Declarations and Commitments: The Cognitive Practice of Sustainability Agreements

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Abstract

This study analyzes six American voluntary agreements for university sustainability, demonstrating that the individual agreement networks intersect to form a larger network for sustainable low-carbon transitions. Drawing on a framework of social and institutional learning, the study uses network and positional analysis methods to map the cognitive practice of universities engaged in voluntary sustainability commitment. These agreements scaffold learning structures for member universities, providing support in the search for solutions to sustainable transitions. Within these structures, universities experiment and learn as they construct new norms for institutions. Through their participation, universities join a network of shared practice and beliefs. By participating in several of these networks, institutions are connected to many new ideas and practices. These overlapping memberships link together, making a network of networks. By choosing to participate in any or all of these agreements, universities have chosen to enter into a dialogue about and practice of sustainable transition, where learning, experience and expertise intersect. The universities participating in these voluntary sustainability agreements are forming a network of committed practitioners supported by policies and an emerging cognitive practice with the ability, capacity and commitment to significantly address the critical problem of climate change.

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1 Introduction

Universities are ideal places to uncover and examine the problems we face as a society. Their culture of exploration and knowledge development translates new ideas to be understandable across disciplines, scales and venues. Most importantly, universities incorporate these ideas into the knowledge base of future leaders, generally known as students, through their teaching (Seyfang and Haxeltine 2011; Calder and Smith 2009). In addition to research and teaching, universities have a strong physical presence in any community. Universities may be one of the largest employers in a region, often with extensive property holdings. Many are the size of small cities, with considerable political and economic power (Vezzoli and Penin 2006). Yet the real power of universities is that they are also institutions in the social sense—a persistent societal structure with symbolic significance beyond their material existence. Universities are part of the dominant culture, with the power to transform societal norms far beyond their own boundaries (Bilodeau et al. 2014; Jacobssen and Bergek 2011).

Learning is considered to be an imperative for institutional survival, particularly in uncertain or highly competitive environments (Popper and Lipschitz 2000). Given the magnitude and unknowns of the climate crisis, institutions must be able to learn quickly. Those that share knowledge can learn from the experiences of others, significantly reducing the time required for transforming their own practice. Networks grow institutional capacity to think together and generate new learning for complex problems (Manring 2007).

This study looks at six American agreements that were developed as purely voluntary sustainability transformations, each with a different focus and approach to institutional behaviour change. Through participation in one of these voluntary agreements, a university joins a network of shared practice and belief that provides important guidance and support for sustainable practice. By participating in several of these movement networks, institutions are connected to many new ideas and practices for sustainable transformation (Knight and Pye 2005).

2 Social Learning Framework and Methods

Voluntary agreements are a specialized form of learning, directing members toward a mutual goal, providing support through recommended actions, encouraged behaviors, and feedback mechanisms. They provide an innovation idea, actions, reports, recommendations, and progress ratings that scaffold the necessary learning for their members (Vygotsky 1978; Lafitte 2010). By joining a network, members

can readily learn from the experiences of others, significantly reducing the time required for transforming their own practice while furthering the dispersion of innovative practices (Mariotti 2012; Kilgore 1999; Kraatz 1998).

Discovering and mapping a network of practitioners allows us to discover the commonalities and clusters of interconnection and innovation. Social learning theory suggests that in these interconnected spaces we may find and leverage the development and institutionalization of new ideas as the basis for collective action (Diani and McAdam 2003).

Knowing the 'what,' ''where' and 'who' of the network leads to a deeper look into the practices, products and extensiveness of its new ideas, and lets us see where learning, experience and expertise are located and intersect.

Cognitive practice theory can be used to analyze the collective action and meaning of a network, looking at what a movement believes, how it organizes to get things done, and most importantly, how it constructs and disperses its knowledge (Eyerman and Jamison 1996). It can give us insight into what social learning has occurred within any social movement, even a vast network of networks of cooperating educational institutions across an entire country.

This study used a combination of situational and network analysis methods to more fully understand the institutional space of voluntary sustainability commitments. Situational analysis is helpful in capturing and mapping the complexity of a situation, and network analysis is designed to graph the many inter-relationships between entities in a network, be they people or organizations. The cartographic orientation to situational data analysis includes "maps" or visualizations that allow the researcher to display the connections and interconnections within a situation. Positional maps are axis-based maps that function as a visual analysis of discourse (Clarke 2005). These maps help to make the structure of knowledge within the network of agreements and institutions visible, indicating what knowledge and expectations are articulated by the agreements, and making commonalities or differences apparent.

