Leveraging Differences for Collaborative Advantage: Enhancing Student Learning through an International Educational Collaboration

Helen K. Burns*   Stuart Brand[†]

Luke Millard[‡]

*University of Pittsburgh, burnsh@pitt.edu

[†]Birmingham City University, stuart.brand@bcu.ac.uk

[‡]Birmingham City University, luke.millard@bcu.ac.uk

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Abstract

This case study in collaboration development describes the relationship from initiation through maintenance over three years between a high profile research-focused school of nursing in the U.S. and a school in the UK known for learning and teaching innovation. The ultimate goal of the collaboration is to enhance nursing student learning opportunities to best prepare students to function in the complex and ever-changing world of nursing practice. This goal has been, and continues to be, achieved through implementation of innovative teaching and learning strategies including the use of high fidelity simulation. The authors describe the intellectual collaborative advantage that the relationship between the schools has made possible as well as key principles to be considered when any organization is contemplating a collaboration.

KEYWORDS: collaboration, nursing, high fidelity simulation, teaching innovation

Many universities strive for innovation in education, but find many barriers preventing the university as a whole and individual faculty within that university from making much-needed changes so that education can keep pace with the non-academic world. While it is not desirable for an institution of higher learning to incorporate every learning innovation, it is important that both faculty and administration challenge the inertia that can develop in a university in order to ensure a rich and up-to-date educational experience for students. This paper describes how this inertia has been challenged at two universities through an unlikely alliance that was built upon interest in one topic, high fidelity simulation in healthcare education, but which subsequently grew to encompass areas and issues that impacted all aspects of each school's curriculum. Over time, the partnership has even affected the way students engage with and are perceived by their own universities.

Partnerships are common in many disciplines. However, there has been a paucity of literature exploring how to maintain and establish partnerships in nursing (Brown, White, & Liebbrandt, 2006). In this context a partnership or collaboration, here used interchangeably, is defined as "a situation in which there is an attempt to build close, long-term links between organisations… that remain distinct, but which choose to work closely together" (Boddy, Macbeth, & Wagner, 2000, p.1004). There are numerous advantages to such partnerships including benefits for organizational learning through shared resources (Casey, 2008), the opportunity to develop professional knowledge and skills (Haloburdo & Thompson, 1998), an enhanced global perspective (specific to international partnerships; Colling & Liu, 1995), and increased creativity of both partners (Huxam, 1996; Lasker Weiss, & Miller, 2001). Despite these advantages, research indicates that more than 70 percent of such relationships either fail completely or fail to meet their goals (Limerick, Cunnington, & Crowther, 1998), and 50 percent of partnerships dissolve within their first year (Lasker, et al., 2001). The high rate of failure points to the obvious challenges of forming and maintaining a partnership. Due to such challenges and a lack of partnership exploration within nursing literature, it is essential that examples of successful partnership arrangements, like the one described here, be reported so that other universities will understand the steps required to gain the benefits of such relationships.

The schools involved in the partnership, the University of Pittsburgh School of Nursing (Pitt SoN) and the Faculty of Health at Birmingham City University (BCU), are units within universities with very different foci and characteristics. Pitt SoN is a high profile, research-focused University while BCU is focused on and has established credentials in learning and teaching innovation. This paper offers a description of the developing alliance between these entities

using the theoretical framework of the stages of collaboration (Gray, 1989), that is centered on collaboration for improvement of the student learning experience. It will demonstrate how this collaboration was initiated, developed and maintained, and show through situational descriptions how the student learning experience has been improved. It will also illustrate how these developments spread to staff in other parts of the organizations as new ideas and practices were implemented. All stages of collaboration will be compared against the six factors for successful collaborations (Czajkowski, 2007), that will form the basis for considering the challenges all organizations face as they seek to sustain and embed innovations within mainstream practice.

THE COLLABORATORS

Birmingham City University is a new University in the United Kingdom, established in 1992, although its origins can be traced back over 150 years. Its key driver is the creation of an improved student experience through learning and teaching innovation. In 2005, the Faculty of Health received a grant from the UK Government to become a Centre for Excellence in Teaching and Learning (CETL). The main goal of the faculty associated with the CETL was to create and promote opportunities in health care education that could provide students with excellent learning opportunities. As the CETL faculty tried to embed innovation and establish and build capacity for pedagogic research, they realized that partnerships with other institutions working in the same field would be crucial to sustainability of the Centre.

