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Cultivating a Culture of Innovative University Engagement for Local Entrepreneurship Development in Rural and Distressed Regions

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Abstract

Universities are commonly considered to be primary drivers of new innovations, and thus supportive of high-growth knowledge spillover businesses (Audretsch & Lehmann, 2005). Even the university atmosphere and its embrace of idea exchange can be considered archetypical of a healthy entrepreneurial ecosystem through which innovators act and interact regularly. However, even with these behavioral advantages on their side, many universities remain focused on developing innovations as *outputs* of their scholarly efforts, rather than concentrating on the *processes* of innovation within the university itself. This is particularly true when it comes to the development of social and community innovations, through which universities can serve as central catalysts of innovation beyond the university borders. This article presents an alternative perspective of university-based innovation, suggesting that universities must first innovate upon their own culture and institutional structure, revising the role played by the university in the public space. We suggest that university faculty and staff must step outside their roles and, quite often, allow their academic expertise to take a subordinate role to citizen-driven entrepreneurial expertise in the surrounding community. Several principles for enhancing this conversation and negotiation between citizen and expert knowledge are presented here, along with ways that universities can embrace public scholarship to fundamentally alter the relationship between experts and citizens. The article illustrates how to transition from an expert-driven model toward a citizen-expert co-creation model of innovation and entrepreneurship, and draws upon a multiple case study in the U.S. states of Maine, Pennsylvania, and Wisconsin to offer empirical support about institutional transformation from the perspective of entrepreneurs. Our findings are then applied toward envisioning the publicly-engaged university as a potential driver and co-creator in the development of local knowledge and entrepreneurial ventures, especially in lagging and rural regions.

1. Introduction

Universities and colleges are often promoted as the geographic foci of knowledge spillover businesses (generally high-growth, high-tech businesses resulting from scientific research) (Audretsch & Lehmann, 2005), or as promoters of entrepreneurship development within the region or territory it serves through traditional education and outreach. In this role, many universities have strategic goals to become more *entrepreneurial,* but the term *entrepreneurship* assumed by these universities often lacks clarity, and may be used loosely and interchangeably with the terms *innovation* and *creativity.* These three terms are distinct yet interdependent, and closely related and reliant upon one another. *Creativity* involves thinking differently, and when this different thinking is paired with action that produces substantial, non-marginal change, *innovation* is born. When *innovations* are realized through the creation of a new business or institutional venture – a step entailing risk – then *entrepreneurship* has been achieved. Enabling a culture of *creativity* is a wonderful exercise within the university setting, but it does not imply that the university is any more *innovative* and *entrepreneurial* than before if risk-taking and new venturing do not generate new institutional forms and economic activity. Additionally, *entrepreneurial* ventures tend to fare far worse if they offer nothing *innovative* or *creative* – such ventures are scarcely commodities at that point, and, by definition, not entrepreneurial.

The goal of this article is to specifically examine the process through which local organizations supporting entrepreneurship (such as chambers of commerce, governments, and universities) engage with entrepreneurs for the purpose of small business development, and to learn how local interaction and conflicting entrepreneur/institutional values might influence the ways universities could engage more productively with entrepreneurs. The article postulates that the engagement process is a meta-process that should itself be the focus of innovation. This is compared to merely

generating outcomes like new entrepreneurship development programs and services that are innovative in their offering, but highly traditional in the ways they are administered. Such meta-level innovation requires universities and colleges to think reflexively about how they engage in communities, and to continually identify new roles to play in the entrepreneurship development process. Universities often do have programs to train the next wave of entrepreneurs, to offer business assistance, to spin off businesses from discoveries made inside the institution's walls, or to help entrepreneurs in their quest for funding. Some studies have suggested, however, that entrepreneurship assistance programs are fragmented, leaving gaps and overlaps in service provision (Lichtenstein & Lyons, 2001), are expensive and/or ineffective (Shane, 2009; Dabson, Malkin, Mathews, Pate & Stickle, 2003), or are unknown to entrepreneurs, especially in rural areas (Fortunato, 2009). One reason for this may be that these service innovations are just that – innovations in *offerings* by universities, rather than innovations in the *culture* of how universities conceptualize innovation and how they engage with entrepreneurs – and more broadly, citizens in fostering entrepreneurial behavior, economic growth, and development.

Our discussion here is therefore intended to move universities toward a cultural shift in how they engage entrepreneurs, pushing beyond the use of creativity toward process innovation, and adopting a practice of strategic adaptability that is an earmark of entrepreneurial action. Entrepreneurship assistance programs may be designed by university experts *for* the citizens, not *with* the citizens, involving citizens fully in the process of creating programs. We challenge universities to examine their own programs and culture critically to determine if the way they support entrepreneurship has encouraged citizens to become consumers, instead of producers, of information, public work, and thus, community development and democracy (Boyte, 2004). This includes the important task of developing entrepreneurial businesses to support local economies.

This article has three parts. First, we will discuss the situation of the modern university, and conceptually analyze how the current structure of engagement with the small business community could be improved through *institutional innovation.* We consider how such innovation differs from innovative services, technologies, and outputs of universities for entrepreneurial assistance, and offer five components of institutional innovations that differentiate them from common creativity. Second, we examine a public scholarship model of engagement to support the transformation of citizens into producers (rather than consumers) of knowledge, social prosperity, and entrepreneurship. Third, we support this argument with insights from a multiple case study examining differences in local organizational engagement with entrepreneurs in high and low entrepreneurship areas across three U.S. states: Maine, Pennsylvania, and Wisconsin. While examining local organizations more broadly, the qualitative and quantitative results offer insights about how universities can improve local engagement strategies for innovation.

2. Institutional Innovation

Before discussing institutional innovation, it bears mentioning what we mean by the term *institution.* Drawing from Schmid (2004), we think of institutions as relationships (via formal and informal rules, norms, and mores) that structure and order human action and expectations. Institutions frequently have their own culture, and a set of fairly consistent processes in the form of tasks and functions that they perform. We differentiate institutions from *organizations*, which we see as suites of institutions that form a broader identity. So, for example, a university can be thought of as an organization with its many colleges and departments, each with a different set of institutional rules and culture. Community outreach, or entrepreneurship outreach, is likely performed by an administrative unit or sub-organization within the university organization – perhaps a special department within a college, or a Cooperative Extension service, or both. Regardless, when we speak of institutional innovation here, we are speaking of rules, procedures, and the culture of engagement and outreach specifically, while we use the term organization to refer more generally to the contextual environment containing these institutions.

An institutional innovation is not an evolution in the products or services offered by an organization, but rather a paradigm-altering, disruptive change in the culture, policies, procedures, and processes of the organization itself. Innovation has many definitions, but we turn to the classic literature on entrepreneurship and utilize a perspective on innovation expressed by Schumpeter. In his *Theory of Economic Development,* Schumpeter (1934) considers what catalyzes cyclical change in modern economic life, as producers have not always produced the same things throughout history, nor have consumers consumed the same things. Great social changes – from political upheavals to wars to natural disasters to social movements – have also been followed by great changes in products and services produced by those who were able to capitalize on changing circumstances. People who capitalized on change by producing new goods and services themselves are *entrepreneurs,* and the activity of producing a new good or service is an act of creativity, and possibly innovation.

In Schumpeter's view, innovation is not a quiet, incremental process, nor is it commonplace. Where many economic theorists before Schumpeter's time had focused on issues of equilibrium and continuity in the marketplace (including

Schumpeter's mentor, Eugen von Böhm-Bawerk, and his classical liberal contemporary, Ludwig von Mises), Schumpeter himself focused on situations of *disequilibrium,* where entire markets would be shattered under the weight of obsolescence created by the rise of new industries. He coined the term *creative destruction* to describe the cyclical process through which new, innovative products and services overtake and replace older ones, thus sending old industries into a precipitous decline as new industries grow to absorb the labor force once employed in the old industries (1934). It is a messy, chaotic, wrenching process for individuals, economic sectors, and society one that is itself responsible for creating social change. It is also the mechanism by which economies progress and remain relevant – and it is almost entirely the handiwork of entrepreneurs.