3   The Agreements

There are many sustainability agreements and compacts around the world. This study investigated six American agreements: the Talloires Declaration, the Association for the Advancement of Sustainability in Higher Education (AASHE), the Sustainability Tracking, Rating and Assessment Systems (STARS), the American College and University Presidents Climate Commitment (ACUPCC), the International Sustainable Campuses Network (ISCN), and the Princeton Review Green Schools (PRGS). There were over 1400 participating organizations within these six agreements at the time of this analysis.

The Talloires Declaration was the first ever university-focused voluntary sustainability agreement, established in 1990 by a group of 22 university leaders convened by Tufts University. As of 2012, there were 430 signatories in forty countries. It offers a ten-point implementation plan, and makes recommendations

for curricular change and establishing operationally-based programs for recycling and water conservation (Adlong 2013; ULSF 1990).

The ACUPCC, a compact for reducing carbon emissions at universities, had 12 founding university signatories, and 400 charter signatories the first year. Its goal is the elimination of greenhouse gas emissions at the member institutions. The ACUPCC requires bi-annual greenhouse gas emissions inventories and 5-year progress reports (ACUPCCa 2013).

The International Sustainable Campuses Network is the newest of the six agreements. Founded in 2007, the charter was completed for adoption in 2009. The charter is based on three principles. Campus sustainability should be addressed through buildings, due to their environmental and societal impacts, campus-wide planning is necessary to guide sustainable transitions, and research, teaching and outreach about and for sustainability are an institutional mandate and responsibility. ISCN requires annual reporting on initiatives undertaken to meet the three principles (Kasemir 2013).

AASHE is a membership network that provides resources and support for sustainability at universities. AASHE functions primarily as a convener, member services and resource provider. It does not recommend a series of specific actions. AASHE also developed the STARS rating system, with its extensive sustainability measuring tools (AASHEa 2012; Second Nature 2012).

STARS is a voluntary benchmarking and rating system, structured as a paid membership, and independent from AASHE participation. The STARS rating is designed to provide metrics and ratification for sustainability practices, policies and education across all aspects of an institution. The system is based on points earned for the sustainability impact of a particular behaviour or process (AASHEb 2012).

The Princeton Review Green Schools program reviews green schools, and releases both a Guide to Green Schools and names a Green School Honor Roll. The Guide to Green Schools grew from a 2007 survey, which indicated that when making their application decisions, students wanted to have information on school environmental accomplishments and behavior. The Review rates schools on their performance against a 28-point criteria list of green practices. Institutions that wish to participate respond with their answers to PR Green Schools administrators. Only schools that wish to participate are included (TPR 2013).

4   Analysis

I began with a content analysis of reports, newsletters, and other publications collected from the organizations. Working with these documents, I identified the themes of mission/vision, roles/role models, and measuring/effectiveness. Within these I developed codes that express a spectrum of discourse positions. I then constructed the positional maps from these codes. Each axis depicts thematic concerns as expressed by codes across a range. The selected discourse of the agreements are then placed onto the map, yielding a visual display of the positions held across the network.

4.1   Mission and Vision

Mission statements sum up institutional purpose and vision statements make clear the desired methods and results of institutional initiatives. There were 4 distinct positions in the mission/vision discourse. "*Protecting*" is about taking direct action to protect the environment and address climate change. Both Talloires and PRGS networks express their missions in ecological terms. The ACUPCC explicitly states that human progress is dependent on stabilizing climatic conditions. "*Advancing*" is about action to advance society's sustainable transformation, and uses human-centric terms, such as "make human progress possible" or "create an equitable and sustainable future for all humankind." AASHE, STARS and the ISCN are human-oriented in their missions, with little direct reference to ecological goals.

"*Surveying*" reflects a concern with laying boundaries and measuring learning. This idea of recording and systematizing measurements is expressed in phrases like "develop and use a standard framework for measuring success," "reporting as self-knowing," and "the need for transparency in measurement." The "*orienteering*" position is similar to surveying, but incorporates the idea of using maps and measurements to travel, as in the sport of orienteering. There is a competitive undertone to some agreements, especially those that use ratings. This position also draws on the idea of a map to the future, with wording such as "create an equitable future in harmony with nature," or "a stable climate will be needed for a stable human future."

