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ARTICLE

Toward a transtheoretical model of interprofessional education: Stages, processes and forces supporting institutional change

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The history of interprofessional education (IPE) in the USA is a checkered one, characterized by boom and bust cycles of advancement and retrenchment, expansion and contraction. The successful development, implementation and continuation of IPE in health and social care in US higher education institutions all depend on a number of factors related to how individuals and organizations do or do not support it in the academic setting. Deliberate and planned change to advance IPE requires a comprehensive theoretical framework to guide it and insure its success. A transtheoretical model (TTM) of institutional change is proposed as a comprehensive framework of the stages, processes and forces that can facilitate and maintain change in support of IPE. The TTM framework recognizes the complexity of change, and captures and organizes important elements from different organizational theories. It also provides a structure for conceptualizing the multiple dimensions needed for change, offering intervention strategies and leverage points to be used by leaders in promoting and maintaining it. Finally, the TTM model suggests that the stabilization of IPE programs over the long term is dependent on a real and significant shift in institutional values in response to forces from both within and without the organization.

Keywords: Institutional change, interprofessional education, theory

INTRODUCTION

This is a good time to be an advocate for interprofessional education (IPE) and teamwork training in the health and social care professions. Each year brings new announcements of support for collaborative practice from health professions associations, governmental departments and international bodies. New organizations formed to promote interprofessional collaboration hold conferences to bring together educators and practitioners to share ideas, develop new models and discuss research and evaluation. There is a spirit in the air of an old-fashioned revival, at which both old hands and new converts commit as true believers to the vision and values of IPE and interprofessional practice (IPP).

Before we get too caught up in the current fervor, however, we need to gain some perspective on recent developments in IPE and IPP by stepping back, taking a long look over the past several years and observing the cycle of boom and bust that characterizes this field. As Satin (1987), Baldwin (1996) and Clark (2004, 2011) have discussed, differing forces at different historical times have alternately supported or threatened IPE and IPP in the USA. In particular, an understanding of the higher education institutional context is especially important, as such settings are the places where interprofessional teamwork training will need to become embedded if it is to be a stable feature of health and social care professions education.

Indeed, the purpose of this study is to develop a comprehensive theoretical framework for developing planned change strategies to counter the entrenched forces opposing IPE. At its root, such a model of change needs to include the basic structural and procedural elements in higher education settings within which IPE must be developed, implemented and (hopefully) sustained. This discussion will use the term "profession" when dealing specifically with the health and social care fields, and "discipline" when referring to the traditional academic domains typically associated with departments within the university. This distinction captures the differences that exist in the literature itself, factors reflecting both their historical evolution and the conventions in different parts of the world.

The first section of this discussion outlines the major features of a transtheoretical model (TTM) for IPE that integrates different theories and concepts from the literature into a single, unified framework. In the second section,

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specific processes, forces and strategies that can facilitate deliberate change are highlighted and discussed. Particular importance is placed on the central role of different kinds of leadership in utilizing these agents of change in support of IPE efforts. Finally, the implications of this model for guiding and sustaining the kinds of changes needed in support of IPE in the academic setting are summarized.

THE DEVELOPMENT OF A TTM

The organizational change literature highlights a wide variety of concepts and theories that are relevant to the development, implementation and continuation of IPE efforts in higher education institutions (Ginsburg & Tregunno, 2005). Ideally, planned or deliberate change supporting IPE in academic institutions should be based on a comprehensive framework or model. In this context, theories that offer structured stages of change at the level of the individual have been invoked as a starting point in understanding organizational change (Ginsburg & Tregunno, 2005), in part because change in individual member's behavior is the basis for organizational change (Prochaska, 2000; Prochaska, Prochaska, & Levesque, 2001). In addition, researchers have suggested that a "one size fits all" approach to organizational change has limited efficacy in promoting it; rather, what is needed is an approach targeted on the specific factors related to organizational contexts and the readiness to change of specific individuals, groups or units within the organization itself (Kezar & Eckel, 2002; Prochaska, 2000; Prochaska et al., 2001).