Organizations (including universities) engaged in entrepreneurship development spend much of their time trying to elevate citizens with good ideas and high ambitions to a platform where they may become truly innovative, in turn obsoleting old industries and creating growth within a particular region or nation state. But, how frequently have universities, charged with stimulating entrepreneurship, undergone such a non-incremental change in the way they themselves practice entrepreneurship development? It is not a question of whether these universities are educating citizens with the latest knowledge and techniques for starting a small business. More broadly, the question is *how these universities arrive at this knowledge and these techniques,* and *how tghat process relates them to citizens and communities* through public engagement and interactions. Instead of "picking winners," or businesses most likely to be commercially successful, have universities adapted their teachings and research to educate citizens to be innovators and entrepreneurs across all domains of life and work? Universities may promote the latest knowledge, but have they innovated the way that they interact and engage with citizens and communities, and thus enhanced the contributions of their initiatives and role in society?

This change in how universities might envisage their function in stimulating entrepreneurship, we argue, is the source of institutional innovation essential for universities and colleges to effectively foster an entrepreneurial mindset and the possibility of greater economic and social prosperity in the regions they serve. It is marked by a fundamental cultural shift in how higher education organizations operate – their core processes – that replace, indeed make obsolete, old ways of doing research and educating and engaging citizens. It is also critical to encouraging "entrepreneurial behavior" within the university that goes beyond merely thinking creatively within the constraints of the current academic system.

3. Elements of Institutional Innovation

In our view, a true institutional innovation is characterized by five essential elements: non-marginal change, disequilibrium, creative destruction, shattered path dependency, and spilled silos. Each will be explained here.

3.1 Non-Marginal Change

In stark contrast to Schumpeter (1934), Kirzner (1973) painted a different picture of innovative behavior as it relates to entrepreneurs. In Kirzner's view, innovation is not a sudden cataclysm, but an accretive process that happens gradually over time. Rather than creating shocking disequilibria, Kirznerian innovation restores equilibrium to existing markets as entrepreneurs find new ways to reallocate resources to provide products and services that improve marginally upon their predecessors. This accretion of innovation leads to competitive behavior, with firms seeking to unseat their competitors through the quick and efficient unveiling of marginal changes built on existing technology.

While we agree that Kirzner's (1973) perspective indeed holds true for a substantial portion of economic competition, it represents somewhat of a "safe road" to innovation via small evolutions, rather than risky, paradigm-changing path that challenges the status quo in the way highlighted by Schumpeter (1934). Kirznerian innovation is also a route that is commonly represented by academic research practices, as this is a place where it is appropriate to build upon the foundations of prior work. However, when it comes to institutional culture, we argue that universities, widely perceived to be a locus for the world's most creative and innovative thinkers, cannot afford to take the route of small-scale, marginal adaptation. Many of the world's premier companies, NGOs, and organizations (especially in places like the Silicon Valley and Boston's Route 128) have been shown to routinely change their corporate structure, core missions, and even blur the boundaries between competitors and collaborators in order to develop landmark products and services (see, for example, Tidd, 1995). While many scholars continue to focus on issues of tenure track advancement and publish-or-perish survival, these would-be innovators are too labored under the institutional culture of the academy to keep pace with societal and market advancements in the private sector. While counterintuitive, we suggest that the seemingly less-risky Kirznarian incrementalism is, in fact, more risky than Schumpeterian non-marginal change in light of the dynamism of social change.

Put differently, to innovate at levels that are competitive with aggressive, non-academic institutions, universities must look inward at their own policies, procedures, and culture, or else risk being seen as sluggish, outdated, and slow to catalyze change. The institutional constraints of the academy are currently at a mismatch: faculty and practitioners within the university system still claim intellectual expertise over innovation processes, but must constantly battle

cultural and organizational constraints to creativity and innovation that do not exist elsewhere. A true institutional innovation will require the sloughing off of old ways of producing scholarship, and will adopt new definitions for what scholarship means, and what roles the university should play. This includes how progress and prestige are measured within the institution, and how faculty, staff, and administration balance the diffusion of knowledge within and across communities and regions with their commitment and ability to listen to, and take cues from, the citizens they serve. This in turn shapes entrepreneurial knowledge within the community, and the diffusion process itself. By drastically adjusting roles, incentives, and mores, universities and colleges will take a substantial step toward becoming more comfortable with perpetual institutional re-invention – a practice many of the most innovative organizations and firms engage in continuously in order to adapt to their changing environment.

3.2 Disequilibrium

Disequilibrium can easily be mischaracterized as "upsetting the apple cart," but relates more accurately to the contrast between Kirzner and Schumpeter seen above. Achieving non-marginal change is challenging when attempted using the same structure that produced the current system of university education and outreach. For example, curriculum development for entrepreneurship outreach may typically be done by senior faculty, who would then roll out the new courses following the approval of the department head, and then the dean, once put through a committee. A different approach might be taken where curricula are co-created among senior faculty, junior faculty, and *especially* local entrepreneurs who experience the realities of rural community entrepreneurship every day. When this is done, the power structure could then shift, giving more privilege to local stakeholders, and broadening the diversity of ideas that can be incorporated into curriculum and outreach. A greater diversity of ideas can not only emerge, but be taken seriously, as ideas no longer flow unidirectionally from senior faculty to citizen, but rather circularly, and cumulatively over time, among "experts" both within and outside the university.

By disrupting the traditional power structure of the flow of ideas, the values underlying curriculum development, outreach, and engagement are thrown into disequilibrium and allowed to hybridize with new ways of thinking and doing. Given that social change is ubiquitous and continuous, the relationship of universities and colleges with their students, citizens, and communities must also be one that supports creative and constructive disequilibrium, involving ongoing institutional innovation (or openness to institutional change), both internally to the university and with respect to external collaborations. Put very simply, in a rapidly changing world, protecting old ways of doing things is a quick route to becoming disconnected from changes in the general public. Universities must find ways to continually refresh their engagement strategies, not only to keep pace, but to establish themselves as innovative leaders and collaborators in rural areas

3.3 Creative Destruction (and Democratization)

As organizational structures and knowledge flows are thrown into disequilibrium, people who formerly lacked power and agency in the process of engagement have the opportunity to claim a stronger voice in the education and research process. As new ideas emerge and take root, old ways of organizing power, talent, and ideas will become obsolete. This is a challenging issue in many universities, as many faculty, staff, and administrators are keenly aware that relinquishing the power of expertise to others is a process that will be difficult to reverse. However, this is a one-sided argument. While those currently with power over education and research may see their privilege slipping, they may also fail to see the remarkable gains in their own knowledge that may be accrued, or completely new roles in which they may prove to be extremely valuable to the team. For example, an associate dean may be less useful managing the day-to-day operations of an entrepreneurship initiative, and more useful as a "pitch (wo)man" for the initiative, building public awareness, raising funds, creating a marketing campaign, and bringing new members into the initiative. These new roles may eventually supersede old roles, leading to the creative destruction of roles within the organization.

Changing roles represent a formidable shift for many organizations that have insulated these roles over time. The fundamental processes of how universities engage entrepreneurs and citizens will likely change with shifts in the sharing of power and privilege, with respect to new roles being played in the act of knowledge creation and application. Entrepreneurs and citizens may expect and demand that their experience, expertise, and wisdom will be respected and integrated in entrepreneurship development initiatives. Further, university administrators and faculty may find that their professional "expert" behavior and practice will shift to accommodate a genuine collaborative sharing of power and privilege with entrepreneurs and citizens, as opposed to a unidirectional transfer of knowledge, information, and technology from university to community. The overall effect is the democratization of expertise, knowledge, and entrepreneurial development. All such changes represent a type of creative destruction associated with institutional innovation as old systems of expert-to-citizen knowledge transfer are replaced by collaborative processes of co-created knowledge, including that of university experts. Fischer (2009) refers to this shift and reframing as shifting the expert-citizen frame to the citizen-expert/expert-citizen frame, reflecting a profound shift in tension and power among

experts and citizens in the creation and application of knowledge.

