of educational materials. They will assist with conducting onsite supervision visits to schools/programs with beginning and early career teachers, teachers pursuing alternative certification/licensure, and student teachers. This is an exciting time for Nebraska agricultural education as these two positions are scheduled to begin in June 2022.

The retirement of an agricultural education faculty member in 2020 left a gap in capacity on campus and provided an opportunity to reimagine the contributions that an additional tenure-track faculty in agricultural education could provide to the 21st century teaching, research, and extension missions within ALEC. Through a comprehensive and collaborative visioning process, IANR unit leaders, deans and the vice-chancellor's office all agreed in support of adding a tenure-track faculty member in ALEC for the agricultural education enterprise. The search process for this position is currently underway with a tentative start date of summer 2022.

Student Experience and Career Placement

Agricultural education pre-service teachers participate in 100 hours of observation and teaching in high schools and middle schools in the surrounding area. These hours meet the requirement for teacher certification and are built into the ALEC courses. In order to receive teaching certification, each student must have 1000 hours of experience working in the agricultural industry or enroll in a 3-credit hour internship that ensures 300 hours of work experience in an

agricultural industry. The capstone course ALEC 431 *Student Teaching* is experiential and requires students to engage in a 16-week immersion experience engaged in all aspects of a school based agricultural education program. This includes minimum requirements for classroom teaching, as well as overseeing students' work-based learning projects (Supervised Agricultural Experiences – SAE) and actively participating in the local FFA Chapter activities – providing leadership opportunities for agricultural education students.

Nebraska currently has a shortage of agricultural education teachers, and not all schools are able to fill their open positions each year. ALEC's agricultural education graduates who decide to begin a teaching career easily obtain a teaching position, with many signing a teaching contract before completing student teaching.

Additionally, ALEC faculty partner with UNL's College of Education and Human Sciences (CEHS) to provide an opportunity for students to pursue and obtain a biology endorsement with their teaching license. Biology endorsements allow students to teach biology courses at the high school level and/or offer agricultural education courses for science credit. Additionally, ALEC faculty (Kreifels, Knoll) partner with Southeast Community College (SCC) to design and deliver coursework in welding, small engines, and construction for ALEC students.

Equipment and resources available through ALEC

None to report

Job Placement for Graduates

In the last six years, Nebraska has averaged 45 secondary agricultural education teaching openings per year (with a low of 36 openings in 2017 and a high of 53 openings in 2020). During that time, an average of 15 new UNL graduates filled those positions, serving as the largest supplier of new teachers. Comparatively, ten positions were filled by teachers moving schools, seven were from out of state, three returned to the profession, six were alternatively certified, two were long-term substitute teachers, and four positions were unfilled. Graduates not entering the agriculture teaching profession in Nebraska during this timeframe have taken roles in agribusiness, production agriculture, graduate school, the ministry, teaching a different subject area, teaching agriculture in a different state, and cooperative extension.

Program Partnerships and Relationships

ALEC faculty (Conner, Kreifels, Knoll) are recognized campus wide as experts in the teaching and learning process. Agricultural education faculty have a long history of providing ALEC 805 *Advanced Teaching Strategies*, a course that is heavily subscribed by graduate students and newly hired faculty and graduate teaching assistants from across IANR. ALEC faculty (Conner) designed and teach ALEC 811 *Principles of Adult Education* and ALEC 809 *Diffusion of Innovations: Through an Extension Context*. Both courses are populated by graduate students pursuing educational and extension pathways as well as extension professionals across Nebraska. In addition, Agricultural education faculty engage with Nebraska Extension professionals providing support in teaching methodologies and career preparation for non-formal teaching and learning for educators and specialists (through the MS and Ph. D. degree programs and professional development programs).

The ALEC department has a long-standing tradition of providing relevant technical and professional education workshops for statewide practitioners. For the past four years, a Curriculum for Agricultural Science Education (CASE) Institute has been sponsored collaboratively by the ALEC department and Nebraska FFA Foundation. Institutes have included: *Introduction to Agriculture Food and Natural Resources, Animal Science, Plant Science, Natural Resources and Ecology*. Additionally, collaboration through grant funding with the Animal Science department, Food Science department, and USDA-ARD have allowed for curriculum development and professional development programs for high school agricultural education teachers, science teachers, family and consumer science teachers, and pre-service agricultural education teachers. These professional development efforts align with ALEC faculty (Conner) research priorities for science literacy and enhancing the science content in secondary agricultural education curricula and enhancing the quality and effectiveness of professional development. ALEC faculty (Knoll) also provide professional development focused on technical skills in the areas of welding, manufacturing, and construction. Faculty (Conner, Kreifels) are active in the scholarship of teaching methodology and engage in inquiry regarding internationalizing the agriculture curriculum at all developmental levels.