In the mission/vision positional map, the x axis depicts the mission concerns as expressed in each agreement's discourse, which range from primarily ecological to those using human-centered societal terms. The y axis expresses the vision of how this is to be accomplished, with positions that range from the standpoint of surveying uncharted territory to the competitive orienteering approach. The mid-point of this axis combines these modes into an assessment approach, which uses measurement to inform moving forward and learning (Fig. 1).

4.2   Roles and Role Models

Each agreement indicates appropriate roles for itself and its members, their charge and role in sustainability transitions, and what role their members should play. All the agreements evidenced a very strong sense of responsibility and recognition of the unique role of member institutions. This is expressed very clearly in the ACUPCC's statement: "What will society say… if we who have the expertise and the mandate of education and research for a thriving society didn't do everything we could to help society recognize the risks and create solutions?"

The agreements saw their own role as either scaffolding direct action as an immediate solution, or for teaching as a long-term solution.
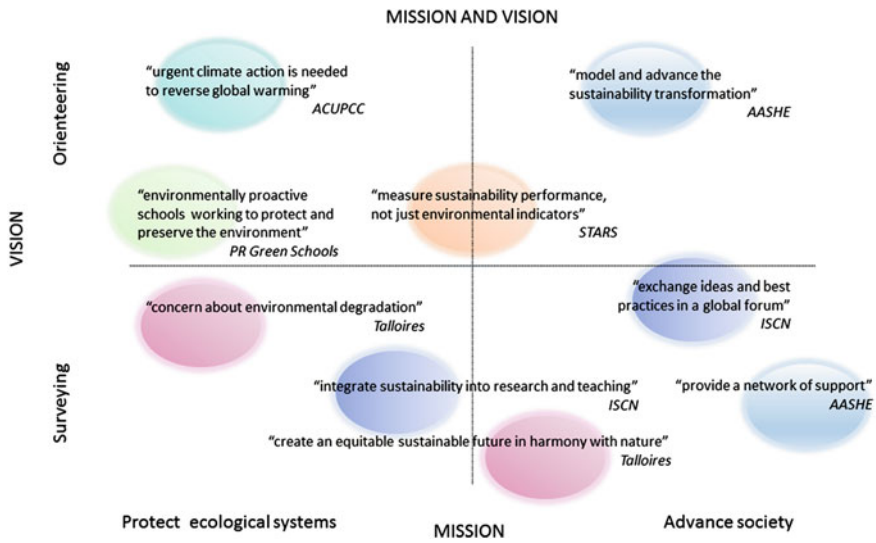
MISSION AND VISION

Fig. 1 Mission and vision. X axis Mission: ecological systems ↔ human systems. Y axis Vision: surveying uncharted territory ↔ orienteering (competitive moving across terrain). Blue AASHE, Aqua ACUPCC, Green PRGS, Purple Talloires, Indigo ISCN, Orange STARS

Acting could have been coded "practice what we preach"—the actual words used in the Talloires Declaration. AASHE has an explicit goal of making sustainable practice the norm in higher education and incorporating low-carbon sustainability into everyday operations. The campus becomes a living lab, demonstrating the possibilities and educating for sustainability while also providing the university with more adaptive capacity for itself (McLaughlin 2011).

The other especially strong code emerged as "*educating* for the future." The Talloires Declaration considers the university to have a "profound responsibility to teach for a sustainable future." The university campus is seen as driver of public education, "where the next generation of our world's leaders are educated," and has a responsibility to "train the next generation of leaders." The idea of mandate also runs strongly in this code. Phrases range from "public mission" to "playing a determinate role". This need is most strongly expressed by the ACUPCC, which claims "America needs us to put the pieces together."

All the agreements have a very strong sense of the university's responsibility to be a sustainable role model for others. I constructed two codes within this theme: *driving* or *directing*. Phrases like "drive innovation" and "higher education as a multi-billion dollar economic engine" and "early movers" all gave insight into the university as causing change by action, in the sense of being in the driver's seat, taking everyone along while operating the machinery to get somewhere.

