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## Entrepreneurship Initiatives in Academic Libraries

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### Abstract

Academic library spaces and services have widely broadened their missions away from providing only traditional research services and quiet spaces for study. Today, academic libraries are increasingly repurposing space and redesigning services to become the hub of innovation on university campuses. The literature explores entrepreneurship and academic libraries from many perspectives but with a common theme of the library as a leader in support for entrepreneurship initiatives on campus.

**Keywords:** academic libraries, entrepreneurship, engagement and outreach, librarian competencies, makerspaces, entrepreneurial studies

### Introduction

Academic library spaces and services have widely broadened their missions away from providing only traditional research services and quiet spaces for study. Today, academic libraries are increasingly repurposing space and redesigning services to become the hub of innovation on university campuses. Many libraries now house makerspaces and co-working labs, and host events and workshops in an effort to create an environment that encourages students to collaborate and innovate in new and different ways. Most importantly, because the library is a campus-wide and online space accessible by students and faculty from all disciplines and departments, it is truly a place where creativity can happen at the next level. The literature explores entrepreneurship and academic libraries from many perspectives but with a common theme of the library as a leader in support for entrepreneurship initiatives on campus.

Entrepreneurship is no longer confined to the domain of business schools. As it has expanded across college campuses in recent years, entrepreneurship has been adopted and adapted by faculty across a wide swath of subject areas. Libraries are embracing the entrepreneurship movement in a variety of ways, including onboarding entrepreneurship librarians, building makerspaces, and facilitating student startups.

The following articles discuss how librarians in diverse academic institutions support (or propose to support) entrepreneurship. Just as institutions vary in their interpretation and application of entrepreneurship, these articles dive into different facets of entrepreneurship

support. Two articles (Toane & Figueiredo, Aagaard & Arguello) are concerned with competencies for entrepreneurship librarians. Bieraugel, as well as Nichols & Dewland, focus on space planning for entrepreneurship support. Buwule & Mutula, Howard & Phillips, and Carroll et al. look at support in terms of information literacy and outreach. All of the articles reflect a strong and growing interest in supporting entrepreneurship initiatives.

**Aagaard, P., & Arguello, N. Z. (2015). Practical approaches to compliance for entrepreneurial uses of licensed databases in libraries. *Reference Services Review*, 43(3), 419-438. <http://dx.doi.org/10.1108/RSR-03-2015-0016>**

This article addresses the use of library business resources for entrepreneurial activities and offers guidance on how to best temper contract compliance risks. The article focuses specifically on online business resources, due to the fact that contracts those resources are more complicated and specific than standard database licenses. Librarians working directly with entrepreneurs may not understand licensing limitations, even though they are responsible for informing researchers about the appropriate use of library resources. The authors conduct a literature review and comment that the majority of the literature in the area of database licensing is directed at staff that directly negotiate licenses, and there is little on how to best understand and interpret the restrictions of these licenses for end users. A discussion on the definition of “entrepreneurial use,” and the kinds of library resources typically sought out by entrepreneurs follows the literature review. The authors next give a detailed breakdown of the specifics of licensing principles that come into play for databases accessed for entrepreneurial purposes. The article sums up by listing two key responsibilities for business librarians that work with entrepreneurs: to inform the researcher of the acceptable uses of databases; and to alert staff that negotiates licenses about new kinds of entrepreneurial engagement with the library subscription products.

**Bieraugel, M. (2019). Do Your Library Spaces Help Entrepreneurs? Space Planning for Boosting Creative Thinking. *Supporting Entrepreneurship and Innovation*, 40, 21-32. <https://doi.org/10.1108/S0732-067120190000040001>**

Academic libraries go beyond supporting student entrepreneurs through traditional channels such as information resources, library guides and librarian consultations by also providing unique spaces for entrepreneurial work. Designing library spaces for entrepreneurs to think, learn and innovate at a higher level is emphasized as an important way to demonstrate a commitment to student learning, and communicate the library’s value to stakeholders. Academic libraries must work to provide six distinct kinds of spaces to encourage student entrepreneurship to flourish:

1. Collaborative space
2. Communal tables
3. Computer Lab
4. Green Space
5. Makerspace
6. Solo Space

The author provides a variety of methods for institutions to assess their spaces as they relate to creative, entrepreneurial thinking, each with an assessment of benefits and costs. A case study allows the reader to learn more about the process of assessing the suitability of academic library space for student entrepreneurs. New spaces allow the library to engage students in a variety of ways and provide an environment that encourages experimentation and success for student entrepreneurs.

**Buwule, R.S., & Mutula, S.M. (2017). Research Support Services to Small and Medium Enterprises by University Libraries in Uganda: An Entrepreneurial and Innovation Strategy. *South African Journal of Information Management*, 19(1), a780.**

<https://doi.org/10.4102/sajim.v19i1.780>

Small and medium-sized enterprises (SMEs) contribute much of the GDP, jobs, and overall economic growth in developing economies such as those in Sub-Saharan Africa. How can academic libraries in the region contribute to the growth of SMEs and therefore to overall economic growth and reduction of poverty in the region? Buwule and Mutula use document analysis, a type of qualitative research, to address this question by contrasting the nature of libraries in Sub-Saharan Africa with those in more affluent regions of the world. They assert that while Sub-Saharan academic libraries remain rather traditional in that they emphasize spaces for quiet study, their contemporaries in other countries are changing their spaces to foster innovation, creativity, collaboration between universities and the private sector, and transfer research and innovation (R&I) data to SMEs.

