Creating an industry advisory board (IAB)—also known as a business or industry advisory group, council or committee—to support the development of career and technical education (CTE) programs can have a multitude of benefits. An IAB is defined as “a selected group of individuals who are not part of the education system, but who meet together on a regular basis to advise or guide the development of an educational program, project or initiative” (Pawlowski & Meeder, 2012, pg. 3). The purpose of such a relationship between local businesses and education institutions or programs is to provide a current resource of informed perspectives on the trends occurring within industry and the workforce that would otherwise not be represented (Schwartz, 1999). IABs have a long history of supporting and fostering CTE programs by bringing together employer and industry representatives, educators, administrators and other stakeholders such as labor and economic development representatives. However, there are a number of challenges in establishing these partnerships, making them difficult to effectively create and maintain over time (Hightower, 2006). Challenges may include goals that are too narrow or too complex, or competing ideas, personalities and motivations of stakeholders and board members. In addition, effective collaborative partnerships will appear different in every situation because the requirements, resources, goals and stakeholder involvement will vary.

This paper will review research in multiple fields—including CTE, the social sciences, logic and philosophy, and economics—that has either examined effective uses and development of this type of relationship between business and education, or focused on cooperation and collaboration as they pertain to organizational development. Understanding the important organizational components that facilitate communication between CTE educators and administrators and industry representatives will help to achieve everyone’s goals more effectively. At the end of this paper, you will have a greater understanding of the research behind effective IABs and how to apply these lessons in institutions and on the programmatic level.

The Nature of IABs

An IAB is, at minimum, a group of stakeholders coming together to exchange information (Genheimer & Shehab, 2009). IABs are not given authority or decision-making abilities (Olson, 2008). Rather, IABs are used as a sounding board for educators and administrators and for other resources as defined by the needs of the educational institution or program (Koong, 2003; Olson, 2008).

The Perkins Act of 2006 requires that business and industry be actively involved in developing and implementing CTE programs. Such engagement is a key element of programs of study—a framework established in the 2006 bill that fosters alignment of secondary
through postsecondary education, leading to valued, workforce-relevant credentials. Many local education agencies have fulfilled the requirements in Perkins by instituting an IAB for each CTE program, or at the district or institution level. Some programs and institutions have established multiple boards with varying purposes, goals and sizes, e.g., a strategic executive board, an outreach and recruitment subcommittee or a dual enrollment/postsecondary transitions task force (Pawloski & Meeder, 2012). These varying types of IABs may be asked to contribute to a CTE program in a number of ways, as noted in Curtis, Graves & Winsor, 1991; Dorazio, 1996; Genheimer & Shehab, 2009; Henderson, 2004; and Marshall, 1999, including:

- providing information on the changing demands of the workforce
- offering internship or work-based learning opportunities
- assessing the strengths and weaknesses of curriculum
- discussing relevant issues affecting the local economy and industry
- enhancing the credibility of a program and adding to its potential for accreditation
- creating opportunities for student and educator networking
- serving as a source for guest lecturing opportunities
- serving as a source for internal and external fundraising

This paper will focus on “industry advisory boards” in general, including but not limited to the types of boards and the activities outlined above.

Depending on the goals and needs of the school or program, the relationship with the IAB can occur on a spectrum between cooperative and collaborative that will fluctuate over time (Austin, 2000). The characteristics of a cooperative partnership are far less intertwined than that of a collaborative partnership. A cooperative partnership is an exchange of information, services or other resources where all parties maintain their identities and respond to their existing central leadership to complete tasks, and where communication among participants is more controlled (Hord, 1986). In a collaborative partnership, parties share a greater investment in terms of resources, time and commitment; personal relationships form to increase communication habits; and decision-making and leadership are distributed throughout the new organization (Hord, 1986, for more information on the difference between the two). In many cases, the IAB will begin as cooperative and can become increasingly collaborative as goals and trust are established among the participants.

**Determining the Effectiveness of IABs**

The success or effectiveness of an IAB is ultimately defined by the group’s ability to achieve the goal(s) determined by the educational institution or CTE program. With this in mind, research has determined that IABs are most effective at meeting goals pertaining to improving the educational experience for students and the image of the educational institution or program within the community (Genheimer & Shehab, 2009; Henderson, 2004; Kilcrease, 2011; Sena, Sena & Crable, 2010). Specific examples include improving student opportunities through internships, networking and providing relevant guest speakers and lecturers, as well as enhancing the program’s credibility and developing better relationships with alumni and other external organizations (Genheimer & Shehab, 2009; Kilcrease, 2011; Sena et al., 2010). Fundraising, on the other hand, was consistently ranked lowest in terms of success rate. Board members were more likely to help meet fundraising goals as a result of their participation in meeting other institutional or programmatic goals like curriculum development (Beckman, Coulter, Khajenoori & Mead, 1997; Genheimer & Shehab, 2009; Henderson, 2004; Kilcrease, 2011; Sena et al., 2010).

