The Irreducible Needs of Interprofessional Education – Creating and Sustaining an Institutional Commons for Health Professions Training

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Abstract

There is an increased need among leaders in health professions education schools and programs to respond to new accreditation requirements in interprofessional education (IPE). The work of creating and sustaining an IPE program is in many ways analogous to the challenge of creating and sustaining a “commons”—a set of resources shared by many, but owned by none. In this commentary, we have borrowed from the work of Nobel Laureate Elinor Ostrom to describe the “design features” necessary to build and maintain the set of common resources needed to successfully implement and sustain an IPE program. We have interpreted these principles in the context of our own experiences implementing IPE programs and have recommended three institutional structural elements we believe are necessary to build and sustain an IPE program as well as a set of four optimal conditions to improve the likelihood of a program’s success and long-term survival and sustainability.
Many academic health centers are currently clamoring to create interprofessional education programs to respond to new mandates that they provide their students with interprofessional education (IPE) experiences to develop skills in teamwork and interprofessional collaborative practice. One of the most significant challenges when creating an institutional IPE program involves creating and governing resources that must be commonly shared across academic programs and distinct administrative structures. Historically, the term “commons” has referred to resources such as these that are shared or owned equally across a community.12

**HISTORICAL BASIS FOR A COMMONS**

The concept of a “commons” has a long history in law and policy. Authors dating back at least to Aristotle have commented on the challenges inherent in managing common environmental resources such as air and water.13 Most contemporary literature addressing the challenge of creating and sustaining a commons derives from a rich base of case studies in the fields of economics and political science. Garrett Hardin’s classic 1968 article, “The Tragedy of the Commons” is perhaps the best known work in this area.14 In it, Hardin discusses the recurring problem of depleting existing resources claimed by many but owned by none, or the negative consequences of the “appropriation” of those common resources. In contrast the challenges surrounding the creation, and maintenance of an accessible and equitably useful common resource are referred to as “provision problems.”13

Hardin’s work and many authors who followed him were inherently pessimistic in terms of the outcomes of a commons. Depletion, overuse, and ultimately the loss of the commons to the market or a central power were seen as inevitable outcomes. Elinor
Ostrom received a Nobel Prize in economics for her work demonstrating that more hopeful outcomes were both achievable and frequent. Her seminal study, “Governing the Commons” draws on lessons learned from extensive case studies of successful local efforts to allocate and govern common-pool resources. Ostrum identifies eight characteristics or “design principles” as necessary to create or govern common resources. These include the following:

1. Individuals who have the right to withdraw resource units from the common resource are clearly defined.
2. There is congruence between the rules that govern the use of common resources and local needs and conditions.
3. Individuals affected by the rules are empowered to modify the rules.
4. Those who actively monitor common resource utilization and appropriate behavior are accountable to the community or are community members.
5. Graduated sanctions are in place and operationalized with those who violate the rules governing the utilization of common resources.
6. Effective mechanisms are in place and are accessible and affordable to community members to support conflict resolution.
7. Community members have the right, recognized by the authorities, to determine their own rules.
8. For common resources that are shared across larger, more complex systems, appropriation, provision, monitoring, enforcement, conflict resolution, and governance activities are organized in multiple layers of nested enterprises.
Academic institutions are resource-rich environments, where the overwhelming majority of resources are “owned” by a specific discipline or department. For example, a single campus made up of multiple health professions schools may have several anatomy courses, each serving the needs of a uni-professional group of students. The financial and human resources to support each of these separate courses are usually provided by the students’ respective schools. Thus, the challenge to bring students together from multiple education programs into a shared course or educational experience requires marshaling the disparate interests and resources of different professions co-existing within an academic institution--each of which has been organized to further its own needs and interests, to create shared resources to meet collective needs and advance common goals.

THE APPLICATION OF OSTRUM’S FRAMEWORK TO THE CREATION OF SHARED RESOURCES FOR INTERPROFESSIONAL HEALTH PROFESSIONS TRAINING PROGRAMS

We propose that Ostrum’s design principles for creating and maintaining common resources apply to emergent IPE programs in academic health centers. In addition to these principles, we have integrated our experiences gained while developing comprehensive IPE programs at three academic institutions (University of Colorado (M.E.) and Universities of Kentucky and Indiana (A.P.)) to propose three structural elements and associated critical characteristics that must be present for the effective governance and sustainability of IPE programs. We further propose that if these structural elements are adequately created and meet the critical characteristics they will address each of Ostrum’s design principles (Table 1).
Table 1: Structural Elements and Critical Characteristics for the Shared Governance and Sustainability of IPE Programs

<table>
<thead>
<tr>
<th>Structural Elements</th>
<th>Critical Characteristics</th>
<th>Ostrum Design Principles</th>
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</thead>
<tbody>
<tr>
<td>Representative governance body</td>
<td>- Representatives empowered to represent their constituency and leadership</td>
<td>1- Clearly defined access to resource</td>
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<td></td>
<td>- Governing body makes most decisions without consultation with higher authority</td>
<td>2- Ensuring congruence between rules and local needs/conditions</td>
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<td></td>
<td>3- Stakeholders empowered to modify the rules</td>
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<td></td>
<td>7- Community members have right and authority to modify rules</td>
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<td>Accountable leader</td>
<td>- Individual accountable to the programmatic whole and not a single discipline</td>
<td>4- Monitoring individuals are accountable to the community</td>
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<td></td>
<td>- Individual empowered as facilitator and primary programmatic executive</td>
<td>5- Graduated sanctions are in place</td>
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<td>Structure supporting vertical and horizontal communication and accountability</td>
<td>- Empowered representatives must have authority within their discipline and be integral to within-discipline decision-making processes (horizontal)</td>
<td>6- Conflict resolution</td>
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<td>- Representatives have access to higher authorities within discipline (vertical)</td>
<td>5- Graduated sanctions are in place and used when needed</td>
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<td>- Director answers to highest authority (e.g. president, chancellor, provost) (vertical)</td>
<td>6- Mechanisms exist to support conflict resolution</td>
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<td>8- Governance is organized in multiple layers</td>
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**STRUCTURAL ELEMENT 1 – A REPRESENTATIVE GOVERNANCE BODY**

