Preliminary Investigation of Think Tank Groups to Improve University Department Work Culture

Authors:

Timothy K. Behrens, PhD
College of Health Sciences
University of Wisconsin—Milwaukee*
Milwaukee, WI
Email: BehrensT@uwm.edu
Telephone: 414-229-5663
*At the time of this research, Dr. Behrens
was with the Health Sciences Department
at Northern Arizona University.

Whitney M. Holeva-Eklund, BS
Health Sciences Department
Northern Arizona University
Flagstaff, AZ
Email: Whitney.Holeva@nau.edu

Dawn Clifford, PhD, RD
Health Sciences Department
Northern Arizona University
Flagstaff, AZ
Email: Dawn.Clifford@nau.edu

Robert Henderson, PhD
Health Sciences Department
Northern Arizona University
Flagstaff, AZ
Email: Robert.Henderson@nau.edu

Caitlin Colleary, MPH
Health Sciences Department
Northern Arizona University
Flagstaff, AZ
Email: crcolleary@gmail.com

ABSTRACT

Purpose*: Little is known about the use of think tanks in higher education to support faculty growth and organizational culture. The purpose of this study is to explore potential benefits of think tanks within a health sciences department at a large regional university.* ***Methods****: Seven qualitative interviews of faculty that participated in at least one think tank session during the preceding year were conducted by a trained researcher. Interview questions were designed to be succinct, conversational, and open-ended.*

Audio recordings of interviews were transcribed, then two researchers coded responses according to recurring themes; a third researcher resolved discrepancies. **Results***: Central themes to emerge from the interviews include benefits for relationships, personal/professional development, and the generation of research ideas. Participants also shared barriers to attending think tanks, such as scheduling.* **Conclusions***: Overall, think tank sessions provide a flexible environment that can encourage collaboration, promote discussion, and encourage the advancement of teaching practices and research projects.* **Recommendations***: Universities should consider offering think tank sessions to faculty in order to forge relationships and promote collaborative work, especially within multidisciplinary departments where faculty tend to isolate into their respective disciplines.*

Keywords: faculty development; collaborative work; organizational environment; peer working group; relationships

INTRODUCTION

Think-tanks have gained popularity over the last few decades and have been extensively researched in the realm of policy analysis and scientific expertise (Struyk, 2002). While there is no standard definition for think tanks in the scientific literature (some papers even use different names to describe a similar idea, such as "faculty inquiry groups" (Bond & Lockee, 2018), university departments of various disciplines have been using think tank groups as a way for faculty to share ideas, connect to important contacts in their disciplines, learn new skills, talk in a comfortable environment, improve work culture and relationships, and increase faculty retention (Julion et al., 2019; Branch, 2006; Henry et al.,1999; Bond & Lockee, 2018). The structure of think tanks can vary greatly to suit the needs of a particular group (Struyk, 2002).

Think tanks are rapidly emerging and are becoming more commonly used in many fields of work, including academia. At this point, little is known about the use of think tanks in higher education to support faculty growth and organizational culture. However, based on the benefits of think tanks in other fields, it is likely that they could be used as a valuable tool to encourage relationships, promote faculty development, and inspire research collaborations. Although think tanks may be very useful in academia, many questions remain about the best way to adapt the structure to best suit faculty in academic institutions.

Like in any organization, the work culture of academic institutions influences productivity, job satisfaction, and resignation. Recent shifts in academia with regards to budget cuts have resulted in larger class sizes, questionable job security, and increased tuition (Mitchell et al., 2017). These changes have increased the stress and perceived demands of a career in academia. Additionally, rising tuition costs are driving students, parents, state governments and other academic leaders to demand increased quality of education which necessitates improved and ongoing faculty support in the area of teaching (Jaschik, 2013; Pew Charitable Trusts, 2015).

The stresses of an academic career are particularly felt by new tenure-track faculty who face many obstacles as they begin their careers, such as establishing a research agenda, learning university systems and protocols, and teaching new courses, all of which can lead to high-levels of stress (Simmons, 2011; Sutherland & Taylor, 2011; Trower, 2012; Trower & Gallagher, 2008). Occupational stress in academia negatively impacts faculty health, creates higher health care costs, reduces productivity, and increases student dissatisfaction (Bureau of Labor Statistics, 2009). Think tanks have the potential to alleviate some of these concerns by creating a support network for faculty.

