

Chapter 13

Politics and Policy

Kendall N. Starkweather

“Strive not to be a success, but rather to be of value.”

Albert Einstein

This chapter addresses the socio-political context of technology education from my background as a technology education professional followed by over three decades of experience as an executive with an international technology education association, the ITEEA. In order to be valued as a key area of learning, technology needs to be distinctive in the school curriculum and create a positive perception in the minds of parents and decision makers. This is an issue of branding. Technology education associations have a key role to play in positioning the subject, informing the politics and policy advancing the subject. Teachers who become active benefit from being involved in strategy discussions and resource development, networking advantages, and political support as a result of being known and interacting with others in the technology education and wider education communities. While much has been achieved by technology education associations, they will need to continue to evolve if they are to reflect contemporary values, beliefs and assumptions of the profession, and have robust mechanisms for supporting members to work together in a digital and globalised world.

Introduction

Politics and policy will play an important role in the future of technology education, just as they have been a factor in many of the accomplishments that have been realised to date. Yet few in the profession fully recognise that in their efforts to have successful programmes, every attempt to should be made to show the value of a technology education. Technology educators often miss golden opportunities to promote their programmes and the profession through the accomplishments of their students as a result of high quality teaching and learning. This is important since it

K.N. Starkweather (✉)

International Technology and Engineering Educators Association (ITEEA), Reston, VA, USA

e-mail: knscls@icloud.com

is when parents, school administrators, corporate decision makers, and elected policy makers raise their level of support for technology education that the field will have even greater opportunities to develop the next generation of technologists, innovators, designers, and engineers. These technological thinkers will be the valued leaders of tomorrow.

This chapter will address politics and policy from my background as a technology education professional followed by over three decades of experience as an executive with an international technology education association, the ITEEA (International Technology and Engineering Educators Association). Therefore, the content is generated from my experiences as well as more general association research. The intent of this chapter is to give the reader a perspective of the role of technology education associations in guiding the work of professionals, and how technology educators can use associations to advance their field through politics and policy. It is imperative that teachers be able to maximise their potential and know the “how and why” of being politically astute.

Advocacy by interest groups have resulted in the additions and changes that have taken place to curriculum over time. The advocacy of technology teaching continues as teachers communicate and share ideas about teaching and learning strategies and practices. Such advocacy groups often become associations that exist to help members share directions, set standards, and advance policy. However, the importance of politics and policy are seldom fully internalised by teachers, administrators and teacher educators, who each have a different primary concern: concentrating on teaching and learning.

This chapter will consider areas of politics and policy that have and will continue to affect the prominence of technology education. These include: positioning technology education, the power of a name, school politics, worldwide networking, association culture, core capabilities, forward thinking, raising the value of technology education, and showcasing success. My intention is that this chapter will help technology educators and members of technology education associations understand the important role of politics, be better advocates, and contribute to stronger policies for future technology education programmes.

Positioning Technology Education

Technology is everywhere and can be linked to everything in our lives in terms of influencing our daily activities, the nature of our work patterns, the security of our information networks, and the safety of our countries. One would think that technology would be one of the most important subjects taught in our schools. However, it does not hold a key position in our schools today because of traditions that emphasise other subjects, understandings about the definition and philosophies for teaching about technology, and the ways that technology is learned in our daily lives or in schools. At a time when technology should be the most important subject in education, it is often considered an elective or ‘add on’ subject in a student’s course of work.

The effort to keep technology education strongly positioned in the elementary and secondary school curriculum is ongoing. Technology education is not often considered as one of the primary core subjects with the status that is given to mathematics, reading, science, or social studies. In the United States, for example, technology education is not measured with the same consistency as the core subjects, if at all, signaling that it is not valued as highly. Rather, technology education is often thought of as a skills course having to do with how much one knows about and is able to use computers for learning, accessing information, or for pleasure—teaching technology is most often thought of in the form of teaching “with” technology rather than teaching “about” technology. For many in the field of education including parents, students, and key decision makers and politicians, the battle for a person’s mind to consider technology as a key, important subject within our schools is lost before it has even begun. This realisation pertaining to the importance of advancing technology teaching becomes a positioning problem because it is an initiative much bigger than any one person can advance. These, and other observations, are the very reason that associations exist today, and will in the future.

Associations exist in many different forms around the world for the advancement of technology education. They exist in all levels of maturity, from very beginning associations to those that have made significant contributions to our profession. Each has its own culture, or personality, as a result of inside and outside influences affecting the level of significance of technology and the way it is taught in schools. Often, technology taught in a specific country is reflective of the level of technological sophistication being used in that country.