3.4 Shattered Path Dependency

Path dependency is the tendency of individuals to cling to established behaviors, cultural norms, and social arrangements, and to reject new arrangements that might disturb this equilibrium situation (Schmid, 2004; Nelson & Winter, 1982). Schumpeter (1934) portrays innovation as the abandonment of old ways of production, old products, services, and ways of producing, in favor of vastly new ways of doing things. Orgnaizations tend to respond with resistance when making this transition, as studies have shown repeatedly that individuals tend to favor continuity over change (Schmid, 2004). True institutional innovation results when the practices and processes of an organization have been replaced by newer, fresher ways of operating. It is not enough to step off the "path" briefly, or to walk parallel to the path, metaphorically speaking. Rather, true innovation results from the *shattering* of old pathways in favor of others. This means that individuals within the organizational context must be open to embracing completely new roles, learning new skills, and developing radically new, more effective ways of serving their core missions.

3.5 Spilled Silos

As the power structure is flattened and networks broaden to include individuals of diverse backgrounds within the university, disequilibrating innovators will inevitably encounter some organizational boundaries. Many organizations contain "silos," or intra-institutional human networks that traditionally only communicate within their established group, and with select other groups in the university under commonly-encountered circumstances. Consequently, this means that important information that may be beneficial to innovation may be isolated within these informational silos, and unable to escape due to pre-existing institutional constraints. Creating an environment of disequilibrium will mean eventually breaking these silos by including members of these information silos collectively in the innovation process. Due to path dependent tendencies, some individuals may not feel comfortable interacting with other groups, because such interaction has happened before and represents a perceived threat to the individual and collective status quo. However, spilling and breaking information silos are the only ways to create a true innovative disequilibrium that distributes information flows as widely as possible. Of course, this also applies to groups outside the university, as information silos that prevent innovative collaboration may exist among public and private organizations as well – even among informal groups and cliques in the local society. Breaking down barriers across discrete and/or isolated organizations using effective engagement strategies should be an explicit goal of institutional innovation that will lead to the maximization of ideas and the free communication of these ideas across the institutional context. Silos that exist between universities and communities, and the bodies of knowledge each represents, presents a particularly salient silo situation that requires spilling, so as to share expertise, information, and knowledge – further increasing opportunity and returns to the local society.

3.6 Balancing Continuity and Change

Taking the five components of institutional innovation together, innovation seems like a disruptive, chaotic, and frightening process. This may be the reason that the terms creativity and innovation are often casually interchanged. It is easy to be creative, think big, and make suggestions for action on a grand scale – as long as nobody has to act on the idea. It is also easy to call this practice "innovation," when in it fails to drive and achieve the non-marginal change necessary for true innovation to take place. Innovation requires a deep level of commitment to change, and to ensuring that the new institutional culture produces its intended outcomes despite adversity. Innovation requires a high degree of ownership over new processes, while creativity does not.

A common argument one could make is that it is foolish to scuttle all of the old culture abruptly when, to be fair, there is so much that universities still do quite well. For example, universities are still proficient at producing basic research, giving a robust and broad education to thousands of students, and producing spin-offs and indirect economic effects that stimulate economic growth and sustainability. It is impossible to argue, furthermore, that universities and do not spin off a multitude of new businesses that produce useful technologies and services. So, universities cannot possibly be *all* problematic, or hopelessly non-entrepreneurial if they already achieve these ends. Therefore, the structure of the university would appear to be a good catalyst for the transfer of knowledge and capacity building techniques between the university and community. Yet, the university too often remains a fundamentally detached institution that does not reach far beyond campus. While universities may be engines of technology, we must collectively ask whether spin-offs truly support rural areas, for example, by employing rural citizens, transferring benefits to local communities, and improving the capacity of rural citizens to continue to develop on their own. And, if the university is in such a position to benefit rural society, why does it remain a largely untapped resource for entrepreneurship development *beyond* the cultivation of spin-offs? The fundamental problem of this stagnant relationship can be found in the basic hegemonic expert-driven ideology and culture of the university and the resulting reliance of society upon such knowledge elite institutions.

One view, advanced by Boyte (2004), is that we as citizens within a democratic society have been reduced to mere functioning cogs in a great machinery of expertly produced knowledge and lifestyles. Citizens are no longer the creators of communities, or of civic ideas, but rely upon the ideas of those who are perceived to be objective and rational (Boyte, 2004). The development of the expert in society has come to mean that they are responsible for discovering truths, dispensing knowledge, and ultimately fixing problems (Peters et al. 2010). Passive acceptance of this relationship as citizens and non-experts has allowed society, including universities, to foster citizens into becoming consumers not producers of their own information, public work and democracy (Boyte, 2004).

In the face of the imperative of change, balancing continuity and change is perhaps the fundamental, transcendent societal and organizational dilemma and challenge over time. Change is necessary to remain relevant and strengthen effectiveness. Continuity requires building on existing strengths as shaped by new conditions and opportunities. Restructuring community-university relationships to better serve entrepreneurs and their communities and regions requires institutional innovation that affects engagement processes, while maintaining a balance with core strengths in basic and applied science and research, educating students, technology development and commercialization, evidenced-based human and social program development, policy sciences and analysis, and human health and medicine. Yet, the prospect of innovating around this relationship is largely foreign to academic institutions and requires a major shift away from the cultural norms that have defined the university (Boyte, 2010; Peters, Alter & Schwarzbach, 2010). Due to path dependent behavior, grounded in venerable cultural norms and practices that have served these organizations well in the past, universities are challenged to change in ways that increase their effectiveness in working with and for citizens and public and private organizations across society and, our particular interest in this study, rural entrepreneurs, so as to positively impact the rural economy.

4. Public Scholarship as Institutional Innovation

One particular method for building more effective relationships between universities and entrepreneurs is through the embrace and implementation of public scholarship. This form of scholarship creates the potential for a more balanced relationship between community and university through the equitable application of both expert and citizen knowledge to problems of meaningful social and public significance. In order to fully understand the scope of public scholarship as institutional innovation, it is necessary to consider the normative definition of scholarship. As previous sections have demonstrated, universities are highly privatized, individualistic, and infused with the positivistic traditions of objectivity (Boyte, 2010). Decades of operating with this structure have led to a definition of scholarship based on the detachment of knowledge creation from civic life (Boyte, 2010). Public scholarship reorients faculty and the university with regard to research and teaching, to develop a more balanced, democratic relationship between experts and citizens. In a public scholarship model, the very formation of knowledge and its application includes citizens as key partners.

Peters et. al. (2010) describes four normative traditions in higher education regarding the role of academic professionals in the public work of democracy: the *service intellectual*, the *public intellectual*, the *action researcher/public scholar/educational organizer (AR/PS/EO), and* the *"antitradtion."* Each of these traditions reflects a different conceptualization of the varying roles, and degree of engagement that academic professionals pursue in public work. The greatest level of detachment is represented by the antitradition, which positions the academic professional in a space that is devoid of any and all engagement with citizens beyond the academy. The role legitimizes its detached stance by maintaining that the work of scholars is to broaden intellectual capacity within the university and the disciplines through the expansion of knowledge and training of future scholars, with the deliberate purpose of maintaining the university as a source of trustworthy and objective knowledge creation untainted by interaction with the society under study. The *service intellectual* tradition positions academic professionals as unbiased responders to the needs of citizens, in which they remain fundamentally detached from any level of community engagement and contribution beyond that of their professional technical skills and knowledge. The *public intellectual* tradition positions the academic as an inherently biased expert, social critic, and civic educator, interested in the values and ideals of the community, but detached from engagement on key issues. The public intellectual strives to provide meaningful work through speeches and publication writing, but not through direct engagement with citizens. The *service intellectual* is closely tied to the detached nature of the researcher found in the logical positivism tradition, while the *public intellectual* fundamentally recognizes the inherent biases of the researcher, as found in the post-positivist thinking of philosophers like Karl Popper.