Although relatively new, BCU's student population and national reputation are growing rapidly. In 2009, the University saw the biggest increase in students applying for places, compared to any other UK university; an increase of 35.6% compared to the national average of 8% (Attwood, 2009). In addition, the research funding at BCU has more than doubled since its inception.

In contrast to the relative newness of BCU, the University of Pittsburgh School of Nursing (Pitt SoN) has a well-established academic and research history. Pitt SoN, founded in 1939, is part of the School of Health Sciences at the University of Pittsburgh. Pitt SoN educates nurses through a comprehensive curriculum that combines rigorous academic work with varied and intensive clinical experiences and an extensive and growing involvement in research. Today the School offers the baccalaureate degree on three tracks (traditional, Accelerated 2nd Degree, and RN Options, a special curriculum designed for practicing nurses who would like to further their education by obtaining a BSN and early admission to MSN), the Master's in four majors and thirteen areas of

concentration, the Doctor of Nursing Practice (DNP) in four majors and ten concentrations, and the PhD, and post-Master's certificates in eight areas.

Pitt SoN has a long history of involvement in research, beginning in the 1950s with SoN faculty participation in Jonas Salk's breakthrough polio research. In 1993, the National Institutes of Health (NIH) National Institute of Nursing Research designated the SoN as a Nursing Research Intensive Environment. Currently within the US, the SoN is academically acclaimed, a position it achieves in part through innovative, technologically-based educational offerings supported by the Center for Innovation in Clinical Learning (CICL), first established in 1981 as the Learning Resources Center. The emphasis on technological aspects of nursing education has allowed faculty to develop expertise in using high fidelity simulation and integrating it into both undergraduate and graduate curricula.

THEORETICAL FRAMEWORK FOR COLLABORATIVE DEVELOPMENT AND ASSESSMENT

The foundation for collaborative development was a theoretical framework that sketches the broad features of a collaborative relationship within which Pitt and BCU developed the details of their working relationship. Gray (1989) laid out a seminal collaboration framework made up of three stages: 1) the precondition stage, 2) the process stage, and 3) the outcomes stage. This framework is informed by more recent work by Czajkowski (2007) who analyzed the literature to identify success factors at each collaborative stage.

The precondition stage encompasses the initial joining of collaborative partners. Trust building and other relationship solidifying factors are key foundational factors determining ultimate success of the collaboration as well as a commitment to adequate human resources to carry out the collaborative activities (Czajkowski, 2007; Mattessich, Murray-Close & Monsey, 2001). Key success factors at this stage include "determining the reasons for partnering, reviewing partner compatibility, defining the criteria for partner selection, and developing a common purpose, goals and objectives" (Czajkowski, 2007, p. 6). The process stage centers on role definition of partners and setting up the communication and functional infrastructure for continued collaboration (Gray, 1989). Part of defining roles includes defining joint roles and how decisions about collaborative activities will be made. Such interdependence for all activities can be addressed by setting up a joint decision-making structure that will also foster a sense of ownership. A formative evaluation is helpful at this stage to assess movement toward collaborative goals (Gray & Wood, 1991). The last stage, the outcomes

stage, involves comparing the current progress of the collaborative against the goals defined in the precondition stage including whether the target population was efficiently and effectively served. Summative evaluation is another useful aspect of this stage in order to feed that information back into the collaborative to improve current programs (Gray & Wood, 1991).

The six success factors of collaboration fall within the broad stages described above. They can and have been applied to measure the success of collaborations and include: 1) Trust and partner compatibility, 2) Common and unique purpose, 3) Shared governance and joint decision making, 4) Clear understanding of roles and responsibilities, 5) Open and frequent communication, and 6) Adequate financial and human resources (Czajkowski, 2007).