Similarly, associations tend to reflect the philosophies for delivery of instruction that dominate in particular educational jurisdictions. For example, the United Kingdom associations have a primary interest in advancing “design and technology” while “technology and engineering” is a major emphasis for United States associations. In Canada and Australia, provincial, territorial, and state associations seem to be more active and stronger than national associations. Associations in developing countries, if in existence, have a tendency to evolve as their education infrastructure grows.

The strength of associations grows and wanes depending on positive and negative controversy related to action both inside and outside of the profession. Association leadership processes create positive controversy through attracting members, engaging individuals, soliciting information, and attaining general consensus on curricula initiatives. These leadership processes create communities of practice, core values, ways of operation, and methods of engaging teachers, administrators, and other key stakeholders. Standards are built by using focus groups to either develop the initial frameworks or seek reaction and improvement by stakeholders or teachers who are responsible for delivering instruction. New curriculum directions are identified or refined through similar processes that create positive controversy. The end result is hopefully a document that reflects the best of collective thought. In other words, technology education associations have become leaders for their teachers by creating documents that establish a direction or territory of the curriculum that belongs to their field. This is important, since

teachers are key to advancing the profession. If they have not bought into ideas and next directions, any proposed progress will fail.

On the other hand, failure to change names or curricula to keep pace with broader developments, lack of success in getting included in progressive legislative reform, or being included as a sub-part of another subject's new standards are examples that can cause negative controversy, hindering the growth of technology education. If an association cannot move quickly to turn a negative ramification into a positive direction, membership interest will drop and, where more than one association exists, members may even migrate to a competitor association that is perceived to better represent the needs and concerns of educators.

A recent example of potential negative controversy may have happened in the United States, with the science community creating standards for technology and engineering education under the umbrella of science education. If this standards thrust is successful, it will cause the national science teachers association to incorporate the technology and engineering community into their organisation. At the same time, the technology and engineering associations will have to make adjustments if they are to hold their leadership position with their own teachers and subject area. It will take years to judge if this move by the science community was fruitful for them or their proposed partners from the technology and engineering community. Hopefully, it will be fruitful for both association communities.

The political structure within a given country also affects the type of association that may exist because of the way that decisions are made at the various levels of government. A democratic form of government will result in an association operating in a different way than associations in countries with authoritarian governments. Nevertheless, many of the same problems will exist when attempting to teach technology in schools, for example, teacher preparation, instructional strategies, assessments, and more. There is, therefore, a common bond between technology teaching professionals regardless of a country's culture or political structure. Within this, associations can become the common ground for the exchange of ideas and initiatives. Often what works in one country (e.g., using design as a key curricular component) is tried in others, some of which have entirely different cultures or political systems.

The Power of a Name

Successful association boards in a democratic society have two main purposes: to determine directions and to set policy. Successful educational associations therefore have a positive mission and purpose to further the ideals of the profession. They aim to help their members grow professionally and to advance thought and practice pertaining to high quality technology teaching. This effort is a way of moving the profession from its 'current reality' to one that is more visionary.

One example of an association 'determining directions' and later 'setting policy' happened with the American Industrial Arts Association (AIAA) in the United

States during the 1980s. The association leadership needed to anticipate a new curriculum for a society that was moving from being industrialised to one that was becoming more technological in nature. Thus, an association name change was proposed after membership surveys, forums, and discussion amongst the Board of Directors. The change from Industrial Arts to Technology Education caused considerable stress because of comfort with the decades-old name, Industrial Arts, which was well known within educational circles.

The AIAA Board of Directors knew that they had to be careful about perceptions, for the selected name of the association would also be the title of a new curriculum. This new curriculum would be developed and promoted both in and outside educational circles, probably for decades. Such a name change would therefore have to be accomplished with thoughtfulness and concern, taking into account the smallest of details. For example, a name such as ‘Industrial Technology Education’ at the national level could result in a funny or negative acronym with affiliates at the state or local level, causing the subject name not to be readily acceptable.

Ultimately, the name, International Technology Education Association (ITEA), was chosen because it best signaled the change towards the new technology education curriculum. Members had become aware of the presence of ‘technology education’ as a term in the literature and the name of the association’s journal had recently been changed to *The Technology Teacher*. ITEA more recently made a second name change to include engineering in their association’s title: International Technology and Engineering Educators Association (ITEEA). This change reflects political positioning to include engineering education at the K-12 levels of education, while the previous name change was more to signal a change in curricular direction. The second name change better positioned technology education to be a player in the technology and engineering standards that were later created by the science community.

School Politics

Teachers place little emphasis on school politics at the primary or secondary level where the real action of teaching and learning is focused. Politics at this level tends to be focused on teacher unions or bargaining units addressing salaries and other benefits that accompany teaching in school systems. Of course, this is a primary factor in any teacher’s life because of financial and health impacts on a teacher and the teacher’s family. This chapter will not address salaries and benefit negotiations, but will address politics and policy making tied to technology education.