The TTM of behavior change

A widely used theory to explain and promote individual behavioral change is the TTM (Prochaska & Velicer, 1997). Drawing on a wide array of psychosocial theories and concepts of individual change, it is based on the premise that individuals wishing to change their behavior move through a series of discrete stages consisting of (1) precontemplation (no intention to change behavior in the foreseeable future), (2) contemplation (intention to change within the next 6 months), (3) preparation (serious intention to change in the next month), (4) action (initiation of overt behavioral change) and (5) maintenance (sustaining behavioral change for 6 months or more).

Linked to these stages of change (the temporal dimension describing when cognitive and behavioral changes occur) are the processes of change (describing how these shifts occur), decisional balance (focusing on the pros and cons of a behavior) and self-efficacy (a judgment about one's ability to perform a behavior necessary to achieve a particular outcome). As individuals proceed through the stages of change, they utilize processes, decisional balance and self-efficacy in different ways, thus making each stage unique.

More recently, the TTM for individual behavior change has also been applied to organizations, including academic institutions (Prochaska, 2000; Prochaska et al., 2001). In this research, the processes of change have emerged as particularly crucial. Importantly, they describe activities that leaders can employ to facilitate change in a particular direction within an organization. Different processes are particularly associated with specific stages of organizational change, and they may be targeted on individuals, groups or units at different points of readiness for change. The processes and their associated stages are:

(1) Precontemplation/Contemplation: dramatic relief (expressing feelings, such as fear of not, or excitement about, making a change), self-reevaluation (recognizing that change is important for one's values or sense of self) and thinking about commitment.
(2) Preparation: teams (working with others to prepare for change).
(3) Action: consciousness-raising (gaining awareness about a problem and its solutions), counter-conditioning (substituting alternative behaviors and patterns of thinking), and making a commitment.
(4) Maintenance: stimulus control (modifying the environment to discourage old behaviors and encourage new ones), helping relationships (using social support for change) and reinforcement management (identifying intrinsic or extrinsic rewards for changing).

Other organizational change stages, processes and strategies

Other theorists of institutional change have developed similar frameworks for describing and fostering deliberate or planned transformation. For example, Kezar & Lester (2009) and Kezar & Elrod (2012) have proposed a three-stage model of institutional change with corresponding actions for each:

(1) Mobilization: In this stage – analogous to the combined pre-contemplation, contemplation, and preparation stages of the TTM – the system is prepared for change. Preparation includes recognizing the need for change, articulating a vision, mobilizing support, and enlisting leadership. At this point, policies and practices that embody the institutional culture start to be challenged.
(2) Implementation: At this stage – similar to the TTM action stage – the change is introduced. It includes developing support, generating incentives and rewards, expanding resources and modifying work responsibilities for the organization's members. Also at this point, new initiatives and supports to maintain the changes start to develop.
(3) Institutionalization: The system is stabilized in its changed state, as the TTM maintenance stage suggests. This includes incorporating and sustaining changes by integrating them into the organizational value system and culture. A new understanding of what the change represents is reached by the members.

Holley (2009a) highlights the strategies needed for transformational change as articulated by Eckel & Kezar (2003) for higher education institutions. They include (1) senior administrative support, (2) collaborative leadership, (3) flexible vision, (4) faculty and staff

development and (5) visible action. Numerous strategies may need to be used simultaneously, suggesting that such forces are most effective when targeted on individuals, groups or units within the same institution that may be at different stages of change.

Finally, Ginsburg & Tregunno (2005) emphasize the need for both intrinsic, voluntary forces and extrinsic, forced mechanisms to promote organizational change. This "carrot and stick" approach echoes the earlier work of DiMaggio & Powell (1983) on institutional theory. In this view, three types of pressures lead to organizational change: (1) coercive forces, such as pressures from regulatory agencies, (2) mimetic forces, stemming from pressures to imitate peer organizations and (3) normative forces, based on professionalization in which values, codes and standards are imposed by professional licensure and certification and by accreditation agencies (Hanson, 2001).