The AR/PS/EO tradition finds its intellectual roots more in studies of American society, like the work of Alexis de Toqueville, who studied the curious tendency of Americans to spontaneously organize to solve local problems; and John Dewey, whose pragmatist stance explained human values as the result of deeply sociological and situational components. The rejection of the detached stance of the public and service intellectuals privileges the grassroots nature of democratic thought (see Matthews, 2014a) and the role of emotion and universalism as a basis for justice and political thought (see Nussbaum, 2013). The AR/PS/EO tradition engages citizens and communities with the

understanding that local knowledge is both necessary and desirable for informed scholarship. The AR/PS/EO forms highly collaborative relationships with partners outside the university. In doing so, this tradition focuses on the university's capacity to be active in relationship creation and the promotion of citizen well-being. Through the more interactional approach, which shifts the normative culture from "I" to "we," the AR/PS/EO tradition embodies the ideals of institutional innovation and creates a platform for universities to have an active role in engagement. The effectiveness of this form of public scholarship as institutional innovation is visible in the culture of engagement that has emerged in recent years. These engaged scholars ask the question, "What does public action look like in higher learning and knowledge production?" (Boyte, 2010). In many ways, this is a radical question that strikes at the foundations of scholarship (Bridger & Alter, 2006). For the faculty and academic professionals who participate in engagement, scholarship is redefined as a relational not an individual activity, as public not private craft (Peters et. al., 2003). Through the use of a more civic-oriented lens, public scholarship requires a more thorough and intimate understanding of the community – not as a recipient of knowledge, but as an equal participant in problem solving and learning. The fusion of expert and citizen is best described by Fisher (2005) when he states:

> From this perspective, the post-positivist expert must function as an interpretive mediator operating between the available analytical frameworks of social science and competing local perspectives (Innes, 1990). Such criteria are employed to organize a dialectical exchange that can be liked to a "conversation in which the horizons of both scientist and local citizen are extended through confrontations with one another" (Dryzek, 1982: 322). Thus interactions among analysts, citizens, and policy makers are restructured as a conversation with many voices (Park, 1993). Given the reduced distance between expert and citizens, the role of both can be redefined. Whereas the citizen becomes the "popular scientist," the analyst takes on the role of a "specialized citizen" (p. 80).

Universities that support public scholarship, and public scholars reinvigorate the possibilities of entrepreneurial activity within the rural community. This is illustrated by a practitioner profile in *Engaging Campus and Community* which highlights two social scientists from the University of California Davis, whom actively engage with citizens to support and build "community food systems" (Peters, Jordan, Adamek & Alter, 2005). Peters et al. (2005) summarize their work:

> As one of them puts it, their work as scholars is focused on developing "ideas about how people in community settings can create forms of economic development that have a greater degree of democracy and community control and a higher environmental sensibility to them." Through their collaborative work with one community that pursued these ideas in practice, the two scholars publish several papers and book chapters. They see their work as an expression of the mission of their university, which one of them describes as being "about supporting local people, in all their variety, in developing a sense of efficacy, pride, standing, and problem-solving capability that is at the heart of the democratic capability of citizens" (p. 12).

It is for this reason that public scholarship should be embraced as a critical component in the progress and implementation of institutional innovation.

Establishing and maintaining a culture of public scholarship requires a great deal of effort and time commitment on the part of the university (Alter, 2005). Public scholarship must be a university priority that integrates researching, teaching, learning, and engagement. This is not to say that public scholarship should be an alternative to more traditional forms of scholarly activity. Instead, it must be viewed as central and endogenous to scholarship across the board, including traditional forms of scholarship. For public scholarship to have a meaningful and sustained impact, serious faculty and organizational development must occur within a changed organizational culture. This requires strong institutional leadership, particularly from university presidents, provosts, deans, and academic department heads. The systematic creation of enabling settings is also an important part of this process. Enabling settings are organizational, administrative, and cultural innovations internal to the university that promote, support, and incentivize university faculty, students, staff, administrators, and especially community members in the work of public scholarship as central to the core missions of the university (Alter, 2005).

A public scholarship approach, as described above, prevents universities from succumbing to what is known an "organization-first approach." This approach is an organizational method of engagement based on looking inward for solutions rather than outward to the community (Harwood, 2010). The unintended consequences of maintaining barriers to public engagement result in programs that are disconnected from citizen and the community (Harwood, 2010). Public scholarship mitigates these barriers and establishes an outward community-first approach.

If university capacity is strengthened to support the ideals and functioning of public scholarship, the partnership between community and university will have a space in which to grow and evolve. Public scholarship represents a

non-marginal philosophical and process shift in university culture, the nature of faculty work, and the role of citizens – dramatically impacting how the university views and practices engagement with communities and citizens. It is important to recognize that we are not arguing that all faculties should be engaged in public scholarship as we define it above. Rather, our argument is for a more pluralistic academic scholarship that includes a more fundamental and valued role for public scholarship as exemplified in the AR/PS/EO model, an innovation that holds significant promise for strengthening knowledge creation, teaching, and community-university partnerships, including those focused on fostering entrepreneurship and economic prosperity in rural communities and regions.

5. Filling Innovation and Entrepreneurship Gaps in Distressed Regions

As rural areas in the United States have faced unparalleled socio-economic changes over the past few decades (see Buttel, 2003; Drabenstott, 2001, for examples), the structure of rural economies has followed suit. Family farms, one of the earliest forms of American entrepreneurship, have favorably impacted American business culture with the farmer's well-earned reputation for independence, hard work, and thrift (Richards & Bulkley, 2007). However, the family farms that dominated the American rural landscape prior to 1970 have in many cases been sold, consolidated, or integrated with a more globalized agri-food system (Buttel, 2003). The loss of farming has had strong economic, cultural, and social impacts on rural places (Fitchen ,1991), and as communities have seen less economic activity from small-scale agriculture, they have also lost banks, restaurants, implement dealers, and many other businesses. As local businesses disappear, local economies further contract and jobs become harder to find (Ghelfi & McGranahan, 2004).

In the wake of these economic shifts, many people have turned to entrepreneurship out of necessity – and do so without adequate capital, planning, or business management skills, leading to low business growth and higher failure rates (Shane, 2009; Nolan, 2003). This has not completely impeded self-employment or firm creation activities in rural areas. The number of rural firms across all economic sectors grew between the 1980's and 1990's, and by the mid-1990's even outpaced self-employment growth levels in urban areas (Henderson, 2002). The self-employed in both rural and urban areas tend to be concentrated in three industries: services, retail trade, and construction (69.4 percent of self-employment in rural areas versus 73.5 percent of self-employment in urban areas) (Henderson, 2002: 52). However, the rural self-employed are more heavily engaged in the nonfarm agricultural and natural resource industries than their urban counterparts, accounting for about ten percent of rural self-employment (Henderson, 2002: 53). The absolute numbers of entrepreneurs in rural areas suggest that entrepreneurship is alive and well, although there tend to be fewer high-growth firms in rural areas than in urban areas, and rural income from self-employment is about 31 percent less on average than in urban areas (Henderson, 2002: 54). Tolbert et al. (2002) have shown that rural areas with high levels of self-employment[1] also have higher metrics of local well-being, relative to urban areas, including lower unemployment and poverty, and higher levels of community engagement.