Another way of looking at higher education's role was expressed more in terms of influence or energy. This way of defining the role used words like "critical mass" or "catalyze action" or "playing a determinate role." Universities should be leaders,

"educating future leaders"
PGS, ACUPCC

"share our expertise and skills"
PGS, ACUPCC

TEACHING

"educating the people who manage
society's institutions"
Talloires

"a profound responsibility to
teach for a sustainable future"
Talloires

"a public mandate to educate"
ACUPCC

"lead in catalyzing action"
ISCN

"university as a living lab"
ISCN

"play a determinate
role in leading society"
ACUPCC

ACTING

"make sustainable practices the
norm for higher education"
AASHE

"a billion dollar economic engine
to drive change"
ACUPCC

"university as microcosm of larger community"
Talloires

DRIVING FORWARD

DIRECTING THE WAY

Fig. 2 Roles and role models. *X axis* Agreementrole, *Y axis* University role

out in front, encouraging or directing others. How an agreement views its place in making a transformation can be positioned as either pushing or pulling. Although these are opposite approaches, both legitimate university power. Either way, universities see sustainability education as their domain, carving out political space and authority for the university as the provider.

In the positional map, the *x* axis is aligned to the "driving" or "directing" codes, and the *y* axis positions the discourse of the university role as either taking direct action as an immediate solution or teaching as a long-term solution (Fig. 2).

4.3 Effectiveness and Measuring

All the agreements were concerned with understanding the effectiveness of their efforts, and emphasized the importance and purposes of measuring.

Effectiveness can have an internal or external orientation. *Gauging our efforts* is an internal approach to effectiveness. It asks "How are we doing?" Green Schools looks at "how well are we preparing students?" Collecting data is a way to assess past performance and indicate success. STARS sees measurement as a way to gauge where improvement can be made. *Framing progress* has a more future orientation than gauging efforts. Data should be used as a teaching tool and to inform future decisions. STARS and ISCN couch this idea in terms of "experience sharing" or "knowledge sharing." *Being accountable* includes a commitment to accountability and transparency as an integral purpose of measurement. ISCN considers reporting to have two purposes—knowledge-sharing and ensuring accountability to the terms of the agreement. *Committing to action* combines the ideas of PRGS' "environmentally proactive institutions" with both STARS' and

ISCN's conceptions of using data to strengthen commitment, awareness, and buy-in. The ACUPCC states that data collection and reporting is what makes the agreement "not just a symbolic act." This is somewhat different than the Talloires Declaration conception, which considers signing the agreement to be "a symbolic act that guides us to action" and a "framework for steady progress."

Internally, measuring is used as a way to gauge what has been done, and as a tool for planning the next steps. The idea of proving performance is used both internally and externally and is centered on the map. In addition to the idea of proof, measures of past performance are also conceived of as externally-oriented transparency of process and of being accountable to the commitments. The two agreements structured as rating systems, STARS and PRGS, include the idea of being publicly recognized for progress toward sustainability goals.

Pulling together the discourse on measuring and effectiveness into one positional map, the x axis maps internal or external orientations to *effectiveness* and the y axis is mapped as *the purpose of measurement.* This continuum ranges from past performance to future planning (Fig. 3). The map shows an even coverage of orientations—across continua and agreements both—which gives visual evidence to the very prominent position of the measuring idea in all these agreements. At the very center of the map is the concept of making progress toward solutions to climate problems through formalized structures. This is one of the fundamental purposes of all these agreements.
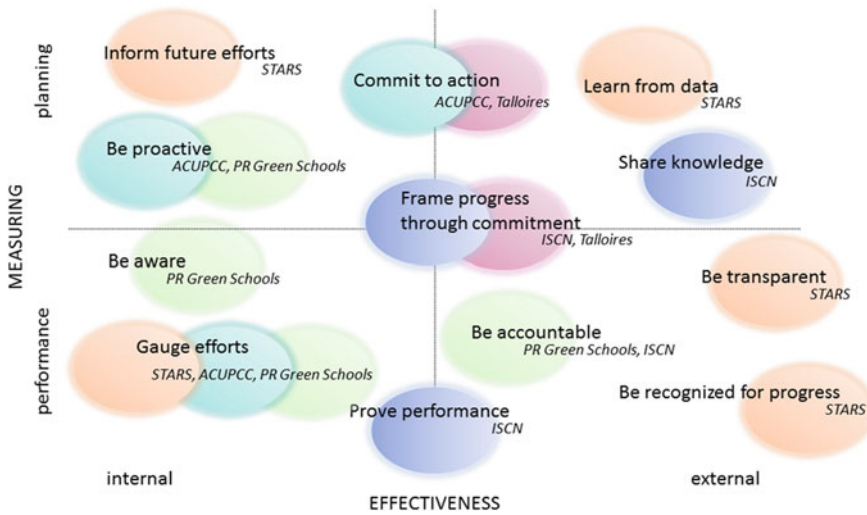

Fig. 3 Effectiveness and measuring. *X axis* using data for effectiveness, *Y axis* purpose of measuring

5   Cognitive Practice Summary

While the six agreements are all very different, the positional analysis reveals certain principles held in common. Although each agreement is relatively informally organized, there is an organization to act as an administrative and logistical home for initiatives. Openness, especially the structures designed to support free sharing of information, is a strong characteristic. Data reported by institutions is publicly available. The networks, conferences, and many publications are all the outgrowth of the idea of sharing information as it is learned through experimentation.