Industry Partnerships

Industry Partnerships for the agricultural education option include school administrators, practicing teachers, Nebraska Department of Education career field specialists, the executive director for the Nebraska FFA Foundation, and representatives from the Nebraska Agricultural Education Association and the Nebraska College of Technical Agriculture. These individuals contribute in many ways strategizing effective recruitment and retention initiatives for Nebraska's agricultural education teachers, facilitating internships and placements for student teachers, and providing input on curricular updates for the pre-service teacher preparation program as well as professional development needs and opportunities for in-service teachers. These industry partners are vital members of the agricultural education sub-committee of the ALEC Advisory Council and meet together quarterly. ALEC faculty (Kreifels) serve as the convener for this group and often interact with members between meetings on an as-needed basis.

Alumni Relations

Alumni who enter the teaching profession stay closely connected to ALEC and UNL through professional development efforts and regional and statewide meetings. Much less is done to intentionally stay engaged with those who choose a different career path or who leave the state of Nebraska.

Significant Updates/Changes since 2016 Review

The 2016 review recommendations highlighted three areas of significance, all based in the growth in student enrollments that were creating pressures on faculty capacity. A recommendation was made to think innovatively about student teacher supervision in order to relieve some of the pressure. Since 2016 ALEC has employed "master teachers" to assist with supervision and utilized the strong partnership with NCTA. Dr. Doug Smith (Ph. D. in agricultural education) is on faculty at NCTA and has very effectively supervised student teachers in the western and southern parts of the state. He is an active participant in the student

teacher meetings and engages in the updates provided by ALEC faculty to ensure that he's current in the expectations for student teacher supervision. In addition, the two statewide agricultural education lecturers will scale up ALEC's ability to provide supervision to the northeast and northwest portions of the state.

The addition of the two statewide lecturers will also address the 2016 reviewers' concerns about ALEC's ability to deliver technical skill professional development for in-service teachers, while also maintaining strong enrollments in the pre-service teacher preparation program on campus. It is envisioned that the two lecturers can help to either provide technical skill workshops directly or provide the leadership to facilitate the workshops for teachers across the state.

The last recommendation from 2016 concerned the need for additional on-campus faculty to maintain and serve enrollments in the undergraduate and graduate programs. Currently only two ALEC agricultural education faculty (Balschweid, Conner) have graduate faculty status, and only Conner has the capacity to accept additional students. The addition of another tenure-track faculty in agricultural education slated to start in summer 2022 will be a welcome addition in this space.

Areas of Growth and Opportunity for the Future

Although the enrollments have dipped over the last two years, there is significant interest in the agricultural education option for those aspiring to teach. ALEC faculty are focused on sustaining an ongoing undergraduate enrollment of 100 or more and student teacher preparation of 10-15 students per semester. To accomplish this, faculty are: refining the transfer process for students from NCTA and Nebraska's community colleges; increasing ALEC's statewide presence through hiring lecturers for northwest and northeast Nebraska to assist in recruiting students to ALEC and building stronger relationships with agricultural education teachers and administrators in those regions of the state; increasing the number of qualified ALEC student teaching field experience supervisors (to assist with student teaching supervision); enhancing the research and instructional capacity of the teaching option through active recruitment of a graduate assistantship (funding is committed from the department); continuing to add cooperating teaching centers for student teacher placement that enhance experience quality and variety; hire an additional tenure-track faculty member; increase the amount of grant funding in order to meet the needs of pre-service/in-service agricultural education teachers and extension educators.

ALEC has an opportunity within IANR for ALEC to play a substantial role in designing and/or supporting career pathways for those seeking employment as extension professionals. Faculty are supremely equipped to deliver courses in subjects such as program planning, evaluation, non-formal teaching and learning, supervisory leadership, cross-cultural communication, and program assessment. When added to the recently developed courses designed and taught by Dr. Conner, ALEC 811 *Principles of Adult Education* and ALEC 809 *Diffusion of Innovations: Through an Extension Context*, this provides a significant opportunity to partner with Nebraska Extension to provide advanced degrees for those in Nebraska, and beyond, who aspire to a career in extension.

Needs toward Diversity, Equity and Inclusion (DEI)

The faculty in the agricultural education option are committed to providing a high-quality program for all students. ALEC faculty (Kreifels) were instrumental in creating Nebraska's first urban school based agricultural education program in Nebraska's largest metropolitan area – Omaha Bryan High School. This work continues with ongoing efforts to establish more programs in urban areas (Class A schools) across the state and a passion that all students deserve the opportunity to participate in a premier agricultural education program. However, there still exists a significant lack of racial and ethnic diversity in the agricultural education option undergraduate program.