Knowledge sharing between individuals in an organization such as a university, which is vital for the success of that organization, is

dependent on a feeling of trust, communication, and a positive work environment (Al-Alawi et al., 2007). Unfortunately, in many areas of research within universities, departmentalization can result in a lack of communication and collaboration between professionals of different disciplines in what is sometimes referred to as the "silo problem" (Maxwell, 2018). Even within departments, it can also be difficult to cultivate relationships between faculty of different professional backgrounds with a demand for instructors to teach online and as faculty further specialize into their subdisciplines. A lack of cohesiveness within and even between departments can increase workplace stress and stall research collaborations. Opportunities for faculty to come together and improve relationships may have a positive impact on workplace culture and the potential for multidisciplinary collaboration.

Service activities, scholarly endeavors and pedagogical innovations can bring faculty together across colleges, departments, and programs. Within health-related disciplines, faculty have positive attitudes about interprofessional education, which has the power to support relationship-building between disciplines and programs (Beck Dallaghan et al., 2016). In addition, university administrators often support cross-disciplinary research endeavors across departments and colleges. There is clearly a desire to increase collaboration, but research regarding best practices is limited.

Although cross-disciplinary work can be an important or even necessary component of advancing research, there remain many barriers to this type of work that prevent cross-disciplinary collaboration from being used to its full potential (Lindgreen et al., 2020); think tank groups may be a useful tool to promoting cross-disciplinary faculty interaction with the potential to increase the occurrence of cross-disciplinary research. Many colleges and universities offer teaching support, facilitating opportunities for faculty

across disciplines to share best practices via teaching workshops, discussion groups, and campus-based conferences. Faculty who engage in educational development opportunities like these show improvements in teaching (Condon et al., 2016). Think tanks may be another potential pathway to increasing collaboration and promoting professional development.

Think tanks have been previously explored within a business school in a higher education setting in a study by Reed, Swank, & Zelihic (2016). The researchers in that study sought to explore how the community of faculty were impacted by their participation through a mixed methods design. Themes that arose from their analysis included think tanks supporting professional development, professional productivity, community, teaching, gaining new knowledge, and opportunities for knowledge sharing (Reed et al., 2016). The authors of this study sought to explore the results of implementing think tank sessions in a similar fashion as the study mentioned above. The goal was to investigate how think tanks might influence cohesiveness within academic departments in the health disciplines.

PURPOSE

The purpose of this study is to gain insight on the potential usefulness of think tank groups to improve department work culture and relationships through feedback from faculty within a health sciences department who had previously participated in these sessions.

METHODS

Study Design & Participants
After the research protocol was approved by the university's institutional review board, participants (n=7) were recruited to participate in this qualitative study. Participants were faculty from the Health Sciences Department of a large regional

university (student population more than 30,000) in the Southwest USA who agreed to participate in semi-structured interviews. The Health Sciences Department consists of multiple disciplinary areas including public health, allied health, fitness/wellness, nutrition, and physical education/teacher education. Both undergraduate and graduate programs are represented. All department faculty (N = 25) were contacted via email to participate in the study. To be eligible for participation potential participants needed to have taken part in a department think tank during the previous academic year (2017-2018; n = 19). Data collection began in August 2018 and concluded in October 2018.

Think tanks were developed around content determined by the faculty (innovative pedagogy, research, indigenous health, mindfulness, healthy eating and active living). Each think tank was facilitated by a lead faculty member who had volunteered to conduct monthly meetings. Participation in any given think tank was completely voluntary, though participation did "count" for service activities related to faculty workload. Faculty were free to participate in as many think tanks as desired. Within a given think tank the focus differed based upon the composition of attendees and their collective goals - though the focus was always about providing time to think about important topics and learn from others, some groups were more "product" oriented and generated actionable content, while others provided a free-flowing space for discussion and contemplation. Importantly, all faculty attended at least one think tank group during the course of the academic year, though participation ebbed and flowed with individual interest.