Summarizing these perspectives, what is needed to move the development, implementation and continuation of IPE efforts forward in higher education institutions in the USA is a transtheoretical approach to organizational change that both recognizes that change occurs in stages and tailors individual strategies for change based on where various individuals, groups and academic units are in terms of their context and readiness for change.

PROCESSES, FORCES AND STRATEGIES OF CHANGE

The discussion that follows – organized around the three general stages of IPE development of mobilization, implementation and institutionalization – highlights the critical factors and forces that promote and sustain change at each level. Leadership implications will be highlighted because of their importance as an organizational characteristic and a facilitator of change (Ogawa & Bossert, 1995).

Mobilizing for change: getting organized

As suggested in the earlier discussion, the stage of mobilization incorporates elements of recognizing the need for change, promoting understanding of it, acknowledging that change can be positive and important, galvanizing support and mobilizing leadership, and making a commitment to change. Particularly important in this stage is developing insight into how academic disciplines may inhibit needed changes. In addition, the role of the champion is critical for effective leadership in initiating change and mobilizing the resources needed in support of IPE.

Academic cultures and disciplines. As Ginsburg & Tregunno (2005) suggest, the strength of different professional cultures and the "blind spots" or cognitive limitations they impose on recognizing the importance of perspectives other than their own are major barriers to IPE efforts in higher education institutions. It is very seductive to wish to fit comfortably within the academic enclave we call a "discipline" and not recognize the need for change in an interdisciplinary direction. After all, a discipline provides the inhabitant with both a cultural or social home, referring to a collaboration or community of individuals within the institutional structure, and an epistemological and linguistic way of seeing and understanding, reflecting shared ways of knowing, methodological tools, and a similar language or symbolic system (Lattuca, 2002; Nikitina, 2005). Becher's (1989) reference to disciplines as the "tribes of academe" captures this concept of an all-encompassing and enveloping community, which confers its own traditions, social organization, reward system, professional status and language. The academic tribe shapes assumptions about what is to be known and how, work to be performed and its assessment, expectations for scholarly productivity and professional interaction, and social and political status (Amey & Brown, 2004).

Loyalty to one's own discipline can create a substantial barrier to the intellectual and social openness of faculty and administrators to collaborating across departmental boundaries (Clark, 2011). Addressing this barrier requires that the entire academic institution adopt an attitude of openness and flexibility in structures and processes, the development of centers and programs that enable faculty and students to cut across disciplinary boundaries, and methods to encourage and reward faculty who venture into the "terra incognita" of interdisciplinary efforts (Amey & Brown, 2004; Clark, 2004).

Role of the champion. In the partnership literature, the catalyst for change in the direction of IPE is most often associated with the role of the "champion" (Eddy, 2010). This individual should be the "visionary and keeper of the interdisciplinary flame, main spokesperson and cheerleader for the growing significance of such programs on campus, and trouble-shooter and problem-solver when difficulties arise" (Clark, 2004, p. 258). In addition, as required for this initial stage of mobilization, the champion plays a unique leadership role in framing the mission of the IPE program and enlisting others to achieve it. As Eddy (2010) suggests, this individual has high intrinsic motivation and works to develop the social capital in a partnership founded on relationships. Greater social capital can expand the motivational circle based on intrinsic factors and provide resources that may be utilized by the champion to counter and overcome opposition. Freeth (2001, p. 38) further observes:

> The impact of local [champions] should not be underestimated. Some people are particularly committed to the ideal of interprofessional working. When this is combined with empowerment to direct energy towards achieving that goal, a small number of key individuals can carry forward a collaborative initiative. Their expertise and enthusiasm can encourage others to collaborate, overcome passive and active resistance to change, and remove organizational obstacles to progress.