Each agreement provides a formalized structure to support solutions to some aspect of a sustainability problem—one of the fundamental purposes of all the agreements. Within that structure participating universities can experiment and learn together as they construct new norms for institutions of higher education. By choosing to participate in several of these agreements, the universities have chosen to enter into a dialog and practice of working toward a sustainable transition.

This wide network has an extremely strong measurement culture. Measuring is positioned as both a practice and as a way of learning, one of the most important ways to both meet agreement goals and share knowledge. Measurements can be used to set boundaries, make decisions, gauge progress and support teaching.

The agreements are united by their commitment to making sustainable transformation within the university and beyond. Their cognitive practice is based on a strong shared belief in the university as a leader with a responsibility to push or persuade society to meet the goals of practicing sustainability and educating people for the future.

6   Network Analysis

Network analysis relies on principles of graph theory for managing the complexity of data with many overlaps and interconnections. Network diagrams or graphs combine visual and statistical methods in order to trace the flow of ideas and practices and make sense of complex webs of relation and affiliation that might be obscured by the quantity or complexity of these connections (Kadushin 2012). Graphs are useful for discovering patterns of connection, and tracing the flow of information and influence that would be difficult to tease out of a table or other linear format with many data points (Diani and McAdam 2003).

The network analysis began with an affiliation matrix that traced the universities connected to each agreement. The matrix was entered into a network analysis program, and various algorithms run to produce visualizations of the data. These graphs show how the six selected voluntary university agreements are connected through their members. In general, the less the agreements are related to each other by common membership, the farther apart they will be displayed (Bastian et al. 2009) (Fig. 4).

Fig. 4 Network of 6
agreements. *Blue* AASHE,
Aqua ACUPCC, *Green*
PRGS, *Purple* Talloires,
Indigo ISCN, *Orange* STARS
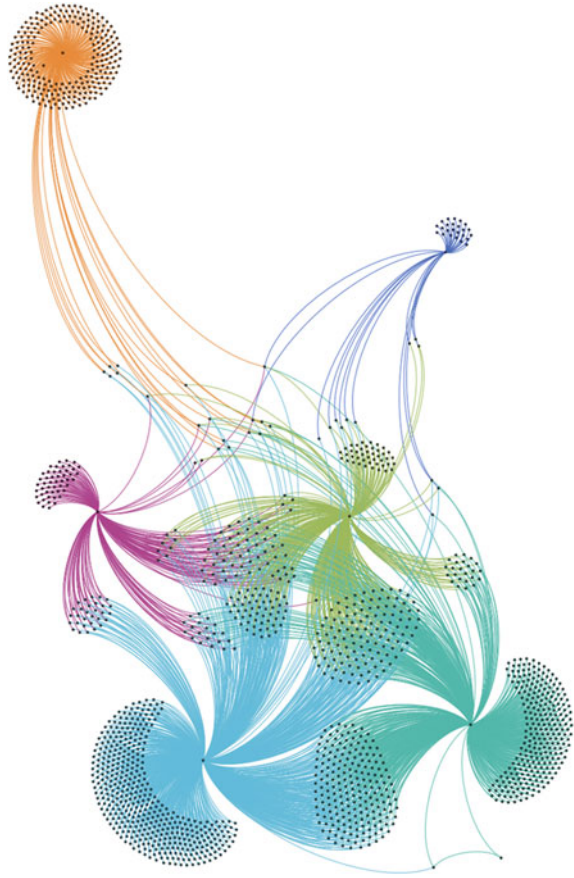
The analysis used density and centrality to further clarify the structure of the
network. *Density* measures the number of ties that actually exist stated as a ratio to
the number that could possibly exist, and indicates how cohesive or connected a
network is. Larger groups generally have lower densities. This network is quite
large, with a theoretically possible 2,510,640 edges or connections, but only 2400
real connections, giving it a fairly low density score of 0.009. Higher densities are
considered more effective at transmitting information (Mohrman et al. 2005).