**Factors Related to Successful Partnerships**

IABs that effectively meet their goals are characterized by several common elements. The three most important factors related to the success of any collaborative or cooperative partnership are membership characteristics, communication and the structure of the collaboration, as noted in Austin, 2000; Copa & Ammentorp, 1998; Hord, 1986; Kezar, 2005; Mattessich, Murray-Close & Monsey, 2001; Mohr & Spekman, 1994; Ostrom, 1990; and Romzek, Leroux & Blackmar, 2012:

- Membership characteristics describe the institutions and individuals involved in the collaboration and intangible factors like trust, respect and understanding.
- Communication refers to the frequency and type of discussions that occur.
- The structure of the collaboration encompasses the types of processes and policies that are developed to organize the partnership. (In this case, collaboration is a generic term that refers both to boards that are more cooperative in nature and those that are more collaborative in nature, as outlined above.)

In addition, the concepts of rewards and incremental time are often cited as important to the success of a partnership (Copa & Ammentorp, 1998; Hord, 1986; Kezar, 2005; Mohr & Spekman, 1994; Ostrom, 1990; Romzek et al., 2012). Rewards are benefits for every party involved. These benefits could come in the form of positive public relations, networking opportunities, a higher quality workforce or an improved program. Incremental time is the idea that development and change will occur in small amounts over time as trust grows among participants. Each of these factors is intertwined and builds upon the others to allow for successful collaboration.

**Membership Characteristics**

Membership characteristics are a mix of intangible items like traditions, trust, respect, understanding and flexibility among the participants (Mattessich, Murray-Close & Monsey, 2001; Ostrom, 1990). These elements are interwoven with the other factors influencing the effectiveness of a cooperative or collaborative effort. When cultivated well, the partnership will be supported with stronger patterns of communication and commitment.

The selection of people who participate on the board is integral, as is instituting a system for managing the size of the group chosen (Beckman et al., 1997; Ostrom, 1990). A good rule of thumb is that those who will be affected by the collaboration should be invited to participate and have some opportunity to influence the discussion (Mattessich, Murray-Close & Monsey, 2001; Ostrom, 1990). In order to determine who will be affected by the IAB, an understanding of its purpose
becomes paramount. When inviting industry participants, consider that leaders will have the most influence within their organization and greater access to resources. Leadership does not have to be the CEO, but a representative that has influence within the business or industry. This makes actionable items more attainable. In addition, participants will generally act in their own self-interest (Mattessich, Murray-Close & Monsey, 2001; Ostrom, 1990; Skyrms, 2004); therefore, leaders with similar goals to the educational institution or program will be most effective on the IAB. Including industry leaders whose knowledge and skills are aligned with the school’s or program’s needs will also aid in meeting goals (Hinman, 1993; Marshall, 1999). If the IAB’s mission is to gather information about regional industry trends, it may be best to find someone with a broad view of the regional industry. If the IAB is seeking weaknesses and strengths of specific curriculum, creating a temporary subcommittee of industry participants with expertise in that particular area may be the most effective choice.

Participation and support from leaders are also key to establishing the partnership’s authority or legitimacy (Ostrom, 1990). The IAB’s influence on the educational setting will be affected by its right and/or requirement to exist and the support it receives from leaders in both the education and business community. Support from leadership in the educational system (i.e., from school administrators), and from business and industry, (i.e., executive officers or professional industry associations), communicates to stakeholders and board participants an investment in the IAB. This, in turn, can build commitment and trust. It also incentivizes other organizations and companies to invest because of the perceived commitment to success.

Communication

Communication is at the crux of what makes an IAB successful. Communication resolves ambiguity and reduces uncertainty among participants (Daft & Lengel, 1984; Fulk & Boyd, 1991). It is often measured by how frequently people interact with one another. Frequency of interaction is generally correlated with people’s trust in one another and helps in establishing a degree of accountability and commitment among the participants (Kezar, 2005; Ostrom, 1990; Romzek et al., 2012). However, the speed of feedback, diversity of communication channels, the nature of one’s relationship to the source of information and the use of explanatory language are all factors that convey the quality of communication (Daft & Lengel, 1984). Face-to-face communication is the channel that provides the richest amount of information. It also allows for greater trust, as well as for relationships to develop among the participants (Daft & Lengel, 1984; Erickson & Jacoby, 2003; Heimer, 1992). However, time and resource constraints do not always allow for face-to-face interaction. Technology can be used as a tool to enable the frequent communication necessary for effectiveness.

In the research specific to the development of IABs, educator perceptions of board effectiveness were related to the number of times the boards met and their degree and quality of participation (Benigni, Ferguson & McGee, 2011; Kilcrease, 2011). More specifically, Kilcrease (2011) noted that educators who more frequently participated in meetings rated the effectiveness of a board more highly than those with less participation. Benigni, Ferguson and McGee’s (2011) survey of educator and student perceptions of journalism and communication IABs found that perceptions of effectiveness were directly correlated to students’ and educators’ knowledge of the boards’ goals, work and role.