Discussion of champions must include their "down side" as well, which is that the energy behind the IPE effort is based solely on certain individuals who possess these qualities. The danger is that if they move on to other institutions, retire or

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die, then the motivation and momentum toward the IPE mission may be lost or reduced. A wider circle of champions must be identified and cultivated as the collaborative effort grows, expanding partnership capital and building the overall movement (Holley, 2009b).

Implementing change: moving into action

The phase of implementation involves creating new structures, policies and processes to support reform, such as resources and rewards for new ways of working and social supports for reformers. Particularly important in this regard are the establishment of mutual trust and altruistic leadership and the development of organizational structures that promote change.

Academic trust. Trust is the foundation of relationships and partnerships, a factor considered as an alternative to the control paradigm that is operative in much of healthcare and higher education (Suchman, 2006). Trust involves elements of vulnerability and risk-taking; when participants in collaborative efforts find their trust levels increasing, the result may be a "trust-building loop" or "virtuous circle" that can strengthen relationships (Vangen & Huxham, 2003). Such a state requires constant vigilance and maintenance, however. Issues involving communication, power, credit, joint ownership, commitment and differing views on goals and objectives must constantly be monitored and addressed.

Trust is an especially important element in building academic or learning partnerships, in which a certain level of disciplinary vulnerability is required. For example, as Karlsson, Anderberg, Booth, Odenrick, & Christmansson (2008) point out, "it is not always advantageous for academics to position themselves as learners in their profession, since they are viewed as experts, and to be a learner can suggest incompetence or lack of expertise . . . But developing trust is an important element in creating a context that supports learning in collaborative relationships" (p. 100). Both relationship and learning are the cornerstones of such collaborations in academe, and they each rely heavily on the foundation of established and continually nurtured trust if they are to be sustained over time. Lack of trust is one of the core reasons that many interprofessional projects fail (Caruso & Rhoten, 2001). In this regard, respect is a key ingredient in trust; if participants do not believe that they are respected and considered as equals, they will not feel secure enough to continue collaborative ventures.

Finally, both trust and respect are essential ingredients in the development of partnership capital, which is made up of the interconnections individuals have with one another and between social networks (Eddy, 2010). Emerging from the synergy among the partners in a collaborative effort, such capital represents an important resource generated from within the group itself. A key insight here is that the success of a partnership depends on building relationships, and trust is the linchpin of relationship. Moreover, firm relationships can buffer the partnership from the vicissitudes of the ups and downs of such factors as external funding and changing academic administrations. Strong relationships within a partnership or network also serve as a foundation for distributed leadership (Kezar & Elrod, 2012) and leadership as an organizational quality (Ogawa & Bossert, 1995), in which roles and responsibilities are spread out and shared among those participants who are most committed to the success of the collaborative effort.

Academic altruism. Altruism is not always associated with individuals in higher education, where self-interest often dominates, especially during times of resource constraints. However, altruism is a quality explicitly discussed in the IPE literature, sometimes in contrast to behaviors such as territoriality (e.g., Axelsson & Axelsson, 2009). Altruism means looking beyond one's own interests, even giving up some of one's own resources, to support a collaborative project such as IPE. It includes the desire to pursue a broad, collective good, even if one does not immediately or directly benefit (Reilly, 2000 as cited in Lawson, 2004). Higher education administrators may struggle to acquire such an outlook, as they may be concerned about being seen as weak if they practice it. Adopting this leadership style may be a challenge for university administrators, who often seem to be stuck in the academic mindset of competition. Its acquisition entails a shift from a more traditional management style of coordination and control to more visionary leadership. This type of leadership may be termed "transformational" as opposed to the more traditional "transactional" style, the latter of which is based on more territorial thinking (Axelsson & Axelsson, 2009).

Such leadership may be difficult to achieve during times when organizational boundaries are drawn more distinctly because of resource shortages. The kind of leadership required for the development and continuation of successful IPE programs is different from the qualities we usually associate with it, such as charismatic, directive and protective. Amey & Brown (2004) suggest that successful IPE efforts require a form of leadership style more accurately described as "steward" or "servant," qualities associated with attending to the needs of the partnership members, building a shared vision or culture and fostering a learning environment based on mutual respect and trust.