Centrality indicates how embedded in a network a particular entity is, by
counting the number of its direct ties across the network. There are several forms of
centrality, but they are all essentially measures of some kind of power. *Out-degree
centrality* measures how many nodes are connected to a target node, and is used as
a measure of influence. Over how many edges does information flow out from the
target node? The higher the score, the more influential this node is considered to be
(Garson 2012). *In-degree centrality* measures how many edges feed into the target
node. How much information flows to it from how many different points? The

higher this score, the more ties or edges that connect to the node, the more important this node is in the network. In network terms, prominence and influence indicate the possession of power and the ability to persuade (Kadushin 2012; Hanneman and Riddle 2005).

Figure 5 shows in-degree centrality with the emphasis placed on the prominence of agreements—how many universities belong to one agreement as compared to the others. The deepest color has the highest membership; colors paleat each level lower. AASHE is the "big fish" in the pond, with the most members. This puts AASHE in the position of being able to make its voice heard to the most people. But as a whole, this network has a centrality degree averaged to 1.514, which means that there is a loose connection among the main nodes. No one organization exercises a central "authority", but again, referring back to density, AASHE cannot require anything outside of its own network, because it is only loosely connected to the others.

Referring back to positional maps, this means that a large number of the members of the wider network will be connected to AASHE's work. AASHE takes an action-oriented view, with a mission to make sustainable practice the norm for higher education. With such low density in the network, AASHE cannot immediately access the wider network through its own members, but it is positioned to

Fig. 5 In-degree centrality. Darkest color = highest degree
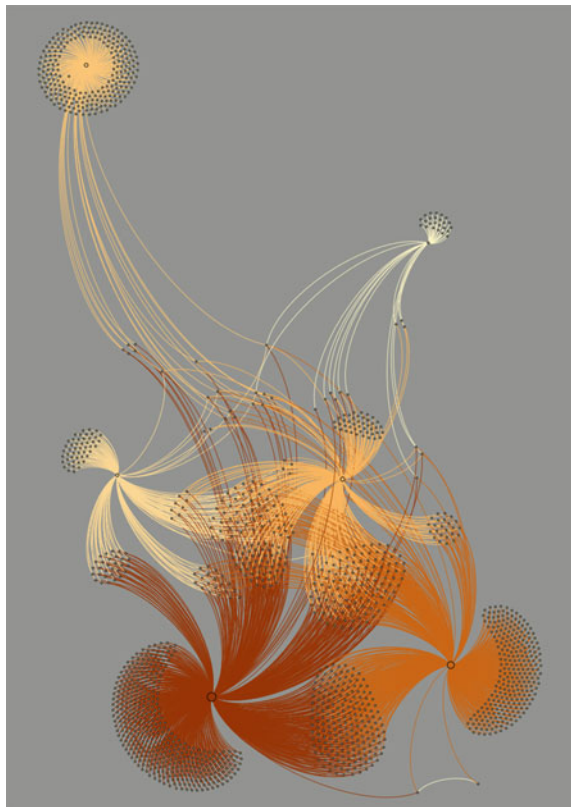
reach across the network in only a few "jumps" between institutions. Conversely, ISCN is the least central in this American network, the least connected across institutions. The ACUPCC network has the second-highest centrality scores, so a large number of institutions are committed to a pro-active and highly structured plan for addressing climate change. ACUPCC has an "orienteering" outlook, with the idea of travelling toward a goal—the goal of climate mitigation, and sees its role as "driving society forward."