THE PRECONDITION STAGE

In May 2005, the International Council of Nurses Conference in Taiwan provided the scene for the first, fortuitous meeting of the partners. Three members of faculty from Pitt were presenting an exciting initiative related to the use of simulation in nurse education, an educational innovation which BCU faculty thought might be well suited to the curriculum at their university. When Pitt SoN faculty and BCU faculty began to talk, both recognized parallels and opportunities for the two organizations. They agreed to continue exploring ways to work together after the end of the conference.

Although BCU faculty were excited about the possibility of integrating a new learning innovation, not previously considered, into their curriculum, they were still uncertain because they recognized that adopting simulation could lead to a significant curriculum shift. Course teams would have to reconsider the traditional separation of some clinical and theoretical elements through a redesign to integrate simulation scenarios into the classroom at the University. BCU, through CETL funding, had the resources and was prepared to integrate such a curricular innovation, but needed to convince its own faculty of the compelling reasons for change since no curricular innovation could be fully implemented without the support of all faculty. In addition, it was felt that the opportunity to engage clinical colleagues in the simulation experience at the university could have a significant impact on student learning and the way in which students were prepared for their student clinical experiences. BCU faculty attending the conference also saw opportunities to partner with Pitt SoN beyond simulation and felt that expending the effort to convince others within BCU of the value of partnering would be worthwhile since the potential partnership could lead to other curricular innovations as yet unknown.

As with many other burgeoning partnerships, key elements to the success of the partnership involved ensuring that faculty who could make decisions regarding curriculum changes were prepared to actively support the partnership (Huxham, 1996; Mizrahi & Rosenthal, 2001) as well as ensuring there was enough funding to support development and implementation of new ideas (Marek, Mancini, Earthman, & Brock, 2003; Mizrahi & Rosenthal, 2001). Both of those elements, key in not only the precondition stage but also to form a strong foundation for a sustainable collaboration, were present throughout development of the Pitt-BCU partnership. The CETL Director made it a priority to develop the relationship with Pitt to explore and seek advice on how an effective simulation environment might be developed. A special reserve of CETL funding was made available for projected expenditures on simulation facilities and equipment at BCU. These actions were the core of building trust and affirming partner compatibility, as well as establishing that collaboration would fulfill common purposes of the partners while also offering unique opportunities.

Establishing a Common and Unique Purpose for the Collaboration

In March 2006, approximately six months after the initial meeting, six members of BCU faculty travelled to Pittsburgh to begin formal discussions regarding specific partnership work and to introduce BCU faculty to the facilities available at Pitt and the Peter M. Winter Institute for Simulation Education and Research (WISER), which houses the majority of Pitt's simulation facilities. For the visit, BCU put together a multi-disciplinary team with senior level representation from all healthcare courses at the university together with experts from the CETL. Pitt took their interest seriously, setting up meetings with the Dean of the School of Nursing and the Associate Dean for Scientific and International Affairs. Faculty from both schools were interested in exploring all partnership opportunities, not just those related to simulation. As well, they wanted to explore a relationship that would be bi-directionally beneficial, in which BCU could lend some of its expertise in teaching and learning. This meeting and initial exploration made it clear that both organizations were open to possibilities, understood why they were undertaking the partnership, were ready to undertake such a partnership, and were clear that the other party was also prepared to undertake the endeavor. These factors reflected an important mindset for all involved in any developing partnership (Cardell, 2002; Mizrahi & Rosenthal, 2001).

BCU, at least initially, saw itself as the junior partner who wished to learn from Pitt faculty about educational simulation and how it was employed within

the nursing curriculum in the USA. The Pitt SoN faculty primarily agreed to the first visit because BCU faculty requested it. The Pitt SoN faculty also felt it would be a good opportunity to further develop education in simulation, although they were unsure how the University would benefit from the visit. However, upon initiation of discussions, it was clear that the Pitt SoN could benefit from the BCU faculty's expertise in teaching and learning developed through CETL. Although recognized as a premier research university, the Pitt SoN faculty had not yet made major forays into research on teaching and learning strategies. This partnership, with BCU's expertise in the area, offered a perfect opportunity. In addition, the Pitt SoN wanted to learn more about BCU's virtual case creator project and accompanying teaching strategies, because it initially seemed that this technology would mesh perfectly with other simulation-related education. It was this openness to learning and willingness to explore the expertise of a very different type of university that changed the perspective of Professor Stuart Brand, Director of Learning and Teaching, CETL Director at BCU, and BCU leader in the partnership who noted:

> The visit to the University of Pittsburgh was an incredibly important point in this development. For the first time we were able to see the real possibilities of simulation education. We were also able to ensure that we were able to give to the partnership as well as take, and the reassurance that our contributions were equally valid showed us all that there was a real potential for partnership.