Organizational support. The literature on the development of successful partnerships describes forces necessary for their success in terms of motivation, extrinsic or intrinsic (Eddy, 2010). The former involves requirements, mandates, pressures and incentives (such as grants) imposed by others. In contrast, the latter is based on self-driven shared interests and mutual goals. A high level of genuine personal and professional commitment to the objectives of IPE – rather than the allure of what is the most recent and current trend in higher education – is much more likely to sustain a program over the long term. Everyone is familiar with the situation of having a program end when the grant funding that supported it runs out.

In the higher education setting, it is not uncommon for "top down" support by a university president or provost for an idea or concept to be passed down to middle-level

administrators, such as deans, who are expected to put it into action. While they may do so, because their job is to implement ideas that come down from the higher administration, they may or may not be truly committed to the values or vision that has been articulated. Academic management ideas come and go, so it is easy for an administrator to simply see IPE as just another "idea du jour" and hunker down until it passes and the next one comes along.

However, research has shown that successful IPE programs require multiple layers of genuine support (Holley, 2009b; Reuben et al., 2003). For example, through their support senior administrators can demonstrate that such efforts represent important university values and priorities that merit real recognition. At the level of actual program development and implementation, however, tangible and practical resources – such as release time and assistance in addressing institutional barriers to IPE – become more immediate and important. Both "top-down" and "bottom-up" support is necessary to insure that the institution is going beyond mere rhetoric to truly match the type and level of resource with where it is most needed (Kezar & Elrod, 2012).

Institutionalizing change: forces for maintaining it

Sustaining change includes incorporating it into the institutional culture, value system and norms, and may be based on a balance between internal and external forces for their maintenance. In this sense, as suggested by institutional theory (DiMaggio & Powell, 1983), a balance between normative and coercive forces is necessary. Indeed, some observers have noted that a dual reliance on intrinsic, voluntary approaches to change and more extrinsic, forced mechanisms is likely to be more successful than the application of either alone (Ginsburg & Tregunno, 2005). Ultimately, a stable balance between disciplinary and interdisciplinary programs is a realistic goal.

Internal forces. IPE is inherently vulnerable (Freeth, 2001) and requires constant vigilance and maintenance (Wilhelmsson et al., 2009). It is always going to be outside the mainstream of academic culture, and require the continuous infusion of energy and support to make it succeed (Clark, 2004, 2011). Time is often cited as one of the key factors required to support the development and successful continuation of interprofessional ventures, and collaboration must be seen by the institution as a form of long-term investment (Amey & Brown, 2004).

In particular, academic administrators play a key role in creating the kind of organizational context necessary for the growth of interdisciplinary programs. Critical investments must be made in faculty support, development and rewards. Resources need to be committed, institutional priorities shaped and the importance of the interdisciplinary vision kept in focus. As an early pioneer in supporting the need to restructure the university along more interdisciplinary lines, Jantsch (1980) suggests that reorienting higher education in the direction of more interdisciplinarity will require restructuring the faculty's interests and skills, beliefs and ambitions. Such a revolutionary goal takes time.

As previously discussed, achieving this objective also requires administrative support from the highest levels, through the intermediate and down to the lowest (Reuben et al., 2003). The academic institution needs to show evidence that it is "walking the talk" through the commitment of long-term flexible support for faculty initiatives. Moreover, these resources must be real and realistic, not based on the whims of administrators who are eager to capture the latest trend or fad today, only to move on to the next one tomorrow. Critical here is the long-term commitment to create the kind of interprofessional context and community that will provide a safe and secure environment for the birth, development and continuation of IPE efforts over many years.