Figure 6 makes the communities that share more than one agreement stand out. In this visualization it is easy to see three levels of out-degree centrality. The nodes in the darkest blue participate in five of the six agreements, nodes shaded in darker
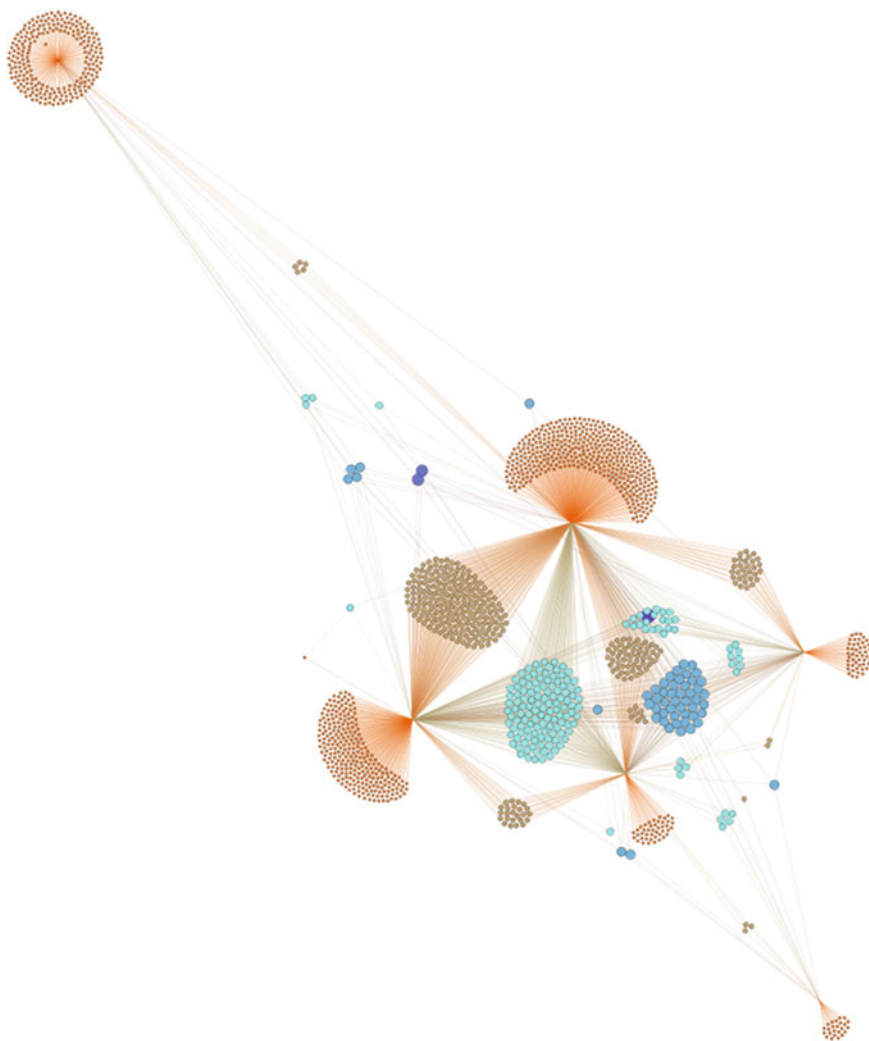

Fig. 6 Out-degree centrality. *Dark blue = 5, medium blue = 4, aqua = 3,* tan = 2, *orange = 1*

blue in at least four, and the lightest shade of aqua indicates participation in at least three of the agreements.

The network depicted in Figs. 5 and 6 is a wide network with a low density of ties between organizations. It has a low local centrality score, with loose connections between agreements and a lack of central authority. The network of networks exists more as an artifact of overlapping memberships than of any coordinated interactions and intentions. This may actually favour continued exploration and development. First, the intersection of multiply-connected institutions can be seen as an innovation cluster. Scholz et al. (2008) study of organizational networks working on water pollution found that those organizations most concerned about the problem tended to participate in multiple collaborations. It is in this overlapping, multiply-connected core of practitioners that new ideas can diffuse most rapidly and where institutional learning and transition occurs. Second, because high density can act as a network constraint, by making the communication of ideas or practices opposed by the dominant organization more difficult, the low density of this network assists its ability to innovate and get attention for new practices (Borgatti et al. 2013).

7 Discussion

Is there any evidence that the members of these networks are transforming their policies and practices for sustainability? Policies are an indication of institutional "transformation of intentions," and help make clear how these new intentions will be accomplished. The style of these policies also reveal much about new institutional practice, conventions and learning, or the transformation of institutional culture (Hall and McGinty 2002).

An important example of the institutionalization of sustainability is the growth of sustainability officers and offices within higher education. In 2010, 23 % of AASHE member institutions had such positions; by 2012—just two years later—67 % of member institutions reported having sustainability offices/officers (Walton 2013). Having an office dedicated to sustainability initiatives gives legitimacy from a finance and administration vantage point. Having sustainability as an institutional responsibility area helps ensure ongoing progress toward goals.

By adding sustainability offices, schools are making structural changes to their internal processes. Sustainability offices ensure that change begins at the basic levels of the business and planning offices, and continues as a program of sustainability expectations and requirements for university functions. By adopting agreement goals as institutional goals, they are reinforced through repetition, stabilizing sustainable practices over time (Barth 2013).

Some agreements have enforcement mechanisms to guide action, others have only suggested ways to think about sustainability problems and guidelines for institutional praxis. They all are committed to transparency in the process and evaluation of results. When compared against each other, it is hard to say if any one of these agreements is more "important" or more "effective" than another.