Despite rural self-employment growth, studies of both rural and urban areas have shown that entrepreneurs – and especially high-growth entrepreneurs that create jobs – are disproportionately drawn to well-diversified metropolitan areas and places containing centers of university and government research (Acs & Malecki, 2008; Acs & Armington, 2006; Rondinelli, 2004). Rural entrepreneurs commonly face challenges to entrepreneurship that are unknown to urban entrepreneurs. Limited local demand, poor access to business services, remoteness, limited business knowledge and supply networks, and lagging overall economies pose significant challenges to small businesses seeking to grow (Dabson, 2001). Local economies in rural areas are often dominated by one industry or by agriculture, exposing these places to higher levels of sector-specific risk than their urban counterparts (Dabson et al., 2003; Dabson, 2001). The small size and geographic isolation of communities further limits access to human resources and a diversified labor pool, broad markets for buying and selling, and institutional support mechanisms for small business (North & Smallbone, 2000).

Indeed, rural areas face both challenges and opportunities with regards to entrepreneurship development that differ from urban areas. One question that arises is whether these challenges and opportunities are uniform or different across rural areas – especially when the effects of urban amenities are not present. The following analysis examines differences in the perception of local entrepreneurs and organizational actors about what is important to stimulating entrepreneurship. The analysis is conducted across six communities and three states that have different levels of entrepreneurship to understand how relationships among entrepreneurs and between entrepreneurs and their local organizational context shape entrepreneurial action.

6. Evidence from a Recent Study

The study was conducted to identify differences in how entrepreneurs interact among themselves, and with local organizations, in areas of high and low entrepreneurial activity, among other objectives. A multiple case study research

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design (see Yin, 2009; Stake, 2005 for a full discussion of this method) was used to ascertain – from the perspective of local entrepreneurs and institutional actors – how perceptions about entrepreneurial opportunity and local interaction change from place to place, and how local relationships structure, facilitate, and/or inhibit entrepreneurial activity. The findings were intended to reveal how these important local relationships may support entrepreneurship in some communities, while inhibiting it in others. While universities were not selected specifically, local universities (where they existed) and their subsidiary organizations (such as a branch of the Small Business Development Center) were included in the selection set of local organizations when possible. The results focus on those findings that specifically examine the relationship between entrepreneurs and organizational actors.

6.1 Methods

6.1.1 Site Selection.

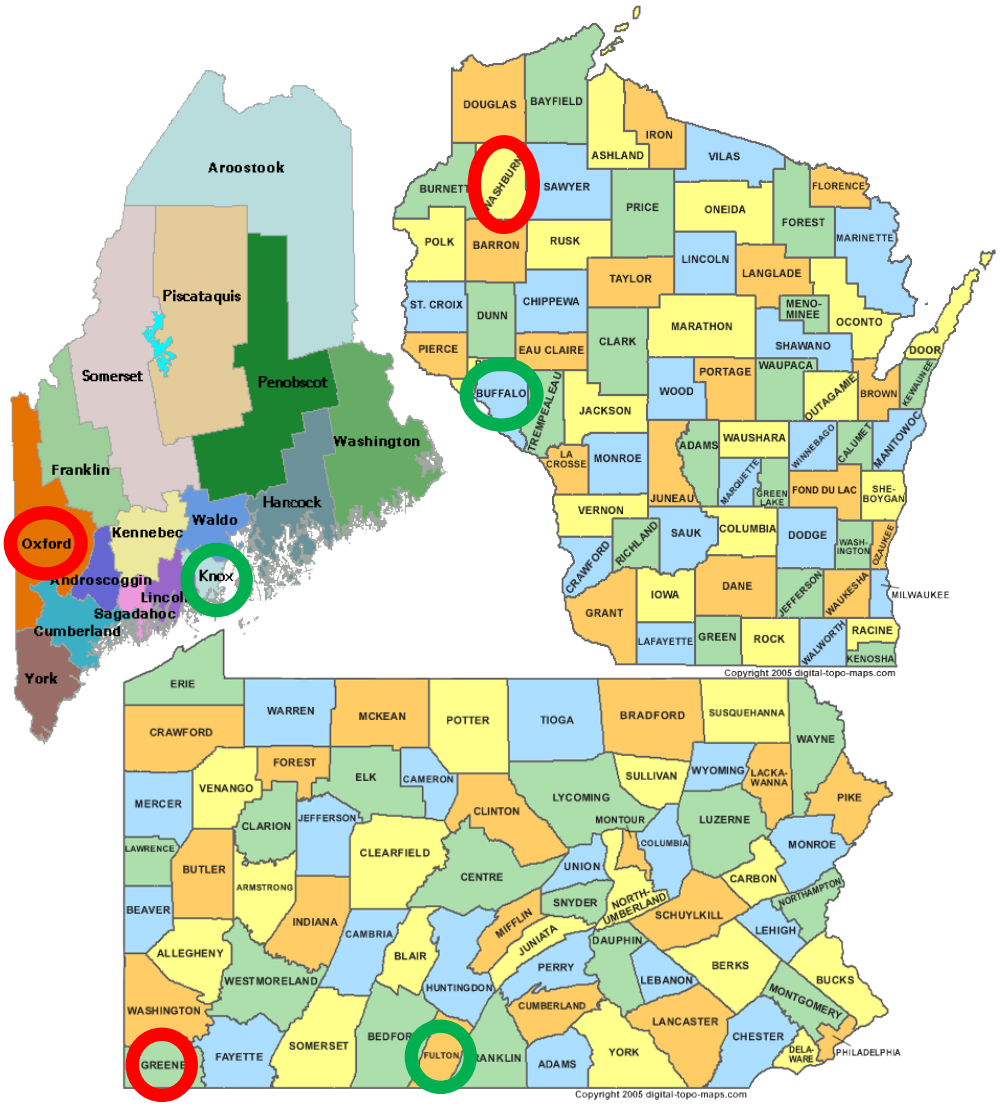
Areas of high and low entrepreneurship were selected from three states, each representing three regions with different cultural and economic histories: Maine (in New England), Pennsylvania (in the Mid-Atlantic Rust Belt), and Wisconsin (in the Northern Midwest). All three regions have a long history in agriculture, but also in manufacturing and (to a lesser extent in Wisconsin) extraction and lumbering. A study by Goetz (2006) on county-level entrepreneurship data found that, among rural counties, there is wide variation in both entrepreneurial *breadth* and *depth. Breadth* is expressed as the share of self-employed individuals to total population in a county, and *depth* is the average income earned by self-employed individuals compared to the average income of wage employees. A similar analysis was conducted for this research in Maine, Pennsylvania, and Wisconsin, examining breadth and depth levels for all nonmetropolitan counties[2]. An index was created comparing these levels to the state non-metropolitan average, and then combining breadth and depth indices into a compound index measuring the overall level of entrepreneurship in the county. The point of this exercise is to separate counties with many entrepreneurs who are also earning high incomes from counties with few entrepreneurs who are also earning low incomes. The highest and lowest entrepreneurship counties from within the nonmetropolitan portion of each state were then selected as study sites.

While this analysis can only be conducted at the county level, counties are quite large and contain many smaller municipal government boundaries. It was necessary to select one community within each county to ensure that a consistent set of formal institutional rules and policies prevailed over the study site (so as not to introduce additional, unwanted sources of variation). Since the study counties have small populations, the community with the highest population within the county was chosen. An analysis of economic and population trends using 1990-2005/09 data from the U.S. Census (2011) and the Bureau of Economic Analysis Regional Economic Information System (REIS) (2011) revealed that these communities universally had higher poverty and unemployment levels (even in high entrepreneurship communities) – and lower median household incomes – than the surrounding counties. Otherwise, they differed little from their surroundings, making them ideal places to conduct the study (Fortunato & Alter, 2011). The only exception occurred in Buffalo County, Wisconsin – the high entrepreneurship county – where the researcher's initial contact with the largest community revealed that there were few small businesses to be found, and that virtually all the county's small business activity was found in the county's second-largest community. The selected sites, counties, and their location within their respective states can be found in Figure 1.