Measures/Instruments

Since the need for a known composition of respondents is necessary for analysis (Fern, 2001; Krueger & Casey, 2015) participant characteristics including age, gender, discipline area, and time at the university were collected. Next, the researchers designed semi-structured interview questions (Morgan & Scannell, 1998) (Table 1). Open-ended questions were configured from variables reported in the literature regarding workplace satisfaction and workplace relationships (Sageer et al., 2012). Interview questions were designed by researchers to be succinct, conversational, and open-ended. Further, questions were designed to dictate no specific response and create a free-form for participants to stimulate the discussion (Krueger & Casey, 2015). The questions built in sequence with an opening, introductory, transition, key, and ending questions as recommended by Krueger & Casey (2015). Probing of participant responses was also utilized.

Procedures

Potential participants were instructed to respond to an invitation email sent by the researchers. They were then screened to determine eligibility (i.e., participated in a think tank the previous year) and scheduled for an interview time. Interviews were held in the workplace at a time that was convenient for the participant and interviewer. No incentive was provided for participation.

The same researcher performed all interviews. At an appointed time, the researcher met the participant in their office to complete the interview. Before beginning the interview, each participant was provided with an informed consent form which they were allowed to review before signing. Interviews were audio recorded for later transcription. Participants were asked to choose a pseudonym in an effort to maintain confidentiality. Interviews lasted approximately 30 minutes each. At the conclusion of each interview participants were thanked for their time and it was noted that their participation was complete. Interviews were performed until repeated themes emerged.

Data Reduction and Analysis

Of the 25 faculty in the department, 19 were eligible for participation (n=7 of

potential N=19; 37% response rate). One of the participants declined to have their interview recorded; thus, their data is not reflected in the analysis of this study.

Researchers transcribed the six audio-recordings verbatim and checked against facilitators' notes for accuracy. The chosen pseudonym was used to identify the participant during transcription and data analysis, thus ensuring confidentiality among participants. Further, participant's audio-recorded responses were destroyed after transcription. Throughout the coding process, data collected from the individual remained separate. A two-step process was used to code the data (Creswell, 2013). Open coding was used for the first step. During this step, two researchers simultaneously but separately grouped data similar in theme into a category and assigned a label capturing its theme. After this was completed, the two researchers reviewed the categories and labels that were created. Any discrepancies in either the composition of the categories or the assigned labels were discussed with a third member of the research team until all three investigators were in agreement. After agreement among all investigators in the composition and labeling of each category was reached, the second step in the coding process took place. In this step, axial coding was conducted. This process consisted of relating categories to the central phenomena of interest (Creswell, 2013). Thus, this step involved relating the categories created during open coding to the original questions from the interview guide. As part of this step, relationships among categories were assessed, and categories found to be similar were combined. In total, these combined categories were utilized to present results, with some of the most compelling individual responses provided as exemplars of the given category.

RESULTS

Participants

Interviews were conducted with seven think tank participants, although one interview was not recorded and therefore not included in the results or discussion of this paper. Of the six participants included in this analysis, five are female faculty members and one is a male faculty member. The length of service at the university ranged from nine months to 19 years. All partici-pants interviewed participated in a think tank session for at least one group (nutrition, indigenous health, mindfulness, or pedagogy) during the preceding year, although some participants attended think tank sessions for multiple groups. The interviews ranged in length from seven minutes to nineteen minutes. Three participants reported that they went to more than one think tank topic.

Benefits

Most participants discussed the benefits that they gained from attending the think tank sessions during the previous year. The benefits discussed were both professional and personal in nature. They ranged from concrete output created by the think tank groups to generating new ideas or simply discussing a topic in greater depth with other interested faculty members.

Idea generating

One of the major benefits discussed by interview participants was the opportunity to interact with other faculty members and generate new ideas for research or teaching practice. Many participants stated that they enjoyed the opportunity to exchange ideas with other faculty members interested in the topics of the think tanks. Some interviewees stated that attending the think tank groups simply caused them to be more aware of the topic and consciously consider the ideas when planning their classes or research.