In recent years, there has been a rapid shift in agricultural education nationally from a male dominated profession to one that is more evenly distributed female/male. For Nebraska, 2019 marked the specific point in time when there are more female agricultural education teachers in the state than male. And in ALEC's pre-service teacher preparation program, the gender ratio is 51:16 female to male. Although this phenomenon is consistent with national trends, the faculty are willing and interested to learn more about what can be done to attract more males to the undergraduate program.

Skilled and Technical Sciences (to be formally reviewed at a later date)

The skilled and technical sciences (STS) teacher preparation program has been housed within ALEC since 2008 and is resourced with a 1.0 FTE non-tenure track faculty (Knoll). Known previously as industrial technology, this program is one of only two in the state (the other at Wayne State College) preparing pre-service teachers and providing professional development for the roughly 400+ STS teachers in Nebraska. The ALEC STS program is strictly a 2 + 2 program with articulation agreements at five of Nebraska's six community colleges, and discussions to establish an articulation agreement with Western Nebraska Community College are currently ongoing. Similar to agricultural education, STS is a career and technical education (CTE) field, and the two programs align well in areas such as laboratory-based instruction, work-based learning, and Career and Technical Student Organizations (e.g., Skills USA and FFA). Since 2014, these two programs have been aligned in ALEC to capitalize on the synergies in places like curriculum, student teacher supervision, and professional development for in-service teachers. The unique nature of the STS Program (e.g., 2 + 2 only; a single non-tenure track faculty member; a teaching mission without expectations for research or extension) provides opportunities and challenges that warrant a separate formal review process that will be undertaken to more closely examine a structured path forward that can position UNL, CASNR and ALEC to maximize the value proposition that the STS program offers Nebraska.

Question to Consider:

How can we best utilize the new statewide lecturers in the areas of agricultural education/STS, STEM, teacher/school relations, recruitment, new teacher support, professional development/curriculum support, and student teacher supervision – while integrating them as full-fledged members of ALEC's culture although they work several hours from campus?

ALEC Minors

A significant component of ALEC's undergraduate academic enterprise is faculty's commitment to providing the larger university student body with access to high-quality programming in leadership and communication through academic minors. This commitment became a priority in the 2017 – 2022 ALEC Strategic Plan to “strategically grow ALEC minors and course offerings.” The following information highlights ALEC's three current undergraduate minors:

Leadership and Communication Minor – this is an 18-hour minor available for students across campus to learn how to work effectively with people from diverse backgrounds, communicate competently in a variety of contexts, and practice critical thinking skills related to leadership and communication. Combining the leadership and communication minor with any degree program strengthens student employability by giving them the knowledge and skills to analyze human systems using leadership theory as a frame and designing solutions to help those human systems operate more effectively. Enrollments have ranged from 232 to 274 between 2016 and 2021 with students served from across UNL.

The expected outcomes for those earning a minor in leadership and communication are that students will be able to:

1. Competently apply leadership knowledge and skills at the individual, team and organizational levels.
2. Develop a level of self-awareness as well as the cognitive and emotional ability to effectively work with people from diverse backgrounds and perspectives.
3. Develop leadership competencies to effectively communicate in a variety of contexts.
4. Develop and practice using critical thinking skills related to leadership and communication in order to effectively influence others.

Leadership and Entrepreneurship Minor – this is an 18-hour minor in leadership and entrepreneurship available through a joint program offered by ALEC and the Engler Agribusiness Entrepreneurship Program. This minor is intended for those who are interested in gaining additional professional skills in leadership and entrepreneurship. The 18-hour minor is comprised of theory based and applied courses as well as experiential learning in leadership and entrepreneurship. Enrollments have ranged from 17 to 114 between 2016 and 2021 with students served from across UNL. Primary enrollments have been through CASNR, and major enrollment spikes have been due to collaboration with the CUSP Scholar program.

The expected outcomes for those earning a minor in leadership and entrepreneurship are that students will be able to:

1. Understand human aspects of organizational models
2. Navigate social systems in businesses and communities
3. Effectively negotiate consumer relations, business-to-business relations, and community relations
4. Prepare to assume leadership roles in business and industry as well as in communities
5. Prepare to be an effective and engaged citizen

6. Effectively negotiate political and regulatory landscapes using critical thinking and creative problem-solving

Agricultural and Environmental Sciences Communication Minor – this is a 15-hour minor focusing on building communication skills and knowledge in the context of global challenges and issues in science related to food, fiber, fuel, water, and health. Students complete a series of communication courses using problem-based and experiential learning strategies that effectively help them translate their field of science for a global, non-scientific audience. Students enrolled in the minor build knowledge and skills in visual literacy, media literacy, and science literacy, which meet the growing demand of the modern workforce.