6.1.2 Recruiting Study Participants.

A combination of entrepreneurs and institutional actors were selected using snowball sampling within six rural study communities. Initial contact was always made with a local government official, local development agency, or chamber of commerce leader. These individuals were asked to identify entrepreneurs and other organizational actors in the region who were active in the local community. These participants were asked to identify more participants until no new participants in the community were named, or those who were named were unwilling to participate. For this research, an *entrepreneur* was defined instrumentally as a self-employed individual who has also started a business with an entity that is distinct and different from them personally. Forty-seven entrepreneurs participated in face-to-face interviews, and of these, 36 agreed to complete a written survey following the interview. *Organizational actors* are individuals within local organizations (such as the local government, local university, chamber of commerce, or Main Street program, for example) who were directly responsible for small business development within the study site. Twenty-eight institutional actors participated in face-to-face interviews, and of these, 21 agreed to complete a written survey. Participants also had the option of describing themselves as *both* entrepreneurs and organizational actors. Nine such individuals participated in face-to-face interviews, and all agreed to fill out a written survey.

High Entrepreneurship	Maine	Pennsylvania	Wisconsin
County (Index)	Knox County (132.1)	Fulton County (132.9)	Buffalo County (142.2)
Community	Rockland	McConnellsburg	Alma



Low Entrepreneurship	Maine	Pennsylvania	Wisconsin
County (Index)	Oxford County (80.1)	Greene County (72.5)	Washburn County (61.4)
Community	Rumford	Waynesburg	Spooner

Figure 1 – Selected Research Counties, Communities, and Their Locations (Compound Entrepreneurship Index in Parentheses). Adapted from Fortunato (2011), p. 132.

6.1.3 Face-to-Face Interviews and Surveys.

Face-to-face interviews were used to investigate how relationships among and between entrepreneurs and local organizations have either enhanced or inhibited local small business development. Results relating to entrepreneur/organizational relations are summarized in the results section. The survey used Likert-type battery items, asking respondents to rate the importance of various factors to starting a business, along with personal characteristics like age, income, and education. These batteries included questions about the importance of collaboration among and between entrepreneurs and organizational actors, as well as a battery examining the importance of factors expected to be

important for small business development. These small business development factors came from two sources: Lichtenstein and Lyons (2006), who proposed a set of *individualistic* factors like personal skills and maturity, and Markley and Macke (2003), who proposed a set of *community-level* factors including infrastructure, taxes, and local programs for entrepreneurship development. These factors, and the corresponding mean scores for each factor by entrepreneur/organizational actor/both distinctions, are listed in Tables 1 and 2 in the results. The results will focus on those items that differed significantly across all three distinctions.

6.1.4 Study Limitations

The study is limited to a six-site case study, which reduces its overall external generalizability. The focus of the study was intended to stimulate thinking about concepts of entrepreneurial culture and organizational action, rather than to determine the extent to which the phenomena under study occur across a wide range of circumstances. Additionally, the use of snowball sampling, while insuring higher rates of participation, is more biased toward examining in-group dynamics of entrepreneurs and institutional actors who are well-known, while excluding those who are less well-known. In retrospect, the researchers would have preferred a greater focus on questions about organizational dynamics in addition to what is presented here. The research also focused on local entrepreneurship support organizations, rather than universities specifically, since there was often no university in the study area (itself indicative of an opportunity for wider engagement). All of these limitations could be addressed by a larger, randomly-sampled, survey-based study in more locations with a stronger university focus.

6.2 Results

6.2.1 Results of the Survey

The following tables offer insights about the different ways that entrepreneurs and organizational actors (including universities, and also government and economic development programs) think about local collaboration, innovation, and how to best support local entrepreneurship. These tables are drawn from the written surveys mentioned in the methodology. Following these tables, summary results from the face-to-face interviews regarding entrepreneur-organization collaboration are presented.

Data for this study showed that the age, income structures, and education levels of entrepreneurs, institutional actors, and individuals who describe themselves as "both" did not differ substantially. This was also true of the length of time one spent in the community (28.37 years average) and/or in their current position (13.4 years average), and the number of participants who were native to the community (41.5 percent) (Fortunato, 2011: 156). To begin, Table 1 examines differences in attitudes about collaboration among entrepreneurs, organizational actors, and individuals who describe themselves as "both."

Table 1. Importance of Collaboration to Local Entrepreneurship Development for Entrepreneurs, Organizational Actors, and Both (5=strongly agree, 1=strongly disagree)

			Frequency Analysis					
Entrepreneurs	**Mean**	**Standard Deviation**	**Strongly Agree**	**Agree**	**Neither Agree/ Disagree**	**Disagree**	**Strongly Disagree**	**Total N**
Entrepreneurs Collaborate With Institutions	4.18	0.727	5	19	8	0	1	33
Entrepreneurship About Improving the Community	4.18	1.014	16	11	2	4	0	33
Collaboration Among Entrepreneurs	4.03^	0.810	10	15	7	1	0	33
Institutions Collaborate With Entrepreneurs	3.82**	0.808	11	18	3	1	0	33
Institutional Actors								
Entrepreneurs Collaborate With Institutions	4.43	0.507	9	12	0	0	0	21
Entrepreneurship About Improving the Community	4.19	0.602	6	13	2	0	0	21
Collaboration Among Entrepreneurs	4.52^	0.512	11	10	0	0	0	21
Institutions Collaborate With Entrepreneurs	4.43**	0.507	9	12	0	0	0	21
Both								
Entrepreneurs Collaborate With Institutions	4.33	0.707	4	4	1	0	0	9
Entrepreneurship About Improving the Community	4.56	0.527	5	4	0	0	0	9
Collaboration Among Entrepreneurs	4.11^	1.054	4	3	1	1	0	9
Institutions Collaborate With Entrepreneurs	4.33**	0.707	4	4	1	0	0	9

Adapted from Fortunato (2011), p. 165.

^ $p < 0.10$

** $p < 0.05$, using a Welch F-test for heteroschedastic distributions (determined by use of a Brown-Forsythe Test for equality of variance)

Table 1 illustrates that Organizational actors placed a higher overall value on collaboration and what it means to entrepreneurship development than entrepreneurs themselves. Specifically, orgnaizational actors felt that collaboration among entrepreneurs (4.52 mean score) was somewhat more important than did individuals in the "both" category (4.11 mean score) and entrepreneurs themselves (4.03 mean score) – a significant difference at the $p < 0.10$ level. A larger difference related to organizations collaborating with entrepreneurs, implying that institutions should reach out more to the small business community. Organizational actors were most likely to agree with this assertion (4.43 mean score), followed by individuals in the "both" category (4.33 mean score), followed more distantly by entrepreneurs (3.82 mean score), a significant difference at the $p < 0.05$ level. However, these differences are, overall, quite small, and should not imply that entrepreneurs are averse to collaboration. Most strikingly, very few respondents disagreed or strongly disagreed with the idea of collaboration, or that entrepreneurship is about improving the community (implying an ethos of helping one's neighbor), and mean scores overall for these collaborative measures were very high. Why, though, might entrepreneurs be somewhat less inclined to agree that collaboration is important to local entrepreneurship development than institutional actors? For insight, Table 2 examines a range of skills found by Markley and Macke (2003, examining community factors) and Lichtenstein and Lyons (2006, examining personal skills) to be important to launching and sustaining a small business.

