2020 ANNUAL REPORT

# ASCN

Promoting knowledge development to support institutional change in higher education

ascnhighered.org

# ANNUAL REPORT **ASCN**

Dear Colleagues,

2020 was a very unusual year. The COVID-19 Pandemic and the contentious political climate in the US caused significant disruptions in higher education. Although we had to make many adjustments to our work throughout the year, the Accelerating Systemic Change Network (ASCN) was able to adjust as needed to continue our work. We thank you for your contributions to this work.

This annual report provides an overview of ASCN activities, highlights our milestones and accomplishments, and includes some of our vision for the future. Some highlights from 2020:

- Our numbers continue to grow -- we now have more than 450 members and subscribers, an increase of more than 100 in the last year. This is on par with membership growth in 2019.
- We published the Transforming Institutions book.
- We offered five webinars in 2020 on topics including: collaborative models of course transformation, habits of effective department chairs, transforming teaching evaluation, enabling change agents, and engaging in sustainable innovations.
- We debuted informal discussions and short courses to provide additional ways for members to engage.
- Our working groups continue to meet and develop new projects, including guides to theories of change (Guiding Theories); a quarterly newsletter and webinar series (Change Leaders); and drafting an online repository of teaching evaluation innovations (Aligning Faculty Incentives with Systemic Change).
- The Change Dashboard is now available in a collaborative online version. The Dashboard is the tool used by teams at the ASCN Systemic Change Institute. Both the white paper, *The Change Dashboard: A Planning Tool for Successful Change*, and the Dashboard itself are available on our website.

The work of ASCN in 2020 was supported by a National Science Foundation five-year grant of $905,141 and by a Leona M. and Harry B. Helmsley Charitable Trust's three-year grant of $794,612. This past year was a year of growth, and we want to thank you for your support.

We are looking forward to continued collaborations, new beginnings and further success in 2021!
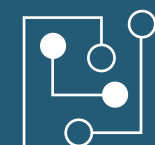
Sincerely,
Charles Henderson, Andrea Beach, Scott Simkins, Kate White, Rachel Renbarger

Hub Leadership Team

Steering Committee

Working Group Leaders

HUB Staff

Systemic Change Institute Staff

SERC Staff






## Hub Leadership Team

1.  **Charles Henderson,** Western Michigan University

2.  **Andrea Beach,** Western Michigan University

3.  **Linda Slakey,** University of Massachusetts-Amherst

4.  **Scott Simkins,** North Carolina A&T State University

## Steering Committee

5.  **Marilyn Amey,** Michigan State University

6.  **Maura Borrego,** The University of Texas at Austin

7.  **David Bressoud,** Macalester College

8.  **Mark Connolly,** University of Wisconsin-Madison

9. **Anthony DePass,** Long Island University-Brooklyn Campus

10. **Susan Elrod,** University of Wisconsin-Whitewater

11. **Noah Finkelstein,** University of Colorado at Boulder

12. **Adrianna Kezar,** University of Southern California

13. **Kelly Mack,** Association of American Colleges and Universities

14. **Cathy Manduca,** Carleton College

15. **Emily Miller,** Association of American Universities

16. **Karen Paulson,** Pennsylvania State University-Main Campus

17. **Karl A. Smith,** University of Minnesota-Twin Cities

18. **Gabriela Weaver,** University of Massachusetts-Amherst

19. **Lorne Whitehead,** University of British Columbia

20. **Julia Williams,** Rose-Hulman Institute of Technology

## Working Group Leaders

**Working Group 1: Guiding Theories**
**Tessa Andrews,** University of Georgia
**Daniel Reinholz,** San Diego State University

**Working Group 2/4: Costs, Benefits, & Demonstrating Impact**
**Pamela Brown,** CUNY-New York City College of Technology
**Archie Holmes,** University of Virginia-Main Campus
**Lorne Whitehead,** University of British Columbia

**Working Group 3: Change Leaders**
**Stephanie Chasteen,** University of Colorado at Boulder
**Gita Bangera,** Bellevue College

**Working Group 5: Equity & Inclusion**
**Holly Cho,** Oregon State University
**Pat Marstellar,** Emory University
**Ruthmae Sears,** University of South Florida