The fact that the two organizations were strong in different areas and both had something to contribute to the partnership (Kanter, 1994) made for a balanced relationship and one both parties could easily see would be mutually beneficial.

While administrative and financial support are crucial inputs for making the exploration of a potential partnership possible, the development and sustainability of effective partnerships rely on the relationships between the individuals participating in the partnership and their ability to communicate with and understand each other (Jackson & Clark, 1996; Mancini & Marek, 1998; Mizrahi & Rosenthal, 2001; McKimm, Millard, & Held, 2008). There was obvious interest on the part of all parties at the first meeting in Taiwan, but it was the first face-to-face meeting in Pittsburgh that allowed partnership participants to begin developing personal relationships that would sustain the working relationship over time.

Leadership

Support of the endeavor by those in leadership positions was vital to the development of such an innovative partnership to ensure that organizational hurdles could be overcome and agreements driven to fruition (Huxham, 1996; Linden, 2002; Mizrahi & Rosenthal, 2001). In addition to institutional financial and administrative support, a strong leader who had the authority to make decisions headed each partnership team. Delays caused by referring back to organizational decision makers who are not directly involved in the partnership can slowly strangle the development process (Mizrahi & Rosenthal, 2001).

In general, in any working relationship where innovative ideas offered by both sides may be met with misunderstanding or skepticism, it is important for leaders to have the ability to foster respect, trust, inclusiveness, and openness among partners (Gardner, 2005; Lasker, at al, 2001; Mizrahi & Rosenthal, 2001). The leaders involved understood this implicitly and entered the collaboration with open minds and a positive attitude.   This overall approach established transparency as a fundamental concept for interaction and set a tone of respect and valuing of individual ideas that could be sustained through the leaders, even when specific team members changed.

Another important role of leaders within a partnership, that can potentially affect many faculty as they implement curriculum changes, is ensuring buy-in from those on the "front lines" of education. Buy-in can be achieved most readily if the benefits of the changes and/or the collaboration are clearly articulated to those "front line" staff in terms of benefits to them and/or the student experience. Momentum for change can gather when many faculty, not just a select few, have the chance to participate in the process. This involvement fosters a sense of shared ownership, willingness to implement new ideas that grow out of the partnership, and increases the potential for synergy and positive outcomes (Lasker, et al., 2001; Mizrahi & Rosenthal, 2001). As early research notes, the best collaborations require broad connections among many people at a variety of levels to achieve multiple levels of integration (Kanter, 1994). The collaborators here would add that it also builds a strong foundation for future sustainability.

THE PROCESS STAGE - FORMALIZING THE TRUST RELATIONSHIP

Trust is a key and necessary element of an effective partnership (Weaver & Farrell, 1997). Many who write about partnerships support formalization of this trust, noting that even simple alliances require formal structures that support shared decision-making (Huxham, 2000) and that the best alliances have simple

contracts based on mutual understanding (Clegg, Kronberger, & Pitsis, 2005). The leaders from BCU and Pitt, sensing authenticity on both sides, immediately built a rapport and level of trust that indicated a real commitment to the collaboration. The commitment was formalized through a signed collaborative agreement obtained following the first face-to-face meeting, which created a structure for shared governance and joint decision making (Czajkowski, 2007). This formalized agreement was also important because it provided a necessary pressure to signatories to abide by the agreement. The consequences for failure of a collaborative partnership need to be unacceptable or failure will be more likely (Linden, 2002). The creation of a formal collaboration agreement signed by the Universities' senior management meant that the leaders of the partnership would receive some very uncomfortable questioning if the collaboration was seen to fail. An important aspect of crafting a formal agreement that would work for both the administration at each university and the partners who would be doing the actual work was involvement of the partners themselves at critical junctures in agreement development. This ensured that senior management was supporting the goals of the partnership as defined by the partners themselves. Such understanding could be key to avoiding future expectations of the partnership from higher levels that were not consistent with the practical work of the partnership. However, the creative development of projects and implementation was left to the working group members. Success became a personal commitment for each member of the working group.