'I think we generated some excitement about teaching and excitement about creative ways

about getting things across in the classroom. It was good to get inspired by other teachers' ideas.'

'…it's kind of an out-there idea - which is a perfect idea for a think tank to just throw out wild, crazy ideas and bounce it off other people.'

<u>Cultural competency</u>

The participants involved with the indigenous think tank discussed the cultural competency benefits they gained by attending the think tank sessions. Some stated that they attended this think tank specifically to gain a deeper understanding of indigenous culture, either because it was relevant to their work or simply for personal understanding.

'It's just about being as culturally competent as possible, and that I know how to be inclusive with the language I use with students and how to be respectful with students.'

<u>Personal development</u>

Some participants discussed the benefits that they have gained in their personal life as a result of attending the think tank sessions, particularly with the mindfulness group. Multiple participants stated that they discovered resources or made changes in their own personal habits due to the information gained during the think tank sessions.

'I think that what changed for me in my own life was just a reminder about all the resources that are out there.'

'I tried meditation for the first time this summer.'

<u>Professional development</u>

Many of the participants mentioned that they considered changing the ways they approached their research or classroom practices due to the think tanks. Most participants discussed general ways that

they incorporated the ideas from the think tanks into their work, although some participants struggled to point to a specific example of changes they had made by the time the interview was conducted. The interviewed participants also mentioned that the think tanks helped them to think more deeply about their approach and be more conscientious of their practices and language instead of continuing to use the same approach that they had previously employed.

'I think in terms of research, it's been helpful to do what I described earlier - figure out ways that we can work smarter and work together and figure out expertise that other people have.'

'It makes you more conscientious of your approach and not just going through the motions. Not a really specific lesson, but in general, always being cognizant of how to improve in that manner of pedagogy within your teaching.'

<u>Employee wellness</u>

Multiple interview participants discussed the benefits they felt the think tanks provided regarding the atmosphere of employee wellness within the department. Many participants discussed the benefit of feeling closer to fellow faculty members as a result of the discussions they had during the think tank sessions.

'One of the ways is it gave an area or foundation for faculty to get together in a different perspective, so I think that enhanced the cohesiveness of the faculty in a different way.'

'…that was an opportunity to be more mindful and clear your mind. That supported the employee wellness aspect of being an employee here, but it didn't lead to any research.'

Classroom/Teaching application

The faculty members that participated in the pedagogy and mindfulness think tanks mentioned instances where they were able to apply some of the ideas into their classroom approach. Others mentioned that the think tanks mainly helped them generate new ideas and approach their teaching from a different perspective. Most participants shared that they felt they benefited from having others with whom they could discuss and work out new ideas regarding teaching practices.

'The one teaching pedagogy think tanks I went to was certainly helpful because some ideas were thrown around about grading writing assignments that I hadn't considered before.'

'I think we generated some excitement about teaching and excitement about creative ways about getting things across in the classroom.'

Output/Products

Although the think tank sessions enjoyed a lot of flexibility in their structure and expectations, some think tank groups decided to produce a tangible product by the end of the year. One think tank, the mindfulness group, hosted an event that students could attend to learn more about mindfulness techniques. Other groups discussed the idea of generating a product but felt that they needed more support or funding in order to make their ideas happen.

'It was brought up that [the department chair] wants us to have some sort of concrete product at the end, but it wasn't held over our heads in a way that made it not fun.'

'What we ended up doing was having a student workshop in the spring, so I could see the committee, the think tank, come together to pull that off.'

'I think everybody thought it was a great idea, but then where do you find funding for [the product].'

Relationships

Relationship-building was one of the key strengths outlined throughout interviews. The faculty that participated noted that their interactions were strengthened between other faculty, students, and their department.

Faculty-to-Faculty

Faculty reported building stronger relationships with fellow peers. This includes engaging with people they were not acquainted with and enhancing existing relationships. One interviewee reported that the think tanks "helped build collegiality" and developed new friendships. Topics discussed during sessions were conversation points that could be referenced in future conversations. Connecting networks between faculty was another noted benefit of the think tanks.

'I thought it was interesting seeing what faculty was interested in. It opened more organic conversations about the topic in hallways or at lunch.'