**Working Group 6: Aligning Faculty Work with Systemic Change**
**Christine Broussard,** University of La Verne
**Kadian Callahan,** Kennesaw State University

**Working Group 7: Learning Spaces**
**Jonathan Cox,** University of Arizona
**Brittnee Earl,** Boise State University

## Hub Staff

**Rachel Renbarger,** Research Director, Western Michigan University

## SERC Staff

**Cailin Huyck Orr,** Associate Director
**Mitchell Awalt,** Geoscience Assistant

# Transforming Institutions Book

*Transforming Institutions: Accelerating Systemic Change in Higher Education* contains 22 chapters representing a cross-section of presentations from the ASCN-hosted 2019 Transforming Institutions conference. This volume of Transforming Institutions builds on the initial Transforming Institutions volume (Weaver et al., 2015) with a mix of case studies, models, and analyses providing key perspectives for advancing change initiatives in higher education. The 2015 volume laid out a roadmap for transforming higher education through implementation of student-centered, inclusive, and evidence-based teaching practices, supported by scholarship from diverse communities of research and practice. This volume highlights progress that has been made in recent years to implement effective systemic change in higher education, including the use of theories of change to guide ground-level change efforts, expanding networks of individuals and institutions involved in systemic change efforts, and the intentional recognition and development of change leaders.

The book is divided into three sections, reflecting progress in the field: Theories of Change, Change Across Scales, and Change Leaders/Leadership. The first section provides multiple examples highlighting the value of grounding systemic change efforts in theories of change. The second section illustrates the important role that peer networks and networking play in driving effective change initiatives, whether at the department, institution, or national level. The third section focuses on the wide variety of people involved in leading institutional change efforts, including instructors, faculty developers, administrators, and students – and ways to build capacity for sustainable change leadership. The book finishes with a look forward, highlighting new challenges driving systemic change in higher education, especially around issues of diversity, equity, and inclusion.

**Read the book: https://bit.ly/TI_Book**

*"Transforming Institutions has done it again! This second volume, much like the first, is a compendium of the most advanced lessons we've learned about the reform of STEM higher education to date. The reader is taken on a reform journey that demystifies the complexities of institutional contexts, competing interests, setbacks, and successes. Each chapter weaves together the criticality of both theory and practice, never privileging one over the other or overlooking the fact that both are essential for undergraduate STEM reform."*

Kelly Mack, Vice President for Undergraduate STEM Education and Executive Director of Project Kaleidoscope, Office of Undergraduate STEM Education, AAC&U

*"Those of us who work to improve the quality of STEM education know that we need much more than "one-off" efforts. A consensus has emerged within the community that only systemic change can move the needle and advance real transformation. This volume, Transforming Institutions, helps us figure out how to close the gap between knowing better and doing better."*

Shirley Malcom, Head of Education and Human Resources Programs of the American Association for the Advancement of Science (AAAS)

# Working Groups

Much of the work of the network occurs within these working groups, and each group focuses on one specific aspect of systemic change.

The ASCN working groups have met many times in 2020 and active membership has grown for each group. Each group has continued to develop an identity and vision. However, thanks to the COVID-19 pandemic and loss of the research director in October, many projects required goal and output adjustments.

**Working Group 1:** Guiding Theories
This group has developed a new web space for providing an accessible entry point to change theories for use by researchers, grant writers, and practitioners to reform STEM education. Six summaries are completed, and more will be developed in 2021.

**Working Group 2/4:** Cost, Benefits, and Demonstrating Impact
In 2020 working groups 2 (Costs and Benefits) and 4 (Demonstrating Impact) merged following discussions at the 2019 Steering Committee Meeting about the overlapping projects and focus of the two groups. The group has developed a resource list on evidence-based decision making for institutions. In 2021 they will work on disseminating resources and focusing on relevant resources since the pandemic.