The AESC minor was heavily revised in 2020 making it easier for students to add the minor to their program of study. Revisions included decreasing total credits from 18 to 15 and removing the practicum class so the minor is more efficient to administer as it continues to grow. Enrollments have ranged from five to 18 students between 2017 and 2021 with the majority being CUSP Scholars majoring in Integrated Sciences.

The expected outcomes for those earning a minor in agricultural and environmental sciences communication are that students will be able to:

1. Develop an understanding of the importance of communication in addressing 21st Century global issues related to food, fiber, fuel, water, and health.
2. Identify and analyze effective communication strategies for discussing challenging issues influencing science literacy.
3. Develop and demonstrate excellence in written and oral communication through various course assignments and projects.
4. Create messages and campaigns about controversial scientific issues utilizing critical communication theories and frameworks, as well as multimedia tools and applications for increasing the science literacy of diverse audiences.
5. Design, implement, and evaluate a communications project integrated into real-world science engagement contexts connected to CASNR disciplines that demonstrates an understanding of media literacy, science literacy, visual literacy, and digital citizen concepts.

Because AESC is not widely recognized across campus, a proposal to change the minor's name from "AESC" to "Science Communication" was developed in May 2020 in hopes of appealing to a greater cross-section of students. However, implementation has been delayed due to concerns about the use of the name "Science Communication" from other UNL departments/colleges.

Commitment to Teaching Excellence

In alignment with the effort of designing high quality academic programs is a focus on effective teaching and learning. ALEC faculty, staff and graduate students recognized the need to "promote faculty teaching excellence through professional development and innovation" by emphasizing this in the current strategic plan. Since 2017, professional development focused on teaching improvement has included activities such as collaborating with internal and external partners to provide brown bag seminars and trainings addressing current research in learning

styles (Kolb Experiential Learning Theory and Learning Styles), innovative techniques in online learning (ALEC sponsored a campus wide presentation from Purdue University Global), ALEC graduate student presentations on the use of *Yellow Dig* – an online learning platform for student engagement and another on *Mentimeter* – an interactive presentation software to engage classroom learning. ALEC faculty attending a brain-based teaching and learning symposium presented conference highlights during a brown bag session, and in-house expertise on the latest Apple technology and other applications and software has been shared across the department at various times.

5. ALEC Brand Enhancement

A key finding from the 2016 academic review led to a recommendation that ALEC needed a ‘concerted effort on promoting faculty achievement through various awards and recognition programs.’ Faculty, staff, and graduate students recognized that greater visibility and awareness was needed to promote the people and programs within ALEC and embedded that effort into the strategic planning process. In an effort to ‘broaden and enhance ALEC’s reputation and brand’ faculty, staff and graduate students committed to greater intentionality in nominating one another for awards (campus, state and regional, national, international) and recognition. The following summarizes ongoing efforts in promoting ALEC’s programs and people.

ALEC Web Presence

ALEC has committed the resources necessary to train staff (Greenlee) as an in-house web developer who regularly collaborates with *IANR Media* maintaining the [ALEC website](#) to meet the continuously evolving branding standards and using analytic tools such as *Google Analytics* and platform integration to drive traffic to the ALEC website. The result has attracted a greater number of page visits from a broader audience and connected all ALEC and affiliated sites allowing for more streamlined experiences on the ALEC web pages. Ms. Greenlee works to consistently update ALEC employees’ biographical web pages to have the most up-to-date information available to the public making it easier for current and potential undergraduate and graduate students, in-service teachers, community stakeholders and donors to engage with ALEC personnel in a more efficient and effective manner.

Table 7 highlights an example of the *Google Analytics* summary of <https://alec.unl.edu/> web traffic to illustrate how analytics inform decision making regarding ALEC website usability.