Finally, a key component of IPE sustainability is an organization's development of performance metrics and accountability structures within the institution's evaluation system (Ginsburg & Tregunno, 2005; Kezar & Elrod, 2012). In other words, measures to track and evaluate the processes and outcomes of IPE must be put into place, with targets and standards for their achievement. Just as there is increasing emphasis in the USA on educational evaluation and the measurement of student outcomes within disciplines, so also must the attainment of necessary knowledge, attitudes and skills for IPP be assessed within IPE programs.

External forces. Though many recent professional, organizational and governmental reports and recommendations have highlighted the need for IPE, the pressures on academic institutions to cover only the basic curriculum remain. Their ability and motivation to take on innovative ideas that are not mandated and for which they are not accountable is very limited. If the knowledge or skill to be developed is not tested or evaluated as part of a professional licensure or certification requirement, or covered by an accreditation standard for the academic program, then it does not exist for all intents and purposes (Gilbert, 2005).

Because academic institutions are slow to change and tend to do so only in response to external pressures or forces (Clark, 2004), this suggests that professional organizations and associations, including licensure and accreditation bodies, need to place increasing responsibility and accountability on universities to develop courses and clinical experiences in health and social care that include IPE (Gilbert, 2005). Though this is beginning to happen in the USA, with a growing number of health professions organizations endorsing IPP and calling for its inclusion as a core competency in the education of their practitioners, it remains to be seen how effective these recommendations will be "on the ground" at the actual institutional level.

Balance between disciplines and interdisciplinarity. Part of recognizing the need for change from a strictly disciplinary approach to education in the health and social care professions is acknowledging the need to create a space and a place for interdisciplinary dialogue and discussion. Some observers suggest that interdisciplinarity is a "discourse of

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innovation" that represents a radical departure from the traditional processes and structures of the university (Weingart & Stehr, 2000, p. 5). Innovation and tradition are considered to constitute polar opposites with regard to key characteristics of academic discourse:

> Disciplines carry the connotation of and are valued as being static, rigid, conservative, and averse to innovation. Interdisciplinary carries the connotation of and is valued as being dynamic, flexible, liberal, and innovative. But then there is the reverse view: disciplines are hard, they stand for tough-mindedness, (necessary) order, and control, all features deemed to be prerequisites of progress and innovation. From this vantage point interdisciplinarity is suspicious of vagueness and lack of rigidity (Weingart & Stehr, 2000, p. 29).

Rather than being forced to choose between disciplinary and interdisciplinary discourse, the reality in the long term is that we need both, brought into a balance between rigor and innovation. The need for the coexistence of these two forms of learning underscores the importance of creating spaces and places for dialogue and discussion between and among disciplines. As "epistemological structures," disciplines can provide the fundamental homes within which particular modes and methods of academic pursuit may flourish, while at the same time allowing for the richness of the intellectual synergy that must be nurtured to address issues occurring at the interfaces between traditional ways of being and knowing (Caruso & Rhoten, 2001; McArthur, 2010).

SUMMARY AND IMPLICATIONS

A TTM of IPE and an in-depth understanding of the various processes promoting change represent an important advancement in the theoretical basis for program development, implementation and continuation. Firstly, the framework recognizes the complexity of change, and captures and organizes important elements from different organizational theories that help guide intentional change in IPE and insure its success. An integrated model of change holds the potential for a more powerful and comprehensive framework that provides insights into the nature of institutional change and how to promote it.

Secondly, focusing on the elements of stages, processes and forces provides a structure for conceptualizing the multidimensionality of change, most importantly suggesting intervention strategies and leverage points to be used by leaders in its promotion and maintenance. Stages of change capture the temporal dimension, whereas the various processes associated with the stages allow change agents to implement the most effective strategies at each developmental point over time.

Finally, as is the case with any change, its maintenance is critical. The TTM model suggests that the stabilization of IPE programs over the long term is dependent on a real shift in the set of institutional values and norms in response to forces from both within and without the organization. During the current time of positive indications for the genuine potential of developing and expanding IPE and IPP, it would be reassuring to have the confidence that academic systems can, indeed, incorporate the changes that will make IPE a stable feature of the education of health and social care providers.

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