**Working Group 3:** Change Leaders
In 2019 the Change Leaders group established the audience of the group to include different levels of the system (classrooms, departments, institutions, and nations). This enabled them to include faculty professional developers among the potential change agents they address, which significantly expanded their audience and enables a sharper focus. In 2020 and 2021, they continued to focus on disseminating information to this and other change leader audiences through webinars, blogs, and newsletters plus the ever-popular informal discussions. In 2021 they are starting a new "short course" format that incorporates previous webinars, blogs, newsletters, and resources on a particular topic, followed by an informal discussion.

**Working Group 5 :** Equity and Inclusion
In 2020 this group revised the mission statement to include social justice and formed 3 subgroups to focus on areas of faculty, policy, and students. In 2021, these subgroups will be merged and there will be a series of informal discussions and diverse publications to engage a variety of groups.

**Working Group 6:** Aligning Faculty Work with Systemic Change

In 2020 Group 6 focused on how people can access resources to support incorporating equitable teaching and evaluation practices.  They did so by 1) leveraging existing experts and groups through co-leading the Teaching Evaluation Collective (a teaching evaluation-focused gathering of researchers and practitioners) and 2) creating an interactive interface for the repository of teaching evaluation resources. In 2021, we will 1) launch the interactive repository, 2) collect resources to inform institutions creating their own definition of teaching effectiveness, 3) create a community of practice/transformation to support novice change agents/initiatives, and 4) work with other organizations to disseminate the resources.

**Working Group 7:** Learning Spaces
In 2020, Jonathan Cox and Brittnee Earl became co-leaders of the group to lead group in creating a template for case studies. They plan to finalize the 3 in-progress case studies and work on a literature review and survey to understand what is known about learning spaces and needs.

# The Change Dashboard

In 2019 we released a white paper that introduces what the Change Dashboard is and how to use it. This white paper and the Change Dashboard itself are available as free resources on the ASCN website.

In 2020 we released an online version of the Change Dashboard. Using the Conceptboard platform, teams are able to work collaboratively on a virtual Change Dashboard.

The Change Dashboard is a visual planning and communication tool for change agents working in higher education. The Dashboard articulates the key tactics of an action plan to get from the current state to the desired state. It visually scaffolds change agents to articulate gaps between a project's current and desired states and develop tactics that are aligned with the goals and with one another. The Change Dashboard is thus similar to a logic model, but aligned with systemic change scholarship. In the white paper we will introduce each part and prepare you to use the Dashboard with your team. The Dashboard is free to use and share with attribution.

The Change Dashboard was developed for use in the ASCN Systemic Change Institute. Its structure was developed to scaffold thinking about change based on the experience of Henderson and others working with change agents in a variety of settings. The Dashboard is intended for use by teams, which often include members from many levels within an institution, such as faculty, administrators and others across campus interested in the project.