The data above show few significant differences. However, of note, while all three groups rated personal maturity as being very important to entrepreneurship development, entrepreneurs were most likely to do so (4.89 mean score), followed by institutional actors (4.76 mean score) and individuals in the "both" category (4.44 mean score), a significant difference at the $p < 0.10$ level. Conversely, organizational actors were more likely to rate as important basic entrepreneurial training for adults (a 4.24 mean score, versus 3.64 for entrepreneurs and 3.56 for both, significant at $p < 0.05$), recognition for entrepreneurs (4.38 mean score, versus 3.78 for both and 3.61 for entrepreneurs, significant at $p < 0.01$), and customized entrepreneurship coaching (4.10 mean score, versus 4.00 for both and 3.56 for entrepreneurs, significant at $p < 0.10$). Put differently, when it comes to entrepreneurship development, entrepreneurs tend to believe most strongly in that which they control – their personal maturity and skills, while organizational actors slightly favor what they do best, creating support programs and stimulating a more entrepreneurial community through organizing. Such a finding strongly supports the notion that local organizations may pursue an "organization-first" perspective that is at odds with the values of the AR/PS/EO style of publicly-engaged scholarship and outreach.

6.2.2 Results of the Face-to-Face Interviews.

Deeper understandings about this dynamic between entrepreneurs and organizational actors emerged much more clearly in face-to-face interviews. Interviews in the six study sites showed that healthy collaborations among small businesses were more prevalent in high entrepreneurship communities than in low entrepreneurship communities. These collaborations had one key criterion – they were fundamentally driven by entrepreneurs or members of the small business community, while in low entrepreneurship communities, entrepreneurs were more likely to report that local small businesses behaved as competitors rather than collaborators.

To offer some concrete examples, entrepreneurs in Rockland, Maine had a particularly active chamber of commerce. Despite the existence of this thriving organization, the chamber tended to favor membership by larger and more established companies – largely in the seafood and food processing industry. When entrepreneurs approached the chamber to co-author a community development block grant to revitalize Main Street, they were rebuffed. It was not until a member of the small business community was named as chamber President that the entrepreneur perspective was able to find a voice in the chamber, and in the local city council. The relationship between Main Street entrepreneurs began to grow, as small business needs were more easily addressed, and thriving downtown business groups continue to enjoy a robust social and economic life in direct cooperation with the chamber. The result has been a bustling Main Street filled with local entrepreneurs in multiple industries, and specialty entrepreneur groups related to art, restaurants, historic inns – leading to the creation of local festivals and events that drive business to the downtown area. A similar situation occurred in McConnellsburg, Pennsylvania, where the chamber of commerce became moresmall business-oriented when an entrepreneur was named to lead the chamber – again leading to a dramatic increase in small business activities, local festivals, and interaction among entrepreneurs.

Table 2. Importance of Community Factors and Personal Skills to Entrepreneurship for Entrepreneurs, Institutional Actors, and Both (5= very important, 1= very unimportant)

			Frequency Analysis					
Entrepreneurs	**Mean**	**Standard Deviation**	**Very Important**	**Important**	**Neither Imp./ Unimp.**	**Un-important**	**Very un-important**	**Total N**
Personal Maturity (Skills)	4.89^^	0.323	31	4	0	0	0	35
Reasonable Local Taxes/Regulations (Basic - Infrastructure)	4.61	0.599	24	10	2	0	0	36
Banks Willing to Lend to Small Biz (Advanced)	4.58	0.906	27	6	1	1	1	36
Management Skill (Skills)	4.57	0.558	21	13	1	0	0	35
Reliable, Affordable Utilities (Basic - Infrastructure)	4.36	0.723	17	16	2	1	0	36
Affordable Broadband Internet (Basic - Infrastructure)	4.28	1.003	19	12	2	2	1	36
Entrepreneurs Stimulate Economic Development (Basic - Culture)	4.22	0.898	17	12	5	2	0	36
Technical Skill (Skills)	4.20	0.719	13	16	6	0	0	35
Focus on Entrepreneurship (Basic)	4.17**	0.655	11	20	5	0	0	36
Market Opportunity Awareness Programs (Advanced)	4.14	0.899	15	13	6	2	0	36
Attractive, Affordable Real Estate (Basic - Infrastructure)	4.11	0.919	14	14	7	0	1	36
Business Services (Basic - Infrastructure)	4.03	0.971	12	17	4	2	1	36
Entrepreneurship as Accepted Lifestyle (Basic - Culture)	3.89	1.036	12	12	9	2	1	36
Support Organizations Specific to Small Biz (High Performance)	3.89	0.900	8	18	7	1	1	35
High Quality of Life (Basic - Culture)	3.83	1.000	11	12	9	4	0	36
Entrepreneurship in the Schools (High Performance)	3.77	0.973	7	17	9	0	2	35
Local Angel and Equity Investors (High Performance)	3.67	0.828	5	16	14	0	1	36
Basic Entrepreneurial Training for Adults (Advanced)	3.64**	1.150	10	10	11	3	2	36
Recognition for Entrepreneurs (Basic - Culture)	3.61***	1.022	7	14	10	4	1	36
Extra-Curricular Youth Entrepreneurship Programs (Advanced)	3.61	0.964	6	15	11	3	1	36
Customized Entrepreneurship Coaching (High Performance)	3.56*	1.054	7	12	13	2	2	36
No Fear of Tarnished Reputation from Failure (Basic - Culture)	3.47	1.028	5	15	9	6	1	36
Institutional Actors								
Personal Maturity (Skills)	4.76^^	0.436	16	5	0	0	0	21
Reasonable Local Taxes/Regulations (Basic - Infrastructure)	4.38	0.498	8	13	0	0	0	21
Banks Willing to Lend to Small Biz (Advanced)	4.52	0.602	12	8	1	0	0	21
Management Skill (Skills)	4.62	0.590	14	6	1	0	0	21
Reliable, Affordable Utilities (Basic - Infrastructure)	4.43	0.598	10	10	1	0	0	21
Affordable Broadband Internet (Basic - Infrastructure)	4.52	0.814	14	5	1	1	0	21
Entrepreneurs Stimulate Economic Development (Basic - Culture)	4.38	0.669	10	9	2	0	0	21
Technical Skill (Skills)	4.43	0.598	10	10	1	0	0	21
Focus on Entrepreneurship (Basic)	4.24**	0.768	9	8	4	0	0	21
Market Opportunity Awareness Programs (Advanced)	4.29	0.644	8	11	2	0	0	21
Attractive, Affordable Real Estate (Basic - Infrastructure)	4.38	0.590	9	11	1	0	0	21
Business Services (Basic - Infrastructure)	4.43	0.676	11	8	2	0	0	21
Entrepreneurship as Accepted Lifestyle (Basic - Culture)	4.19	0.873	9	8	3	1	0	21
Support Organizations Specific to Small Biz (High Performance)	4.10	0.768	6	12	2	1	0	21
High Quality of Life (Basic - Culture)	4.29	0.717	9	9	3	0	0	21
Entrepreneurship in the Schools (High Performance)	3.95	1.071	9	4	6	2	0	21
Local Angel and Equity Investors (High Performance)	4.00	1.000	8	7	4	2	0	21
Basic Entrepreneurial Training for Adults (Advanced)	4.24**	0.768	9	8	4	0	0	21
Recognition for Entrepreneurs (Basic - Culture)	4.38***	0.590	9	11	1	0	0	21
Extra-Curricular Youth Entrepreneurship Programs (Advanced)	3.90	1.044	8	5	6	2	0	21
Customized Entrepreneurship Coaching (High Performance)	4.10*	0.768	7	9	5	0	0	21
No Fear of Tarnished Reputation from Failure (Basic - Culture)	3.65	0.988	4	7	8	0	1	20
Both								
Personal Maturity (Skills)	4.44^^	0.882	6	1	2	0	0	9
Reasonable Local Taxes/Regulations (Basic - Infrastructure)	4.33	0.500	3	6	0	0	0	9
Banks Willing to Lend to Small Biz (Advanced)	4.56	0.527	5	4	0	0	0	9
Management Skill (Skills)	4.56	0.726	6	2	1	0	0	9
Reliable, Affordable Utilities (Basic - Infrastructure)	4.44	0.527	4	5	0	0	0	9
Affordable Broadband Internet (Basic - Infrastructure)	4.33	0.707	4	4	1	0	0	9
Entrepreneurs Stimulate Economic Development (Basic - Culture)	4.33	0.707	4	4	1	0	0	9
Technical Skill (Skills)	4.22	0.667	3	5	1	0	0	9
Focus on Entrepreneurship (Basic)	3.56**	0.726	1	3	5	0	0	9
Market Opportunity Awareness Programs (Advanced)	4.00	0.866	3	3	3	0	0	9
Attractive, Affordable Real Estate (Basic - Infrastructure)	4.22	0.972	5	1	3	0	0	9
Business Services (Basic - Infrastructure)	4.44	0.527	4	5	0	0	0	9
Entrepreneurship as Accepted Lifestyle (Basic - Culture)	4.33	0.500	3	6	0	0	0	9
Support Organizations Specific to Small Biz (High Performance)	4.11	1.054	4	3	1	1	0	9
High Quality of Life (Basic - Culture)	4.11	0.782	3	4	2	0	0	9
Entrepreneurship in the Schools (High Performance)	3.78	0.833	2	3	4	0	0	9
Local Angel and Equity Investors (High Performance)	3.89	0.601	1	6	2	0	0	9
Basic Entrepreneurial Training for Adults (Advanced)	3.56**	0.726	1	3	5	0	0	9
Recognition for Entrepreneurs (Basic - Culture)	3.78***	0.667	1	5	3	0	0	9
Extra-Curricular Youth Entrepreneurship Programs (Advanced)	4.00	0.866	3	3	3	0	0	9
Customized Entrepreneurship Coaching (High Performance)	4.00*	0.707	2	5	2	0	0	9
No Fear of Tarnished Reputation from Failure (Basic - Culture)	3.44	0.726	1	2	6	0	0	9