Teacher preparation usually does not educate teachers about the attributes of associations or the dynamics of being politically active to support technology education in schools.

School teachers normally have to learn about politics in a random fashion, usually from colleagues with the same teaching and content interests. For example,

technology teachers are often interested in technologies such as robotics or solar energy. They know that they can gain knowledge in these areas from meetings and training. The meetings are usually organised by their colleagues who are members of a local, regional, state, provincial, or national association. The need to know more about teaching and the technical expertise to be able to teach about design, technology, and technological literacy concepts causes the teacher to take initial steps towards becoming involved in association activities.

As school systems change curriculum, standards, instructional media, assessments, and other related items, teachers are expected to become knowledgeable in their use. For example, school systems often have some type of learning standards or the need for assessments written in a specific manner related to technology education. Associations often have anticipated such needs and have models to share. The degree of passion that a teacher has for staying current with the latest educational developments is often directly related to their amount and degree of association involvement. Obviously, educators active in an association are better prepared to be excellent teachers simply because they have been involved in the development of materials and strategies used by the association and technology teachers. These involved educators also become recognised as leaders because of the knowledge they have gained through association participation.

It is clear that a group of educators often have more influence on an issue, problem, or opportunity than a single person. Therefore, a group of technology teachers can have more influence on key decision makers than a person representing a single programme. Associations often use this numbers power to influence educational leaders beyond their subject area, for example, in calling for lower student:teacher ratios, organisation of technology teaching within a STEM unit of a school, changing the philosophical direction of an existing programme, calling for more professional development support, stopping spending on outdated initiatives, etc. Associations become a way of organising the masses for the good of the majority involved. This is particularly true when asking school boards, government leaders, or elected representatives for more funding to expand the impact of technology education.

The needs of the technology teacher become the major focal point for any effective technology education association. The support and time given by the classroom teacher to an association usually results in knowledge gain by the teacher, networking advantages, and political support as a result of being known and interacting with other leaders. A political support system can be the difference between a programme surviving during tough financial times or being terminated as a result of no one being politically savvy enough to stop the termination process.

The ideal politics and policy-making programme of an association at any level is one that promotes positive ideas that will help educators and their students. Such a programme would undertake offensive initiatives for the growth of technology education, rather than constantly being on the defensive and trying to save past initiatives. School politics is one of the most important areas of technology education because it can do more to affect the overall health of technology education programmes, and it all starts with the actions of teachers.

Worldwide Networking

Worldwide social networks also have a tremendous influence on perspectives and decision making simply because information is shared so quickly and can influence each person. This type of networking often forms or is directed through an association. Professionals are also often directly connected to the association(s) that they value from around the world. For example, it is not uncommon for a professional from Africa to be involved with associations and meetings in Europe, or New Zealand educators being active in Japan, China, or Finland.

Technology education researchers from around the world share philosophical positions and research through journals and selected other publications, and interact during research conferences, such as the Pupils Attitudes Toward Technology (PATT) conferences or the Technology Education Research Conference (TERC), where ideas, directions, and philosophies are tested. For example, the many characteristics of technology and engineering as it relates to science and mathematics will be shaped at conferences related to science, technology, engineering, and mathematics (STEM) education. These face-to-face meetings are further supported by electronic networking, which advances discussion in terms of practice and thought, or simply by watching what fellow professionals are doing.

Of course, social networking has also forever changed the face and internal operations of associations (Nour 2011; Sladek 2011). Although we may not know what social networking will look like in the future, its effect is going to be huge. For instance, the idea of “belonging” to an association is changing in that members will belong in the future, but in a different way. Perhaps accessing resources from associations will become like a person walking up to a vending machine where money is paid for the product and the person walks away with the product. This is an important adjustment for associations because they may need to change how their primary revenue is derived.

Within such a changed context, it may not be how many members an association has that is important, but rather how much influence an association can create for their cause. Yes, membership numbers count, but the old days of representation according to a membership infrastructure is fast becoming passé. Professionals are no longer joining associations for the same reasons as in the past. Few care about the degree of representation that an association can deliver. Many do not care if they become an association member. They want what will help them in their current situation and they want it NOW. If they cannot get their wants and needs satisfied by the association, they will go to other places on the internet. This places technology education associations in a precarious situation. They still need members to provide the core association direction and financial income, but their professional members do not necessarily have the same desire and commitment as in the past to affiliate.

Association Culture, Core Capabilities and Forward Thinking

If associations are to act as a major player in the politics and policy advancing technology education, the way that technology educators think about their future professional association will have to change. This change must happen because of progress that will be made in communities of practice with the next generation of teachers' core values, ways of operation, and ways of engaging others. The use of information technology, often by younger professional members, has already changed that thinking. The older members must move quickly to obtain a new mentality about technology and its use in communicating if the association is to attract younger members. We know that electronic communication will continue to change technology advances, and that it changes the way people communication and think about society.