'I got to know people I probably wouldn't have had a reason to interact with at that level otherwise.'

'I think part of the benefit of it was getting to know your colleagues a little better and feel like you're on the same page as them as far as improving your teaching.'

Department collaborations

The benefit of networking also influences discussions about collaborating on different research ideas and projects when there are complementary interests shared.

'It helped me see who in my department is interested in that area which could lead to some collaborations in the future.'

'I think I wanted to understand what other people were doing and to think about ways that we might be able to work smarter together instead of duplicating projects and things like that.'

<u>Faculty-to-Student</u>

Topics discussed in the think tanks were applicable to classroom experiences and interactions. In addition, brainstorming conducted in think tanks inspired a wellness program that was delivered directly to students.

Expectations

Think tank participants exhibited differing expectations regarding what they hoped to gain from the sessions. Some participants noted that they preferred the open-ended discussions with flexible goals to accomplish during the sessions. However, others felt that the style of the think tanks lacked direction and would have preferred if there were more people in attendance. It was also pointed out that having a common goal to accomplish over several think tank sessions is useful for directing conversations and having something to work toward.

'One thing I'd like to see change is being more intentional. Maybe if our chair gave us a goal that would encourage people to be more consistent.'

'I think that's one of the challenges of promoting and encouraging think tanks. You want it to result in something productive, but how do you find that balance where it's not so productivity-focused that you lose the fun, connectivity, and relationship-building.'

<u>Motivators to attend</u>

A common motivator to attend the think tanks was to develop new techniques and ideas for teaching in the classroom. This was both an individual teaching goal and a mentorship opportunity for those who influence part-time faculty that teach the same class. Those who are tenure-track faculty also displayed interest in exploring new projects and grants as well as finding peers with complimentary research areas to collaborate with. Prior personal interest in the think tank topics also helped motivate people to attend.

'I wanted to understand what other people were doing and to think about ways that we might be able to work smarter together.'

'Mindfulness has always been one of my key interests, and I knew there were other people in the department who were interested in that. I figured this could be an overarching thing that some people would have interest in.'

Lessons Learned

Although the participants discussed the many positive impacts of the think tanks, they also mentioned areas where they felt the think tank sessions were lacking and could be better implemented. During the interviews, both issues regarding the think tanks as well as suggestions to improve the think tanks were discussed. Many of the participants specifically mentioned the scheduling, structure, and purpose of the think tank sessions as areas that they felt could be improved.

The first topic that many participants mentioned regarding think tank struggles was the scheduling of group meetings. Of course, many of the interviewed participants mentioned that they lacked the time to attend all the meetings, which is an issue that cannot be solved by altering the think tank meetings. However, many interviewed participants suggested that scheduling be consistent and decided farther in advance. Some participants also mentioned that a possible solution to this issue could be to require members of the think tank to attend a certain number of meetings each semester in order to be a part of the group.

'Just having the time to follow through with some of your ideas - it can be very time

consuming, and sometimes we just don't have the time.'

'That's the one thing I'd like to see change is being more intentional. Maybe if our chair gave us a goal…Maybe that would encourage people to be more consistent.'

Many participants also suggested that the structure of the think tanks could be improved. Although many participants indicated that they enjoyed that the think tank meetings were an opportunity to generate and discuss ideas, some participants also expressed a desire for the think tanks to incorporate more structured requirements. One common suggestion was that the think tanks should set concrete goals that the participants should achieve each academic year.

'I think that's one of the challenges of promoting and encouraging think tanks. You want it to result in something productive, but how do you find that balance where it's not so productivity-focused that you lose the fun and connectivity and relationship building.'

'If we set a goal up front, a real specific goal and a timeline for it, like as a group we may set a smart goal or something where we would say we're going to accomplish this together and have a really specific thing.'