The authors call for research and innovation information to be disseminated to small and medium-sized businesses in Sub-Saharan Africa to bolster entrepreneurship and contribute to the economic health of their communities. While some technologically-heavy modes (3D printing and testing laboratories are given as examples) remain unaffordable to academic libraries, other modes of cooperation such as consulting services and distribution of R&I information should be within reach.

**Carroll, A. J., Hallman, S. J., Umstead, K. A., McCall, J., & DiMeo, A. J. (2019). Using information literacy to teach medical entrepreneurship and health care economics. *Journal of the Medical Library Association*, 107(2), 163–171.**

<https://dx.doi.org/10.5195/jmla.2019.577>

Using a group of undergraduate biomedical engineering (BME) students at North Carolina State University (NCSU) as subjects, the authors measured the effectiveness of an information literacy training exercise as part of a medical entrepreneurship project. Biomedical engineers work within the health care environment as entrepreneurs, meeting the needs of clinicians and patients through the design of hardware and software products that advance patient care and safety. BME students enrolled in an upper-division design sequence course worked in teams to investigate health-related issues and develop commercially viable prototypes that address topics such as medical device innovations, intellectual property and regulation strategies, and medical billing and reimbursement solutions. The authors utilized a

mixed-method approach to test three hypotheses. Most notably, the study results supported the hypothesis that information literacy training can improve outcomes for students working within medical entrepreneurship.

**Howard, H., Zwicky, D., & Phillips, M. (2018). Academic Libraries Support Cross-Disciplinary Innovation and Entrepreneurship. *IATUL Annual Conference Proceedings*, Paper 3. <https://docs.lib.purdue.edu/iatul/2018/collaboration/3>**

These proceedings highlight the applicability of the characteristics inherent in the work done by academic libraries to the entrepreneurial work increasingly being done on college campuses. Using Purdue University as an example, the authors highlight multiple partnerships and projects the library has supported with entrepreneurial research services. Library collaboration efforts with the Schools of Mechanical Engineering and Engineering Technology at Purdue are detailed, including a summary of the classes, student population, and library support activities. Purdue University business librarians also work with students on a business pitch competition that focuses on creating a new product made from soybeans. Collaborations with specialized programs are featured: one for disabled veterans, a business accelerator program called Purdue Foundry, and an initiative that supports women entrepreneurs in Indiana. Purdue librarians also completed a comprehensive entrepreneurship mapping project that collected data on all campus stakeholders and determined projects and partnerships already in place. The mapping project led to the development of a series of recommendations that emphasized coordinating efforts to allow Purdue Libraries to better allocate resources and define new opportunities.

**Nichols, J., Melo, M., & Dewland, J. (2017). Unifying Space and Service for Makers, Entrepreneurs, and Digital Scholars. *portal: Libraries and the Academy*, 17(2), 363-374. <https://doi.org/10.1353/pla.2017.0022>**

Using the former iSpace (now CATalyst) at the University of Arizona as a case study, Nichols and Dewland examine the role of makerspaces in academic libraries in fostering interdisciplinary collaboration, especially between the seemingly disparate disciplines of digital humanities and business-related entrepreneurship. iSpace is a secure, entrepreneurship-focused coworking space with maker technologies, housed within the library. iSpace is home to InnovateUA, a partner program that facilitates student startups. The authors note that digital humanities use technology to get at the central core questions of humanities, making libraries an ideal laboratory. Students that come to iSpace for digital humanities work often branch out into startup projects with InnovateUA. This coworking arrangement facilitates hybridization between humanities and business. The authors note that space is a major consideration when undertaking such coworking initiatives.

**Toane, C., & Figueiredo, R. (2018). Toward Core Competencies for Entrepreneurship Librarians. *Journal of Business & Finance Librarianship*, 23(1), 35-62. <https://doi.org/10.1080/08963568.2018.1448675>**

Entrepreneurship programs are growing rapidly on North American campuses. No longer confined to business, these programs are now scattered across campuses in diverse disciplines. Using various listservs and professional associations, the authors administered a 70 question survey to 88 participants, resulting in an extensive report on the state of academic librarians who support campus entrepreneurship. The questions drew on competencies established by the American Library Association (ALA) Reference and User Services Association Business Reference and Services Section (RUSA BRASS) and the Special Libraries Association (SLA). The goal of the study was to identify the “core set of skills, knowledge, attitudes and attributes these individuals share, or if not, to establish the range of competencies they employ.” Core competencies were drawn from the above, and chief among them were research services and outreach, market and industry research, as well as innovation and problem solving. These skills distinguish the entrepreneurship librarian. Interestingly, in comparison to other areas, attributes related to makerspaces did not feature prominently.