See more here:
**bit.ly/ASCNChangeDashboard**
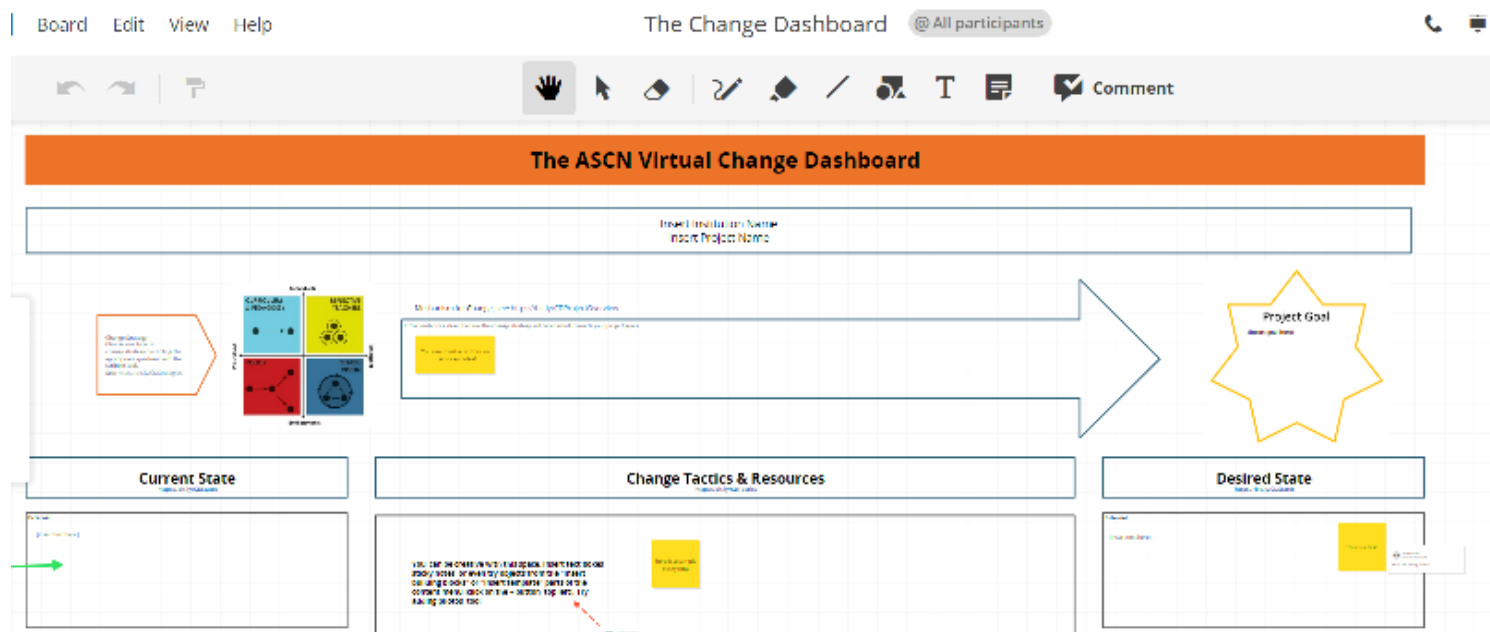
# The ASCN Web Space

This was the third year of our five-year contract with the Science Education Resource Center (SERC) at Carleton College. SERC provides the online platform for the ASCN community with funding from the Helmsley Charitable Trust. They have also been contracted to build and support the website for the 2021 ASCN Transforming Institutions Conference.

*The major areas of SERC's charge include:*

1. Hosting the network website, including both public pages and private working areas on its servers;
2. Providing use of the Serckit tools for community authoring of online resources;
3. Supporting meetings and webinars;
4. Supporting the use of these tools by members;
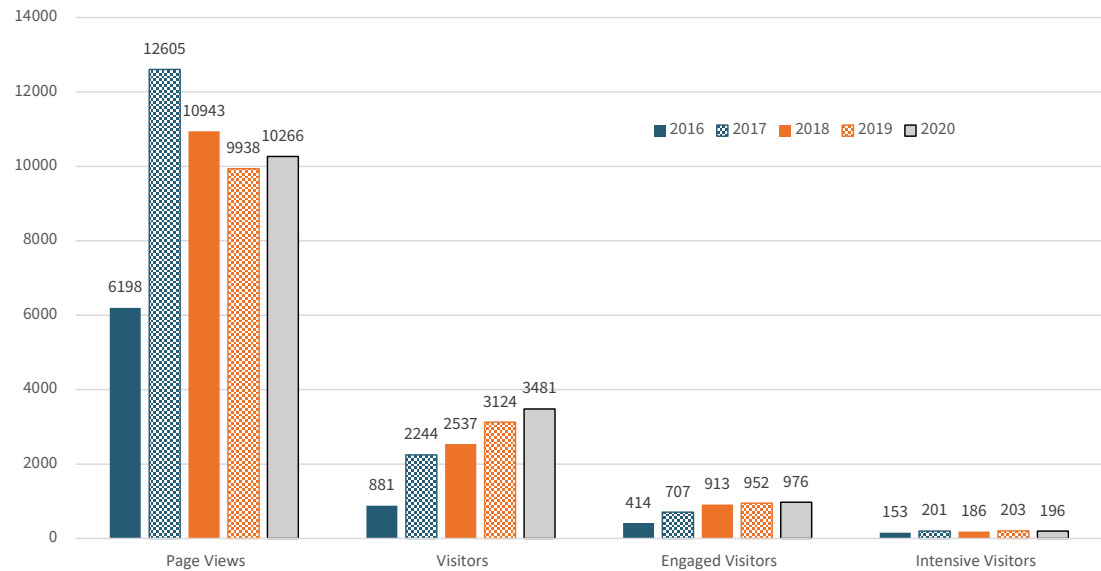5. Developing other pages and resource collections.