However, no contract or agreement can cover all contingencies in a partnership that necessarily must be a flexible working relationship. The balance of work not directly covered by the formal agreement must rely on trust that each organization within the partnership will complete assigned work (Mizrahi & Rosenthal, 2001). The figure below graphically illustrates the important role of initial trust and continually reinforcing that trust to establish and maintain a successful partnership. Cardell (2002) suggests that the degree of personal trust, which is often at an individual level, can be such an effective vehicle for collaboration that it can ensure that two organizations with limited cultural similarities can work effectively together. This is reflected in the importance of trust as a key factor for success observed in many collaborations (Czajkowski, 2007).

Reinforce trusting attitudes

Gain underpinnings for more ambitious collaboration

Aim for realistic (initially modest) but successful outcomes

form expectations about the future of the collaboration based on reputation or past behaviour or contracts and agreements

have enough trust, be willing to be vulnerable and take a risk to initiate the collabation
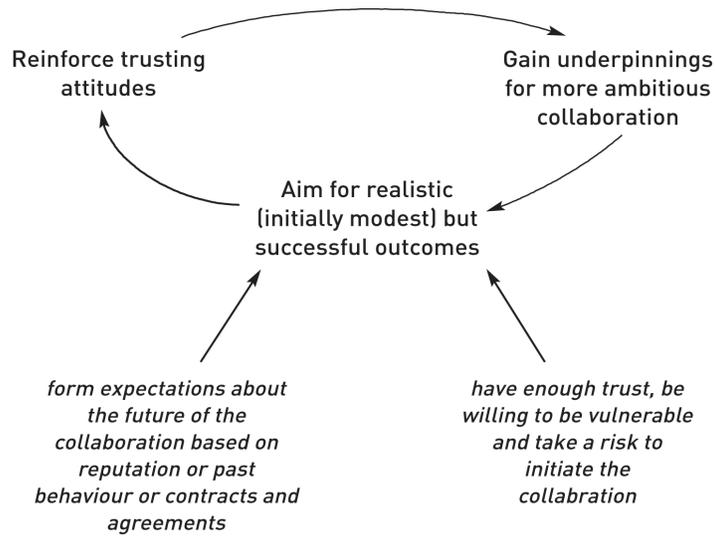
Fig 1: The Trust Building Loop (Huxham & Vangen, 2006).

When members of the organizations first met in Taiwan and through initial conversations, there was little trust. However, as illustrated in Huxam's and Vangan's (2006) Trust Loop, the requisite foundations for building trust existed. Specifically, BCU had certain expectations regarding what it would gain from an internationally recognized university, and both universities were willing to be vulnerable and take a risk. The initial goals of the partnership were modest, including sharing good teaching practices through staff visits and joint conference presentations, yet played a key role in the development of trust. As the universities continued to work together, the sustained commitment to the partnership reinforced the trust relationship and formed the foundation for more ambitious projects (described below).

However, developing this trust was not without its challenges. As Huxam (1996) notes, "working with others is never simple" (p. 4). The most significant challenge both universities faced, and one that could have led to a failure of the partnership, was obtaining buy-in from peripherally involved colleagues. This aspect of collaboration is not addressed in the Trust Loop. Colleagues at both universities had not been involved in the early stages of the partnership but would be necessary to meet the more ambitious goals requiring wider departmental involvement at both schools. Achieving this buy-in was especially challenging at BCU where the colleagues initially approached to work with the group did not turn out to be appropriate members of the team. If it were not for the trust established early in the partnership, faculty at the Pitt SoN might have doubted the

commitment of members from BCU. Both universities were eventually able to secure the necessary buy-in from other faculty by involving them in all aspects of the partnership and providing an environment in which the new members of the group could form trusting relationships with the established partnership members. Ultimately, the establishment and reinforcement of the trust relationship grew largely out of belief in the future benefits of the partnership, a degree of flexibility, and sustained communication.