Sena, Sena and Crable (2010) noted that educators rated boards with more than 15 members that met at least twice per year more effective than boards with fewer members and fewer meetings.

Collaboration Structure

Communication and the board’s collaboration structure are closely tied to each other. The rules and norms unique to a particular partnership inform its structure or process, while patterns established affect the way participants interact with one another. Mattessich, Murray-Close and Monsey (2001) listed several important components of an effective collaboration structure:

- All members should have the ability to influence the process and outcomes.
- Decision-making occurs on multiple levels.
- There is adaptability and flexibility to accomplish goals and work within changing conditions, roles and responsibilities.
- Policies are clearly identified.

A collaboration structure will become more complex as it becomes more integrated (Austin, 2000). A formalized structure and clear patterns of behavior will appear over time as the people involved sort out their roles within this environment (Kezar, 2005). The formal and informal patterns of policies, norms and expectations that are established will affect how participants make decisions and behave within the collaboration context (Polski & Ostrom, 1999; Romzek et al., 2012).

Rewards

Research specific to IABs has focused primarily on rewards. Essentially, what are the benefits that each participant accrues by participating in this collaboration? Research has sought the answer in two ways: 1) by determining if the goals of the educational programs or institutions have been met, and 2) by determining the perceived benefits for industry participants.

This paper earlier addressed specific goals that are common to CTE IABs. In general, objectives and resources the board offers should be relevant and benefit the educational organization and the members of the IAB (Copa & Ammentorp, 1998). IAB members from outside the school or program must receive benefits from this partnership (Dorazio, 1996). They may not receive the same degree of benefit as the educational partners, but there should be some form of incentive for participation (Copa & Ammentorp, 1998). The board’s communication, collaborative structure and membership characteristics impact rewards (Benigni et al., 2011; Kilcrease, 2011). For instance, asking for IAB members’ participation with authentic, relevant issues and communicating the effect of their feedback can contribute to board members feeling valued. If their impact is not well-communicated, board members may feel as though they are not needed and the experience is not worth their time (Hightower, 2006).

Understanding board members’ motivations and the rewards board members receive from the experience is beneficial. Research has pointed to several motivating factors, including contributing to curriculum (Genheimer and Shehab, 2009), networking and a sense of “giving back” (Nagai, 2011). Contributing to curriculum, among other potential impacts on the program, provides organizations with the opportunity to
APPLYING RESEARCH TO PRACTICE

- Determine your goal. Frame the goal so that it relates to students’ educational experiences.
- Research any existing policies within your school or district that include rules or regulations that need to be followed. Are any permissions needed to begin this type of group?
- Select education representatives who will be most affected by the IAB’s goal and board members who can provide the most relevant advice and/or resources pertaining to the goal.
- Arrange at least two in-person meetings over the course of the year. Use technology to enable communication throughout the rest of the year.
- Ensure that all stakeholders affected by decisions are represented and feel comfortable with voicing their opinions.
- Clearly communicate any formal policies and roles to all who participate.
- Create a positive environment where all people are able to contribute, their voices are valued and they have the potential to benefit because of their participation.
- Communicate to the board the changes and value they bring to the education institution or program. Be appreciative of their resources and contributions.
- Be patient. Celebrate small accomplishments.

build and improve their workforce pipeline. The concern that employers are unable to find a highly qualified workforce has been expressed often in recent years (ACT, 2011; National Association of Manufacturers, 2005; Manyika, Lund, Auguste & Ramaswamy, 2012). Engaging industry in the development and improvement of a CTE program has the potential to improve the industry’s productivity and ability to compete in a global economy.

Incremental Time

It is important to understand that developing and building the effectiveness of the board will take time (Austin, 2000; Mattessich, Murray-Close & Monsey, 2001). Change should occur incrementally and both the degree and pace of change should be relative to the scope of the organization. In the early stages of an IAB, smaller goals are helpful to create trust, respect and commitment among participants. A board that has been established for some time and has already developed positive membership characteristics and strong patterns of communication will have greater success at attaining more complex and highly integrative goals. The concept of incremental time and goals allows for trust, respect and expressions of commitment to success to build among the participants (Axelrod, 1984; Skyrms, 2004).

Conclusion

Developing an IAB to assist your school or CTE program can be highly beneficial. It can offer access to information and resources that can improve your ability to make informed decisions and prepare students for the workforce. However, at the heart of this partnership are people—people who are seeking to improve the school and the community and to provide opportunities for students and local industry by working together. Increased respect, trust and commitment among the participants are important in incentivizing everyone to continue to commit to improving outcomes for students and the local or regional economy. Allowing time for the partnership to flourish, as well as aligning goals, will enable your IAB to achieve its potential.

AUTHOR BIO

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