## Statistics

SERC continued to provide statistics regarding the traffic to the overall website as well as to individual blog pages.

Notes:

- *Page Views*: This is the number of times the page has been opened in any web browser.
- *Unique Visitors*: the number of different people who have viewed the webpage. This number is generally lower than the page view number because individuals often visit a page more than once.
- *Engaged Visitors*: This is the subset of the visitors who were on the page for at least 30 seconds or downloaded a file from the page.
- *Intensive Visitors*: This is the subset of the visitors who visited the page for at least three minutes.

### ASCN Web Traffic



| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| Page Views | 6198 | 12605 | 10943 | 9938 | 10266 |
| Visitors | 881 | 2244 | 2537 | 3124 | 3481 |
| Engaged Visitors | 414 | 707 | 913 | 952 | 976 |
| Intensive Visitors | 153 | 201 | 186 | 203 | 196 |

## Top-Five Most Visited ASCN Blog Posts in 2020

1. Kate White & Naneh Apkarian, "Start somewhere: Resources on equity and inclusion for STEM and higher education" (June 9, 2020)

2. "What does systemic change mean to you?" (February 1, 2017)

3. Judith Ramaley, "Communicating and Collaborating Across Disciplines" (November 27, 2017)

4. Charles Henderson, "What Is Systemic Change?" (March 9, 2017)

5. Kate White, COVID Recommended Resources from ASCN (March 25, 2020)

# ASCN Webinars

The goal for the ASCN webinars is to offer a wide range of topics that align with the vision of the ASCN and contribute to learning and sharing knowledge or expertise. Our intention is for the webinars to be part of our mission to disseminate the knowledge and expertise of systemic change scholars and practitioners to the wider higher education community.

We offered five webinars in 2020. These webinars covered many topics, including: supporting leaders with specific change tools, sustaining change, and working with faculty members. Our webinar presenters are experts in their fields, with many years of experience working on systemic change.

All of our webinars are available to watch on our website. For more information, follow the links listed to the right.

### Leading Change with Design Thinking: A collaborative model of course transform using approaches for solving wicked problems
Presenters: Nick Swayne, Bernie Kaussler, Patrice Ludwig, and Sean McCarthy (James Madison University)

Attendance: 33, Watch online at **bit.ly/3oJ28w9**

### The 7 Habits of Highly Effective STEM Department Chairs
Presenters: Bob Hilborn (American Association of Physics Teachers) and David Craig (Oregon State University)

Attendance: 28, Watch online at **bit.ly/3oJ3Iy5**

### Transforming the Conversation about Teaching Evaluation in Higher Education: Thoughts from the National Academies' Roundtable on Systemic Change in Undergraduate STEM Education
Presenters: Andrea Greenhoot (University of Kansas), Ann Austin (Michigan State University), Noah Finkelstein (University of Colorado Boulder), and Kerry Brenner (National Academies)

Attendance: 86, Watch online at **bit.ly/2XEBbOr**

### Enabling Change Agents with Systems Thinking Tools
Presenters: Bill Davis (Washington State University), Pam Pape-Lindstrom (Harford Community College), and Gary Reiness (Lewis and Clark College)

Attendance: 30, Watch online at **bit.ly/2XCBkSz**

### Designing Educational Innovations for Sustained Adoption: Writing proposals and developing innovations that have broader impact
Presenters: Raina Khatri (Florida International University), and Charles Henderson (Western Michigan University)

Attendance: 34, Watch online at **bit.ly/3ict312**

# ASCN Blog

The vision for the ASCN blog is to become a platform to engage scholars and practitioners, including those who are already involved with ASCN work, as well as the wider community of researchers and practitioners who are engaged in or supporting pedagogical, curricular, and culture change in higher education. The blog serves three purposes:

1. It informs stakeholders about the work of ASCN by providing updates from the working groups, highlights about resources on our site, information about our meetings and conferences, etc.