Adapted from Fortunato (2011), p. 178.

^^ $p < 0.05$

* $p < 0.10$, using a Welch F-test for heteroschedastic distributions (determined by use of a Brown-Forsythe Test for equality of variance)

** $p < 0.05$, using a Welch F-test for heteroschedastic distributions (determined by use of a Brown-Forsythe Test for equality of variance)

*** $p < 0.01$, using a Welch F-test for heteroschedastic distributions (determined by use of a Brown-Forsythe Test for equality of variance)

Low entrepreneurship communities exhibited very consistent patterns between entrepreneur and organizational actor participants: entrepreneurs felt strongly that local organizations were disconnected from entrepreneurs, fragmented, and primarily concerned with larger or more established industries. This problem was most severe in Waynesburg, Pennsylvania, where entrepreneurs noted that entrepreneurship assistance was very hard to find, because local bureaus and governments were extremely fragmented and difficult to access. Many entrepreneurs across low entrepreneurship communities complained they did not feel they had voice in the local government or local decision making processes, and their initiatives and ideas were often quickly rebuked by city council members who resisted change. Since many entrepreneurs come from outside the community, several entrepreneurs – particularly in Spooner, Wisconsin – noted that they felt socially isolated from the local community. Entrepreneurs in these communities were also more likely to adopt competitive mindsets against one another, because the local population in each study site was declining along with local market share, and many entrepreneurs found themselves clinging to whatever customers they have left. This competitiveness was exacerbated by the lack of small business groups that welcomed entrepreneurs and encourage entrepreneurial interaction, or the incorporation of a small business perspective in local initiatives. In each case, small business "assistance" was available, but entrepreneurs did not feel that this assistance was useful, or that their local organizations went far enough to include entrepreneurs.

7. Discussion

The findings, while investigating institutions broadly defined, are also useful for informing ways to build better relationships between universities and entrepreneurs, as universities represent a specialized type of organization containing expert-driven knowledge. Perhaps the central finding in these results is not that entrepreneurs favor collaboration less than organizational actors – indeed, those communities where entrepreneurs collaborate most appear to be associated with higher levels of entrepreneurship breadth and depth. In particular, survey results suggest that entrepreneurs may favor their own skill sets more strongly than organized assistance programs, perhaps because these programs fail to meet their needs as a group. However, face-to-face interview results demonstrate that, in places where small businesspeople have assumed leadership positions in local organizations, small business perspectives became part of the public and organizational dialogue, and robust partnerships between entrepreneurs and organizational actors emerged. In these cases, it was circumstances where grassroots leadership and the deep involvement of entrepreneurs, combined with engaged local organizations, helped to support the local small business community.

The study also revealed stark differences between entrepreneurs and organizational actors with regard to the factors that they identified as important to launching and sustaining a small business. Survey data showed that entrepreneurs were more likely to rate personal maturity and skills as being very important to entrepreneurship development, whereas organizational actors were more likely to rate as important basic entrepreneurial training for adults and customized entrepreneurship coaching. These are types of 'organization-first' support programs typically offered by universities. Entrepreneurs sought to collaborate with organizations, but seemed more optimistic about working with institutions to catalyze the use of their own skills, rather than to be part of a prescribed assistance or education program. High entrepreneurship communities contained entrepreneur-organization collaborations that were successful because entrepreneurs were elected to and took on leadership roles (for example in local chambers of commerce), and thus the perspectives of the small business community were well-represented as part of organizational and broader public dialogues.

While the limitations of this study certainly warrant further research, there are indeed some initial implications for university administrators and entrepreneurs alike. Administrators may wish to evaluate the extent to which their current entrepreneurship programs represent the *service intellectualism*, *public intellectualism*, or the *AR/PS/EO* traditions. To do this only requires examining programs reflexively (see Schön, 1987 for a primer on teaching and learning reflectively in the professions). Is expertise flowing from the university to the entrepreneur? Or, do entrepreneurs have the opportunity to *collaborate* with universities, taking the lead from time to time on projects? Is the university flexible in its administration of programs, or does the university take a "one size fits all" approach to entrepreneurial engagement? Is the university collaborating broadly with entrepreneurs and other institutions, or does it remain isolated from these other groups? Most importantly, has the university taken the time to really understand the motivation of entrepreneurs in their area? Our research here supports the idea that entrepreneurs believe strongly in their own skills and abilities, and are less supportive of organization-first driven approaches to entrepreneurship development. However, this does not mean that entrepreneurs do not need support. Understanding the appropriate rules of engagement for any university begins with listening to entrepreneurs and observing their leadership style. To do so effectively requires the university to rethink and focus its organizational role toward one of mentorship, an aggregator of ideas and knowledge, and an open collaborator capable of lining up talent behind good ideas quickly and readily – especially those ideas generated outside the university, grounded in the perspective of innovative citizens (Matthews, 2014b).

8. Conclusions

In this paper, it has been our intent to raise questions and stimulate reflective thinking about whether society and universities have fostered a culture in which citizens are consumers as opposed to producers of information, public work, and democracy. The fundamental issue for universities and colleges in their efforts to foster rural entrepreneurship, and active citizenship more broadly is *institutional innovation* – not scientific, technological, or programmatic innovation. The essential institutional innovation involves, philosophically and operationally, establishing and supporting a model of scholarship committed to fostering relationships with and among entrepreneurs in their communities. Ideally, this public scholarship approach would bring together the knowledge, expertise, experience, and wisdom of university experts, entrepreneurs and citizens as co-equal partners in identifying and creating strategies and programmatic initiatives with high probability of strengthening the economy of rural places. This public scholarship model in our view is exemplified by the AR/PS/EO tradition, which places a premium on working *with* and *for* entrepreneurs and citizens in local contexts, and being not just *in* the community but *of* the community. It builds on the concern expressed by entrepreneurs to build relationships among themselves and with community and societal organizations. In this way, this model holds the promise for not only strengthening entrepreneurship and rural economies but also for building community and fostering democracy.

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