CONCLUSIONS

In summary, the focus group participants in this study mentioned both professional and personal benefits of participating in department-level think tanks. The think tanks provided opportunities for members of a multi-disciplinary department to discover new ideas to inform their teaching, which is in agreement with prior think tank research. Flower identified that think tanks could be utilized to build ideas based on the diverse backgrounds and perspectives of those involved (2002) which could lead to innovative pedagogical ideas that participants could implement in classrooms

(Flower, 2002). Participants in this study also identified think tanks as an opportunity to engage with colleagues from other disciplines. This benefit of think tanks is critical as universities experience an increased push to promote interprofessional education collaboration and allow multi-disciplinary faculty to share knowledge and skills to improve teaching practices (Hammick et al., 2007).

Participants also reported that the think tanks allowed exposure to concepts that expanded their research agendas and sparked collaborations for future research. This finding is consistent with past research that found think tanks in university settings allowed collaborative faculty knowledge to inspire further research and knowledge sharing (Gonzalez & Zhang, 2014). Think tanks may have also helped to spur new ideas which can be difficult for faculty carrying the expectation to produce persistent, meaningful research in a short period of time.

Discourse is one of the most important components of think tanks because it presents the opportunity for participants to support or challenge beliefs leading to further idea development (Henry et al., 1999), which in turn may spark additional research production. Faculty might feel under pressure to produce peer-reviewed journal articles to maintain or advance their academic careers in part due to the competition for prestige and increased funding for further research (Auranen & Nieminen, 2010). University sponsored think tank sessions may allow a relaxed, innovative environment for faculty to develop research ideas and projects and may help to alleviate some of this pressure.

Although faculty may feel a lot of pressure to create research, many university faculty have many other expectations as well. Increasingly, demands are placed on faculty to teach more classes while maintaining a robust research agenda.

These expectations can cause professional relationships can become strained. Work-related stress can arise due to conflicts between the faculty member and workplace demands or when the faculty member is not paired with staff that has the appropriate skills to complete a task (Betonio, 2015). Think tanks may offer an opportunity for meaningful discussion between faculty members that quells workplace conflicts and enables faculty to discover coworkers with whom they can collaborate on research projects so that individual workloads are slightly reduced.

In addition to professional development, participants discovered resources that also supported personal wellness and development during the think tanks. Several participants mentioned how interacting with their colleagues in think tank sessions enhanced cohesiveness of the faculty to form a more positive work environment. New friendships were developed as faculty engaged with colleagues they wouldn't normally see during the day. This preliminary qualitative data supports think tanks as one way to cultivate a positive workplace culture within multidisciplinary academic settings. Overall, participants seemed to appreciate the creative thinking space that supported collegial relationships while also informing teaching and research practices, and our findings were consistent with past research in this area.

Some participants liked that think tanks did not have a set agenda and therefore provided a space to think outside the box and brainstorm innovative ideas. Participants shared that think tanks were encouraged to produce a final product but did not feel pressured to do so. This seemed to have created a relaxed atmosphere where discussion, collaboration, and innovation were the primary focus. On the other hand, some participants desired slightly more structure with specific goals in mind. The specific structure of a think tank group is flexible and should be determined by the desires of each specific group when it starts meeting.

Scheduling presented as the most significant barrier to regular attendance with think tanks and it was suggested that a regular meeting time be decided in advance. Some participants shared they struggled at time to attend due to competing demands and time constraints; inconsistent participation seemed to negatively impact momentum for some groups.

University faculty development initiatives can help make changes on an individual and organizational scale which can influence interprofessional education and collaboration, teaching strategies, and spark leadership initiative (Steinert, 2005). Think tanks represent a practical opportunity to encourage these changes and can be easily tailored to meet the needs of specific academic institutions and departments. This approach can also be tailored or modified to meet the needs of diverse health professionals in fields outside of the university setting. Traditional workplace wellness programs rely on effective communication strategies and allowing employees the opportunity to help promote wellness endeavors (Mattke et al., 2013). These ideas can be incorporated into think tank sessions while maintaining the productivity objectives of think tank groups. Participants may be more interested in joining a think tank group if the opportunity to increase productivity exists in these sessions.