2. It disseminates knowledge and expertise of scholars and practitioners by encouraging guest posts that align with the vision of the ASCN, showing clear connection to our work, and contributing to learning and sharing knowledge or expertise.

3. It facilitates discussions about relevant frameworks, articles, books and tools that align with the vision and principles of ASCN.

The ASCN Blog is a place where ideas based on research and evidence are expressed in posts and comments and contribute to the development of new knowledge about change in higher education.

## Contributors and Blog Highlights

The ASCN blog was started in December 2016. The blog currently has 39 posts; 7 were written in 2020.

- In January, Stephanie Chasteen (University of Colorado at Boulder), one of the leaders of Working Group 3, wrote "Understanding How Instructional Change Works." She discussed how faculty change their instructional practices.

- In February, Kate White, former ASCN Research Director, outlined how members can join an ASCN working group. She also summarized each working group and their current projects.

- In March, Kate White published COVID-19 recommended resources which included higher education and governmental websites, remote teaching resources, assessment & evaluation resources, webinars, and other online discussion venues. This post was updated in June and had the second highest view count of the year with 123 views.

- In June, Kate White and Naneh Apkarian (Western Michigan University) created a starting point for individuals wanting to learn about equity and inclusion within STEM and higher education. This post included articles, resources, social media accounts, and online movements to address systemic anti-Black racism. This had the most views of the year with 3,674 views.

- In August, Amreen Nasim Thompson (Texas State University-San Marcos) wrote about their research in "Instructional Change Teams: An Exploratory Model." This includes key processes and states on how teams collaborate to design or redesign undergraduate STEM courses.

- In September, Kate White and Charles Henderson wrote a post about The Change Dashboard and how individuals can use it at their institution. The post links to other ASCN tools, such as the training module and white paper, to help people work through each section.

- In October, Stephen Secules (Florida International University) discusses the need for qualitative research to enhance what we know in equity and inclusion in engineering pedagogy work. He refers to qualitative work as "eating your veggies" research.
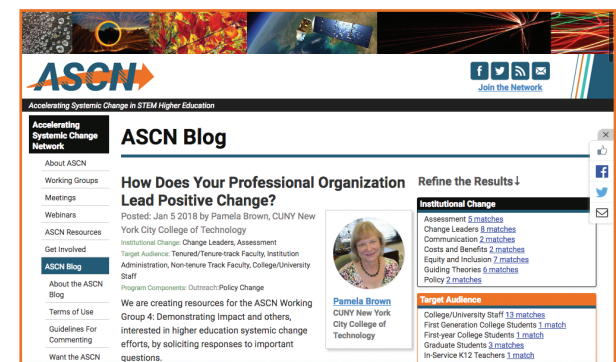
# Newsletter

ASCN News is a monthly, subscription based email newsletter.  The newsletter provides a way to maintain contact with the ASCN community, including working group members and supporters.

## With the newsletter, we:
1. Communicate directly with ASCN members;
2. Provide updates from ASCN members, the working groups, and events;
3. Share new publications by ASCN members and articles and websites of interest to the ASCN community.

## 2020 in summary:
- We sent 13 newsletters and 6 event announcements. These included webinar and workshop announcements.
- Subscriptions rose from 445 to 553 between January and December.
- Our average open rate is 35.7%; the industry average is 17.4%.
- Our average click rate is 6.4%; the industry average is 1.6%.
- Most of the time the most popular links from the newsletter bring readers to the ASCN website. This includes links to ASCN events, the ASCN blog and other information.
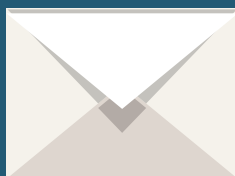
**555 December 2020**
**445** December 2019
**364** December 2018
**225** December 2017
**123** January 2017

**Mail List Reach**

# Social Media

ASCN uses two social media platforms (Facebook and Twitter) to engage our community and to reach others interested systemic change in higher education. In 2020 our Twitter sent 57 tweets and following decreased from 389 to 195 users. Each month the account reaches 1,547 accounts and has 21 profile visits. Our busiest month with the most impressions and interaction was June with discussions around equity and inclusion in conjunction with #ShutDownSTEM. On Facebook, our following grew from 119 to 136 users, and the posts with the most reach in 2020 linked to the blog posts about equity and inclusion and qualitative "Eat Your Veggies" research.