An important part of any formalized relationship is establishing regular methods of open communication to maintain a constant flow of ideas and provide deadlines to which the partners will be accountable (Czajkowski, 2007). Communication between BCU and Pitt has relied heavily on technology, evolving over time as needed. Initially, the partners agreed to monthly conference calls that were quickly replaced by monthly video conferences. While the purpose of the monthly calls was to facilitate regular communication, once video conferences were instituted, the partners recognized that being able to see each other facilitated much more than communication. It was key in reinforcing trusting attitudes (Gardner, 2005; Huxham & Vangen, 2006) as non-verbal signals about developments can be transmitted, helping the flow of debate and preventing misunderstandings. The calls are planned in advance to ensure that participants have every opportunity to avoid conflicts. On occasion a call has to be rescheduled, but the importance of the relationship and commitment by leadership ensures full attendance and the necessary preparation.

THE OUTCOMES STAGE - COLLABORATIVE IMPACT ON STUDENT LEARNING AND INSTITUTIONAL BENEFITS

For any collaboration to succeed, it needs to demonstrate early wins (Mizrahi & Rosenthal, 2001). Although initial goals are often modest (Huxam & Vangen, 2006), early successes can ensure buy-in of even skeptical members of faculty, helping partnership projects to gain momentum and providing administrators with evidence for continued support. The partnership was initially focused on the integration of simulation into healthcare education. However, as the partnership grew, participants developed projects in other areas. The remainder of this paper highlights two of the key collaborative activities that led to a number of early "wins" and some of the challenges that partners encountered and overcame to achieve these.

Using Simulation to Transform Nursing Curriculum

In order to integrate simulation into the nursing curriculum at BCU, faculty designed a program based upon knowledge gained by observing simulation classes at Pitt. While BCU's program also involved a succession of small groups of students participating in clinical scenarios while being observed via video, BCU staff developed an educational model based on their expertise in teaching and learning.

The model of multimodal simulation (Biggs, 1999) constructively aligns e-learning, part-task training, and high fidelity simulation within the nursing curriculum to enhance skills and knowledge acquisition. During the program students participate in three highly interactive multimedia patient scenarios supported by the University's Virtual Case Creator (VCC) software. Part-task trainer sessions support skill acquisition and the combination of these aligned elements prepare students for the high fidelity simulation (HFS)-based learning activities that follow.

During scenarios, which could be clinical or non-clinical, the HFS facilitator acts as a clinical mentor for small subsets of the student group engaged with the session. The subsets, composed of up to eight students, are taken in turn from the larger cohort, which monitors the developing scenario through a video link to the main classroom. Students are encouraged to question as they identify learning needs during the running of the encounter with the simulated patient. This questioning allows in-scenario micro-teaching that does not compromise the fidelity of the simulation. Links to video recordings of the simulation scenarios and discussion forums are available to the students after the scenarios have been completed. Students can reflect on the scenarios, further promoting development through self-identification of learning needs.

In addition to the student learning benefits, BCU as an institution has also greatly benefited. The investment of resources into simulation education led directly to BCU's position at the forefront of simulation education in the UK. Shortly after full implementation of the new technology, the UK regulator, the Nursing and Midwifery Council (NMC), identified the University as one of the thirteen pilot sites for a project exploring the possibility of replacing some practice-based learning in nursing education with simulation-based learning. Due to the existing simulation program built through the partnership with Pitt, BCU was able to serve as the largest pilot site for the NMC and take over 1,000 nursing pre-registration students through the pilot. In addition, BCU was able to add to the national program in the UK through further support of Pitt SoN faculty, who

shared evaluative tools they used to assess their own student's experience of simulation-based education.

Simulation is now fully integrated and accepted within the nursing curriculum in BCU. Student evaluations are overwhelmingly positive, and nursing students even challenge staff as to why other elements of their courses are not carried out through simulation. The process feedback loop (Gray, 1989) has led to the rapid spread of simulation to other areas of healthcare education in BCU as the benefits become clear, with developments taking place in midwifery, mental health, radiography, radiotherapy, and speech and language therapy programs. The broad impact of one presentation in Taiwan and the subsequent ongoing partnership is now evident from the significant and widespread changes to healthcare education at BCU. The success of simulation education at BCU clearly demonstrates the strengths and benefits of collaboration.