We can get a sense of the extent of practices and their effectiveness through institutional reports. Data from the ACUPCC (2012) Annual Report provides a useful snapshot of the power of a voluntary agreement: its 664 members had submitted 1648 greenhouse gas emissions inventories, and 482 had Climate Action Plans to address those emissions. ACUPCC signatories that purchase renewable energy credits are the third-largest purchaser of renewable energy credits in the United States (ACUPCCb 2013). In addition, the 298 signatories that produce green power themselves, produce 186 megawatt hours of solar power, 67 megawatt hours of wind power, and 41 megawatts of geothermal, fuel cell and biomass renewable power—over 295 MW hours of renewable, low-to no-carbon energy (Second Nature 2012). This is a significant investment in low-carbon technology. It would have been impossible to accomplish without a committed program with strong policy support. By purchasing green power or by installing solar panels, wind turbines or fuel cells on their campuses, universities support the longer-term goal of a decentralized and diversified renewable energy system.

Universities across these networks are also investing considerable money in the construction of green buildings. Construction and operational decisions will affect the emissions footprint for many years. A focus on green building also supports long-term change by providing financial support for new architectural practices to be accepted into standard construction practice.

7.1 Limitations

This study looked at only six American sustainability agreements. The ISCN network extends beyond the United States, although only the American members are shown in this analysis. There are many other voluntary agreements that could be analyzed, including a number of programs in Asia, Africa and Europe. GUPES and EAUC together have over 350 member institutions, some of which are quite large (UNEP 2014; EAUC 2014). A study of the structure and impact of those agreements could add to our understanding of the global potential for change. In order to deepen our understanding of how these agreements foster institutional change, future research could also map the many NGO partners and intermediaries that support and interact with networks, and include the ever-growing cluster of businesses that provide services to the institutions working on these agreements.

7.2 Implications for Institutional Practice

Each agreement provides a structure to support some aspect of the sustainability transition problem. Within that structure, participating universities can experiment and learn together as they construct new norms for institutions of higher education. By choosing to participate in any or all of these agreements, universities have chosen to enter into both the dialogue and practice of sustainable transition. An institution joining this wider network could expect change in several key areas.

Joining any of these networks means joining a measurement culture, where measuring is positioned as both a practice and as a way of learning. Reporting institutional performance becomes a form of sharing experience, a way to learn from the practices of other institutions. There is a strong concern for developing the structures and frameworks that can support more meaningful comparisons across member institutions, echoing Michael Shriberg's call for systematic and informed decision-making (2002). Institutions will find that procedures and practices will need to be quantified in ways they may not have been before, in order to support that decision-making.

Perhaps the most important part of the cognitive practice of this network is the transformation of the curriculum. Education and research are the reasons for the existence of universities, and the curriculum is the intersection of those practices. The agreements all seek the transformation of the curriculum, fully integrating it into everything at an institution. Member universities are working to infuse the entire curriculum with sustainability, linking the concepts of ecosystem capacity, the impacts of economic systems, and the importance of social justice. By providing students, faculty and staff with opportunities for sustainable practice, these concepts are reinforced with visible practical applications. The long-term impact of this deep institutional change, especially in the normative sense, will be immense. Through curriculum, norms and common practices are diffused through society, increasing society's capacity to innovate and respond to the challenges before us.

8   Conclusion

This study looked at how universities that participate in six voluntary sustainability agreements have become part of a wider network of cognitive practice working to transform institutional structures and practices, actively engaging in action for climate remediation and adaptation, seeing measurement as both a tool for analysis and as a form of change in itself. These networks believe that they have a special role to play in advancing societal change, a commitment to the open sharing of knowledge, and a deep sense of responsibility to fulfill a social mandate for teaching.

These guiding principles, knowledge, and meanings are the foundation of new institutional practice. Universities have an unparalleled ability to make transformative social change. As institutions in both the organizational and the normative sense, they are well-positioned to combine practice and structure for effecting change. Through a commitment to practice what they teach and the implementation of many measures to meet concrete institutional sustainability goals, universities are directly addressing the challenges of sustainability. Universities are responding to the most urgent need we have before us—transformation to sustainable systems.

These universities are a deeply committed network of practitioners, connected to many institutional agreements, all working to construct sustainable institutional practices for our future. By doing so, they will fulfill their highest calling, providing society with a skill set for sustainable decision-making for the challenge of climate change.

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