**195** Followers
**999** Tweets
**3.8k** Highest Monthly Impressions

**Twitter**

**119** Followers
**277** Posts
**68** Highest Daily Reach

**Facebook**

Year in Review | ASCN Blog, Newsletter and Social Media

# Leadership Changes

**Dr. Kate White** (right), our amazing Research Director and the center of the ASCN Hub, left the ASCN at the end of October. She has taken a position using her full array of expertise and experience at Temple University as an Assistant Director for English Language Learners and International Students, in their Student Success Center. She will be doing faculty development & consultation (improving pedagogical approaches & policies for multilingual learners, workshops on topics like confronting bias & intercultural competence, etc.), supervising and training student language tutors & conversation partners, and working with various offices to advocate for international students and language learners on campus. Kate's leadership has been central to the network's success, particularly with the Transforming Institutions book. emple University is lucky to get her energy and expertise. Luckily, Kate will stay connected to ASCN through Working Group 6.

**Dr. Rachel Renbarger** (right, below) became the Research Director in January 2021. She identifies as a former rural, low-income, and first-generation student from Oklahoma who loves traveling, reading, and eating good food. Her undergraduate degree was in Language Arts Education at the University of Oklahoma where she was also a McNair Scholar. She then became a teacher and has taught all age groups in a variety of settings. As a former teacher and university instructor, she will be joining the ASCN to help support the inclusion of research-based educational strategies. With her PhD in Educational Psychology, her research works to address issues of access and equity in postsecondary education. This includes undergraduate as well as graduate education in all subject areas. As such, she is excited to collaborate with working groups to better equity in all realms and for all student groups.

# Looking Ahead

This year was our third year of funding with a grant from the National Science Foundation for $905,141. The award ends December 31, 2022. This five-year grant will support the infrastructure of the network, outreach and growth, as well as meetings and conferences.

Kezar and Gehrke (2015) estimate that it takes Communities of Transformation (CoT's) five to seven years to develop a sustainability model. Progress toward sustainability for ASCN based on their findings is detailed in the project timeline below. The five typical phases of CoP/CoT development are Potential, Coalescing, Maturing, Stewardship, and Transformation.

ASCN is currently in the middle of the Coalescing phase. In the five years of funding, the goal is to develop this community through the Maturing phase to the beginning of the Stewardship phase.
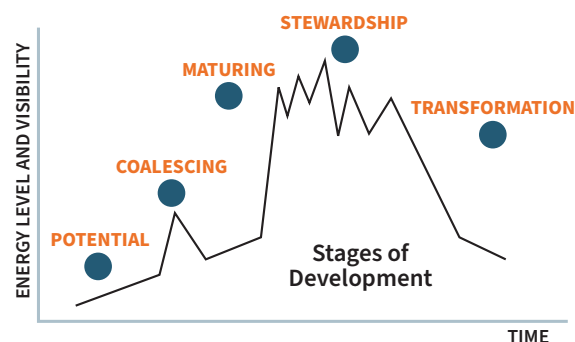
## Project Timeline

### Years 1-3 Summary

*Goals: Increase Participation (Coalescing Phase), Develop an identity (Maturing Phase), and Build strong systems (Maturing Phase)*

During 2018, which was the fourth year of ASCN activity, we met our goal of increasing participation. Our working groups continued to work together to address network goals and key questions. Some developed deliverables (including critical resource lists, surveys, webinars, and newsletters) while others were in the planning stage of various projects.

In 2019, we continued to improve our reach online and to engage more frequently with our members through the ASCN blog. We also planned to continue to develop webinars, the ASCN newsletter, and other events. This included the third iteration of the Transforming Institutions Conference. We surveyed our members about their involvement with ASCN and began to consider the future of the Network.