An IPE program should have an empowered body that can represent each professional and academic constituency, and the leadership of that constituency. The body needs the authority to make most decisions on behalf of the IPE program with a significant degree of autonomy. Achieving this requires that the body negotiate the boundaries of its autonomy early in the process of establishing itself and the program by clearly defining the scope and objectives of the program as well as the resources needed for success through an
iterative process of negotiation that engages vertical (Deans, Provosts, and Chancellors) and horizontal (discipline specific leadership) leadership structures and processes.

Designating and establishing this representative body addresses several of Ostrum’s design principles. The body can clearly define the common resources and access to those resources. It can ensure the congruence of the IPE program with the local needs, rules, and conditions within each participating program. Finally, it provides a mechanism where the participating stakeholders can modify the rules as the authority to modify the rules largely rests in the accountable body.

In our experience formally establishing this representative body is a critical step toward sustainability. Accordingly, this body must fully own the IPE program and its products. While it may be tempting to create a “steering committee” that reviews the work of the few faculty who are tasked with engaging the multiple stakeholders and designing and implementing a program, this approach has some inherent weaknesses. Such committees tend to have insufficient investment in the process or its products to advocate for needed change or to own the failures when they inevitably occur. A representative body with full ownership will more likely be vested in the program and accountable for its outcomes in a way that is crucial for the success of an IPE program.

**STRUCTURAL ELEMENT 2 – AN ACCOUNTABLE DIRECTOR OR LEADER**

An IPE program should have a single accountable leader. This individual, charged with responsibility for the programmatic whole, should be accountable equally to each constituency and maintain equipoise in their response and allegiance to the various stakeholders involved while facilitating the IPE program, its processes and the representative body
Having an accountable leader addresses three of Ostrum’s design principles. This leader can monitor individual stakeholders and ensure they are accountable to the community and facilitate conflict resolution. Should a stakeholder or stakeholder group consistently fail the community, the leader can facilitate a process that leads to sanctions if the conflict cannot be resolved by other means.

The leader will need dedicated time and authority that is clearly delegated and supported by higher institutional leadership. The leader must also be supported horizontally by peer leaders in each participating discipline. Positional authority should be granted and delegated by institutional leaders, but the less formal “earned” situational and personal authority is equally critical for success. For this reason, the leader should be thoughtfully selected.

STRUCTURAL ELEMENT 3 – A STRUCTURE SUPPORTING VERTICAL AND HORIZONTAL COMMUNICATION AND AUTHORITY

Ostrum writes of the unique challenges of commons that are nested in larger institutional structures. This describes most IPE programs as they exist between various disciplines, each with its own curricular structure and leadership hierarchy. In turn, each nests under a larger institutional structure governed by deans, chancellors, provosts, presidents, and governing boards. Optimally IPE programs are configured to allow the designation of resources and authority and the accountability and communication necessary to retain both the authority and the resources.

Achieving both vertical and horizontal integration requires that the members of the representative body have a significant degree of authority and be integrated into the decision-making processes within their respective disciplines. A common narrative in IPE
development is the creation of an elegant curriculum or program that fails utterly because it has not been adequately vetted within one or more of the stakeholder groups. Whether it is an unseen logistical hurdle or the failure of the planned program to meet a critical need, months of work can collapse because horizontal communication and authority were not appropriately structured. Avoiding this requires the representatives to be an integral part of the decision-making processes of their own programs with the full support of the Dean or program director.

While most of the challenges in IPE development happen in the horizontal dynamics between the IPE program and the contributing disciplines, some formal process of vertical communication and accountability is necessary also. Institutionalized IPE programs require resources and those resources are likely to come from a central source. Those resources will at times compete with resources needed within each professional program. Ensuring the growth and survival of the IPE program requires regular communication up the institutional ladder. Ideally an institution's deans constitute their own representative body, convened perhaps by a chancellor or provost. Such a council could periodically meet with the IPE director and review the program’s budget and progress.

Without vertical accountability, several of Ostrum’s design principles may be compromised. First, it may be difficult to resolve some conflicts and apply sanctions if the conflicts cannot be resolved, without communication to and support from a higher institutional authority. Ostrum’s eighth principle, that governance be organized in multiple layers, is recognition that such vertical accountability and communication is essential in a nested commons.

CONCLUSIONS
In this paper we use the concept of a commons, Ostrum’s framework, and our own experience in developing IPE programs to frame three structural elements that we believe will optimally ensure that Ostrum’s design principles are met: 1) the creation of an empowered representative body; 2) the designation of an accountable director or leader, and 3) the creation of an organizational structure supporting vertical and horizontal communication and authority. If thoughtfully constructed, we believe such an organizational structure can meet all of Ostrum’s design principles. The structural elements we describe in this paper constitute a set of institutional best practices for the creation of a functioning and sustainable IPE program in a manner that addresses all of the conditions Ostrum lays out in her work.

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