RECOMMENDATIONS

Some institutions may be hesitant to initiate the use of think tank groups because of the fear that the time spent in think tank sessions may be better used conducting research or writing manuscripts for journal publication. Past research has found that traditional think tanks tend to upload publications to websites or blogs rather than publish it as a journal article which might

dissuade universities from conducting think tanks due to the pressure to generate articles to maintain or advance academic authority (Hernando & Williams, 2018). However, universities should recognize that think tanks can be adapted to meet their needs, and they might consider requiring a think tank group to produce a set number of publications each academic year to avoid productivity concerns. Another potential adaptation for think tanks could be to include undergraduate or graduate students, which may produce positive benefits for both the faculty and students. Think tanks that include students should be explored in future studies.

Overall, think tank sessions provide a flexible environment that can encourage collaboration, create an open environment for discussion, and promote the advancement of teaching practices and research projects. Think tanks can be tailored to fit the individual needs of an academic institution or other healthcare setting so that they can be an effective tool for many different groups or situations where professionals with diverse backgrounds and perspectives work together. Institutions should individually decide the guidelines and expectations they would like to implement for think tanks but leave some decisions open to the group so that the needs of the participants are addressed appropriately. Based on the findings in this study, it is the recommendation of the authors that universities should consider offering think tank sessions to faculty in order to forge relationships and promote collaborative work, especially within multidisciplinary departments where faculty tend to isolate into their respective disciplines.

REFERENCES

Al-Alawi, A. I., Al-Marzooqi, N. Y., & Mohammed, Y. F. (2007). Organizational Culture and knowledge sharing: critical success factors. *Journal of Knowledge Management*, *11*(2), 22-42.

Auranen, O., & Nieminen, M. (2010). University research funding and publication Performance An international comparison. *Research Policy*, *39*(6), 822–834. https://doi.org/https://doi.org/10.1016/j.respl.210.03.003

Beck Dallaghan, G., Hoffman, E., Lyden, E., & Bevil, C. (2016). Faculty attitudes about interprofessional education. *Medical Education Online*, *21*, 32065. https://doi.org/10.3402/meo.v21.32065

Betonio, J. (2015). Stress factors and the teaching performance of the college faculty. *International Journal of Social Science and Humanity*, *5*, 651–655. https://doi.org/10.7763/IJSSH.2015.V5.534

Bond, M. A., & Lockee, B. B. (2018). Evaluating the effectiveness of faculty inquiry groups as communities of practice for faculty professional development. *Journal of Formative Design in Learning*, *2*(1), 1-7.

Branch, M. N. (2006). Reactions of a Laboratory behavioral scientist to a "think tank" on meta contingencies and cultural analysis. *Behavior and Social Issues*, *15*(1), 6-10.

Bureau of Labor Statistics. (2009). *Occupational injuries/illnesses and fatal injuries profiles*. http://data.bls.gov/gqt/InitialPage

Condon, W., Iverson, E. R., Manduca, C. A., Rutz, C., Willett, G., Huber, M. T., & Haswell, R. (2016). *Faculty development and student learning: Assessing the connections*. Bloomington, IN: Indiana University Press.

Creswell, J. (2013). *Qualitative inquiry & research design: Choosing among five*

approaches. Thousands Oaks, CA: SAGE Publications.

Fern, E. F. (2001). *Advanced focus group research*. Thousand Oaks, CA: SAGE Publications.

Flower, L. (2002). Intercultural knowledge building: The literate action of a community think tank. *Writing Selves/Writing Societies*, 239–279.

Gonzalez, C., & Zhang, X. (2014). The rise of think tanks in China and the United States: Their interactions with universities. *UC Berkeley Center for Studies in Higher Education Research & Occasional Paper Series*. https://escholarship.org/content/qt20q3n364/qt20q3n364.pdf

Hammick, M., Freeth, D., Koppel, I., Reeves, S., & Barr, H. (2007). A best evidence systematic review of interprofessional education: BEME Guide no. 9. *Medical Teacher*, *29*(8), 735–751.

Henry, S. K., Scott, J. A., Wells, J., Skobel, B., Jones, A., Cross, S., … Blackstone, T. (1999). Linking university and teacher communities: A "think tank" model of professional development. *Teacher Education and Special Education*, *22*(4), 251–268.

Hernando, M. G., & Williams, K. (2018). Examining the link between funding and intellectual interventions across universities and think tanks: A theoretical framework. *International Journal of Politics, Culture, and Society*, *31*(2), 193–206.