At the 2020 Steering Committee Meeting we focused on the results of the member survey and possible future directions for the Network, the future of working group 5 (Equity & Inclusion), and planned the Transforming Institutions Conference in 2021. We published the volume building on the work from the Transforming Institutions Conference in fall 2020 and added more resources to the ASCN website.

### Year 4: 2021

*Goal: Finalize plans for sustainability (Maturing Phase)*

By funded year 4 (year 7 of ASCN activity), the community is expected to take responsibility for its own development. Based on the experiences of other networks (Kezar & Gehrke, 2015) it is unlikely that the network will be fully self-sustaining at this point. But, it is very reasonable to expect a 3-5 year plan for sustainability to be in place, including plans for securing additional external funding. We will also hold the next Transforming Institutions Conference.

### Year 5: 2022

*Goal: Enact plans for sustainability (Begin Stewardship Phase)*

Funded year 5 (year 8 of ASCN activity) is the final year of NSF funding. Thus, the community will need to enact its sustainability plan and put the necessary structures in place for the network to continue successfully after the funding period.
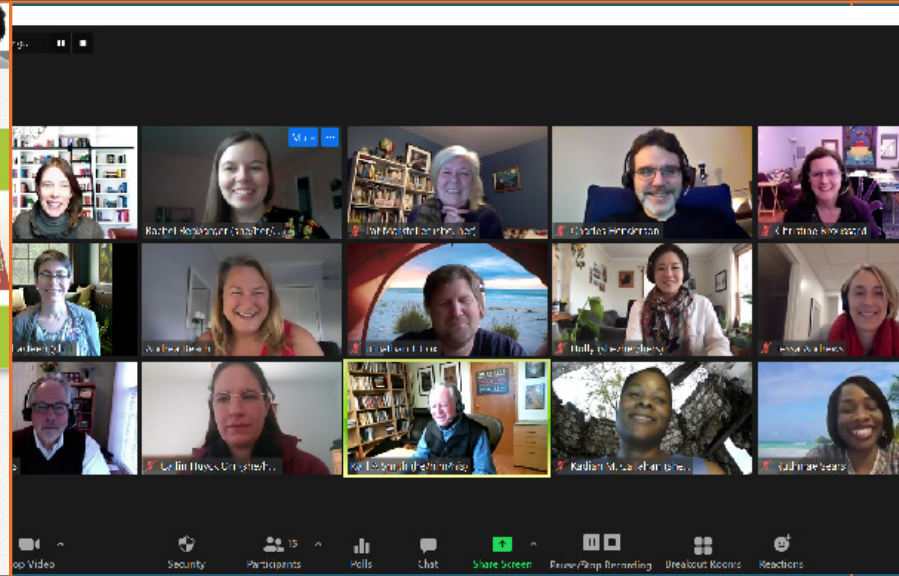
The steering committee and working groups will continue their work and will have completed the development of key project deliverables

### References

Kezar, A., and Gehrke, S. (2015). Communities of Transformation and their Work Towards Achieving Scale in STEM Reform. Los Angeles: Pullias Center for Higher Education. Retrieved from http://www.uscrossier.org/pullias/wp-content/uploads/2016/01/communities-of-trans.pdf.

Wenger, E. (1999). Communities of practice: Learning, meaning, and identity. Cambridge University Press.

ENERGY LEVEL AND VISIBILITY

STEWARDSHIP

MATURING

TRANSFORMATION

COALESCING

POTENTIAL

**Stages of Development**

TIME

From left:

1. Raina Khatri (Florida International University) begins the November webinar on "Designing Educational Innovations for Sustained Adoption" with Charles Henderson.

2. Steering committee members end the 2021 annual meeting which took place virtually.

3. Andrea Greenhoot (University of Kansas), Ann Austin (Michigan State University), Noah Finkelstein (University of Colorado Boulder), and Kerry Brenner (National Academies) present thoughts on the National Acadmies' Roundtable onSystemic Change in Undergraduate Education.

4. Picture of change dashboard from a Systemic Change Institute.

5. Bill Davis (Washington State University) starts the "Enabling Change Agents with Systems Thinking Tools" webinar.