Table 7

Side by Side Comparison of ALEC Site Web Traffic for Two Years Using Google Analytics

ALEC Sites (alphabetical)	Nov 2019 – Nov 2020			Nov 2020 – Nov 2021		
	Sessions*	Pageviews ⁺	Unique Pageviews	Sessions*	Pageviews ⁺	Unique Pageviews ⁺⁺
AESC	1,007	2,289	1,692	933	1,890	1,523
Ag Ed Teaching	1,030	2,203	1,663	759	1,699	1,283
Ag Ed CDE	21,156	53,761	39,695	22,328	50,306	38,615
ALEC	13,429	22,585	18,336	19,039	28,882	23,034
Leadership	3,454	6,524	5,253	3,479	6,022	4,973
NHRI	4,369	11,074	8,851	3,351	6,905	5,605
STS	387	868	602	394	953	675

*Sessions: number of times a user is actively engaged with the site, new session is counted after 30 min of inactivity

⁺PageViews: total number of pages viewed, repeat views are counted multiple times

⁺⁺UniquePageViews: number of sessions during which the page was viewed at least once

ALEC Brand

Within UNL’s *N2025 Strategic Plan* is the commitment to be an institution where “every person and every interaction matters.” In concert with that commitment, ALEC faculty, staff and graduate students engender a culture based upon our core values of treating everyone with **dignity**, fostering a spirit of **collaboration**, embracing our work while being **globally minded**, and promoting a culture of continual improvement leading to **excellence**. This commitment to live out our core values is expanded to include creating experiences within ALEC’s physical spaces (offices, classrooms, meeting rooms), it’s embedded within our activities and events, and instilled in our communications in ways that are consistent with these core values. ALEC’s tagline of *Developing Human Potential* is more than a slogan. Rather it’s an ethos that guides our beliefs and characterizes our commitment to every student, stakeholder, alumni, and partner.

ALEC’s digital signage is a communication tool promoting our department brand. Staff (Donner) actively works with UNL’s ITS (Information Technology Services) and the university communication systems to use the digital signage effectively and creatively for program promotion and recruitment. Ms. Donner has also been instrumental in leveraging ALEC’s vision, mission, core values and strategic priorities through consistent messaging in a social media campaign. Her efforts carefully align ALEC’s social media messaging and account management with University Communications branding guidelines and she actively collaborates with faculty and graduate students to differentiate platforms to effectively target multiple audiences such as current and prospective students, external and internal collaborators, potential donors, and alumni. She is intentional to align messaging with CASNR and UNL Branding (“We Are

Nebraska” messaging matrix), differentiate platforms based on audience, and was instrumental in leveraging portions of two AESC graduate assistant positions to contribute to the overall messaging enterprise.

Awards

Faculty and staff have created internal mechanisms to increase awareness of opportunities for students, faculty, and staff recognition for their efforts in providing innovative programs and support to develop extraordinary teachers, leaders and communicators. These mechanisms included the creation of a dynamic awards list capturing the relevant awards that ALEC’s faculty, staff and students are eligible for (campus level, state/regional, national, international, professional societies, fellowships, etc.), creating timelines with due dates/deadlines and past nominations submitted for ease of tracking and future submissions, and the addition of an awards section in the ALEC in Action *Weekly* as a consistent reminder of upcoming submissions and rolling deadlines.

Appendix 1 – ALEC Faculty Apportionment

Faculty Name	Title	Rank	Apportionment
Heather Akin	AESC	Assistant Professor	75% Teaching; 25% Extension
Mark Balschweid	Department Head	Professor	85% Administration; 15% Teaching
Susan Burton	Agricultural Leadership	Assistant Professor of Practice	100% Teaching
Nathan Conner	Agricultural Education	Associate Professor	73% Teaching; 25% Extension; 2% Service
Helen Fagan	Agricultural Leadership	Assistant Professor of Practice	40% Teaching; 60% Other
Lindsay Hastings	Agricultural Leadership	Clifton Professor in Mentoring Research	50% Teaching; 25% Research; 25% Extension
Dann Husmann	Director-PGA Golf Mgmt	Professor – Tenure Home	
Myunghwa Kang	HRTM	Associate Professor	45% Teaching; 50% Research; 5% Service
Eric Knoll	Agricultural Education	Associate Professor of Practice	100% Teaching
Matt Kreifels	Agricultural Education	Associate Professor of Practice	98% Teaching; 2% Service
Gina Matkin	Agricultural Leadership	Professor	73% Teaching; 25% Research; 2% Service
L.J. McElravy	Agricultural Leadership	Associate Professor	25% Teaching; 25% Extension; 50% Other
Taylor Ruth	AESC	Assistant Professor	75% Teaching; 25% Research
Hannah Sunderman	Agricultural Leadership	Assistant Professor of Practice	50% Teaching; 50% NHRI
Troy White	Agricultural Education	Panhandle Research, Extension and Education Center – Lecturer	100% Teaching
Laura Young	AESC	Assistant Professor of Practice	100% Teaching
TBD	Agricultural Education	Haskell Ag Lab – Lecturer	100% Teaching
TBD	Agricultural Education	Assistant/Associate Professor	75% Teaching; 25% Research