Virtual Case Creator (VCC)

In 2002, BCU initiated development of an online e-learning simulation platform, the Virtual Case Creator (VCC), to support nurse education. This came as a response to a perceived need to create flexible and student-focused learning opportunities that situated the learner more closely to practice (Wynne, 2009). The University now has 26 virtual scenarios covering areas such as mental health nursing, high dependency children's nursing, and older adult nursing. The VCC provides students with opportunities to problem find and problem solve in an information-rich context that enhances their understanding of and skill in applying the decision making process related to the provision of nursing care.

While Pitt faculty had expertise in high fidelity simulation using mannequins, when they learned about how BCU faculty were transforming their curriculum with the VCC, they were interested in how this could be used in concert with existing technology at Pitt to further enhance student learning. BCU faculty shared the VCC existing cases with Pitt faculty and together they explored the joint development of new cases. Once again, faculty from both universities, and by extension the students, were able to benefit from the collaborative relationship.

SUSTAINABILITY

Sustainability is an indicator of positive performance and worth. While the collaboration described above is relatively new, the early successes achieved and the strength of the ongoing relationship lead all involved to believe that this

partnership has the potential to be sustainable through the years. However, for the collaboration to achieve this status and become embedded within both organizations, it needs to continue to grow beyond the originators of the collaboration, demonstrate a clear collaborative advantage to the wider faculty, be flexible and responsive to emergent need, and attract funding to support joint initiatives. Most importantly, the partners must continue to demonstrate to their respective university administrators and decision-makers that through the collaboration, "something unusually creative is produced – perhaps an objective is met – that no organization could have produced on its own and that each organization, through the collaboration is able to achieve its own objectives better than it could alone" (Huxham, 1996, p. 603).

CONCLUSION

From a tentative collaboration that focused on high fidelity simulation, two major universities, one in the US (Pitt) and one in the UK (BCU), were able to work together to transform the way they educate nursing students. This relationship has led to much more than an intellectual collaborative advantage (Huxam, 1996). As the people in each organization learned about the other, the skills and enthusiasm of the faculty have led to collaborations that go far beyond the initial focus.

The collaborative relationship described here has demonstrated the utility of Gray's (1989) theoretical framework for structuring a relationship. Further, the six factors necessary for success (Czajkowski, 2007) of the collaboration were present and are further explained below in the unique context of this collaborative.

- Trust and partner compatibility: The relative status of organizations is unimportant as long as both have something to offer. It is not necessary to look for similarities in a partner; look for complementarity. What is missing from your skill set that the partner can offer?
- Common and unique purpose: If the support for specific educational endeavors does not initially exist, a leader or leaders with vision can still spearhead a successful relationship as long as that leader or leaders can secure the buy-in from individuals responsible for allocation of human and financial resources.
- Shared governance and joint decision making: Not only will a formalized agreement between collaborative entities provide a broad framework for decision making, but also those leading the collaboration must have the ability to make decisions.

- Clea understanding of roles and responsibilities: These can be easily established if the universities have complimentary, not competing skill sets.
- Open and frequent communication: There needs to be an environment of open communication and flexibility to deal with the unexpected.
- Adequate financial and human resources: These resources should be committed early in the process, which can be an essential part of trust building.

There are an additional two factors that do not fit clearly into the six broad factors for success but were factors that were key to ensuring the Pitt-BCU partnership succeeded. Specifically, the collaboration had to grow beyond the leaders and provide professional development opportunities for faculty in order to set up a situation in which the collaborative relationship has the potential to be taken into both universities and formalized on a broader level; and, perhaps most importantly, persistence was rewarded. There is no doubt that collaboration is hard work and requires a great deal of persistence, but the experience described here would suggest that if an organization can find the right partner and firmly ground activities within a theoretical framework linked to proven strategies for collaborative success, it is well worth the effort.

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