Jaschik, S. (2013). Jobs, value and Affirmative action: A survey of parents about college. *Inside Higher Ed*, *20*.

Julion, W., Reed, M., Bounds, D. T., Cothran, F., & Gamboa, C. (2019). A group think tank as a discourse coalition to promote minority nursing faculty retention. *Nursing Outlook*, *67*(5), 586-595.

Krueger, R. A., & Casey, M. A. (2015). *Focus groups: A practical guide for applied Research* (5th ed.). Thousand Oaks, CA: SAGE Publications.

Lindgreen, A., Di Benedetto, C. A., Brodie, R. J., & Van der Borgh, M. (2020). How to Undertake great cross-disciplinary research. *Industrial Marketing Management*, *90*, A1-A5.

Mattke, S., Liu, H., Caloyeras, J., Huang, C. Y., Van Busum, K. R., Khodyakov, D., & Shier, V. (2013). Workplace wellness programs study. *Rand Health Quarterly*, *3*(2).

Maxwell, J. A. (2018). The "silo problem" in mixed methods research. *International Journal of Multiple Research Approaches*, *10*(1), 317-327.

Mitchell, M., Leachman, M., & Masterson, K. (2017). A lost decade in higher education funding state cuts have driven up tuition and reduced quality. *Center on Budget and Policy Priorities*. https://vtechworks.lib.vt.edu/bitstream/handle/1919/83618/TuitionReducdQuality.pdf?sequene=1&isAllowed=y

Morgan, D. L., & Scannell, A. U. (1998). *Planning focus groups*. Thousand Oaks, CA: SAGE Publications.

Pew Charitable Trusts. (2015). *Federal and state funding of higher education: A changing landscape*. http://www.pewtrusts.org/en/research-andanalysis/issue- briefs/2015/06/federal- and-state funding-of-higher-education

Reed, L., Swank, A., & Zelihic, M. (2016). Virtual university think tank: A mixed methods, inductive, exploratory analysis. *Developments in Business Simulation and Experiential Learning: Proceedings of the Annual ABSEL Conference*, *43*(1).

Sageer, A., Rafat, S., & Agarwal, P. (2012). Identification of variables affecting employee

satisfaction and their impact on the organization. *IOSR Journal of Business and Management*, *5*(1), 32–39.

Simmons, N. (2011). Caught with their constructs down? Teaching development in the pre-tenure years. *Journal for Academic Development*, *16*(3), 229–241.

Steinert, Y. (2005). Learning together to Teach together: Interprofessional education and faculty development. *Journal of Interprofessional Care*, *19*(sup1), 60–75.

Struyk, R. (2002). Transnational think-tank networks: purpose, membership and cohesion. *Global Networks*, *2*, 83–90. https://doi.org/10.1111/1471-0374.00028

Sutherland, K., & Taylor, L. (2011). The development of identity, agency and community in the early stages of the academic career. *International Journal for Academic Development*, *16*, 183–186.

Trower, C. A. (2012). *Success on the tenure track: Five keys to faculty job satisfaction*. Baltimore, MD: Johns Hopkins University Press.

Trower, C. A., & Gallagher, A. S. (2008). Perspectives on what pre-tenure faculty want and what six research universities provide. *Harvard Graduate School of Education*. https://coache.gse.harvard.edu/files/gse coache/files/coache_perspectives.pdf?m=1 4724837

Table 1. Semi-structured open-ended interview questions about participation in think tanks.

For what program do you primarily teach classes here at [the university]?
How long have you been teaching at [the university]?
Which think tank(s) did you attend last year? How many times did you attend each of the think tanks?
Please describe how you found the think tank(s) to be useful in your teaching, research, or service. Describe what made the think tanks useful.
Please describe the impacts the think tank had on you personally. Did it influence your thinking or participation in other events?
Please describe the improvements implemented in your own practice, such as in the classroom, your research, your program, or in the department of Health Sciences because of the think tank(s).
Describe any challenges to participating in the think tank(s).
Provide a scenario where a relationship with a colleague was influenced by your participation in the think tank(s).