Changing the association culture is not an easy task, since most associations have a culture that is adverse to change (Coerver and Byers 2011). Volunteers, such as board or committee members, don't want to disagree with peers and staff don't want to disagree with the leadership, who are the volunteers. Technology educator associations often focus the majority of their time on procedural or managerial functions, such as keeping the committees, task forces, and Boards functioning. Often so much time is spent on operational functions that little emphasis is placed on where the time and energy investment should be placed.

Moving forward, associations will likely need to drop most of their procedural and managerial activities and concentrate only on what they do best. This can be done by first asking and answering where the association can best invest its time and energy. Core capabilities must be identified and only a leadership commitment to get maximum results will create a culture effecting forward thinking. When technology education association cultures fail to change with the times, the politics and policies needed to advance technology teaching will be severely limited or may not occur at all. The result will be many missed opportunities.

What are association core capabilities? Often, only the association members have the knowledge and experience to determine core changes related to their region of the world. At selected times, a core capability will arise and be so obvious that it becomes evident to all and automatically attracts support. Such an example is one that evolved in the United States pertaining to drunk driving. So many individuals were causing accidents and deaths as a result of drunk driving that it caused the creation of an association called Mothers Against Drunk Driving (MADD, www.MADD.org). MADD worked to have state and national legislation passed to create stiffer penalties. They created greater awareness about the drunk driving problem and contributed to bringing this more under control for the betterment of society. MADD serves as a model for identifying a core issue with the ability of creating an association to do something about it. MADD coalesced around a leadership group who tackled the problem, and attracted and mobilised many others to help work on the solution. Although the reason for the creation of MADD has been addressed, the association

continues to keep the problem of drunk driving in the forefront of North American society. Technology education associations need a similarly compelling core reason (s) that will attract educators from around the world to an equally important mission. Such a compelling issue has been hard to identify.

What are select core capabilities for technology education associations and professionals? The answer may be found in the reason that technology education associations were created in the first place: to advance thought and practice about the teaching of technology and technological literacy. However, this reason alone is not sufficiently compelling to cause masses to be mobilised into action. A problem or issue related to technology and technological literacy that is more compelling needs to be identified. For example, if there was a direct link drawn between technological knowledge and/or capabilities and how much a population thrives as a nation in terms of goods and gross national product, more interest may be focused on teaching technology. The end result could be better positioning and more support for teaching about technology, innovation, design, and engineering. However, even this direction may not be compelling enough, for mathematics and science are often given credit for such advances, not technology.

The identity, positioning, and advocacy issues associated with the technology teaching profession remains a hindrance to the growth and support of technology education. Unlike the school subjects of history, science, or mathematics, where much of the content is based on constant facts or theorems, technology is dynamic in nature, with changing, new content that reflects the latest developments in society. The profession's content once covered woodworking and metalworking, but now covers such topics as computer-aided design, robotics and lasers. These changes make it difficult to keep the various publics apprised of the latest technology education identity. In other words, identity and positioning problems are likely to continue within the larger community of education, as well as with parents and other stakeholders. Technology education associations inherit these identity, positioning, and advocacy problems.

At the same time, the compelling reason for starting an association may not remain as compelling for keeping the association moving forward in the long run. Other more compelling core capabilities need to be constantly identified, reviewed, researched, trial tested, and implemented for a profession and its representative associations. These characteristics help an association to remain vibrant. The longevity of technology education associations will depend on the compelling nature of their core capability. As previously stated, this is not a situation that is unique to technology education associations. However, it is a big challenge for the profession and its associations if political action and advocacy efforts are to be effective change agents.

Perhaps one mandate is for technology education associations to have a mission of developing essential resources for improving teacher performance, while at the same time creating an environment that will allow the association to stay in business. This culture should look to and reflect on how an association adds value to the work of technology teachers who are the membership—if membership is still composed of only technology, design, or engineering teachers. It will likely be necessary for the association leaders to strive for deeper, more meaningful services that might include

project information or selected services that matter to members, add depth to current services, or create new services to address new member needs. Some technology education associations might be in the position to do less, but do it better.

Technology education associations must address the characteristics identified in the previous paragraph as signs of change and look at the traditional membership association as the end of membership as we have known it (Sladek 2011). Today's association culture signals, with its many electronic capabilities and internet delivery of services, a dominant, compelling purpose to attract a new membership that will be teaching in a similarly electronic environment. At the same time, it must be a revenue generation association that stands out with a uniqueness that makes it different from other subject area associations. The future association will have a culture made up contemporary values, beliefs, assumptions, experiences, habits, and robust mechanisms for supporting members working together in an electronic world. These characteristics will likely all be required in the race for relevance for technology education associations.

Raising the Value of Technology Education

Earlier in this chapter and in other chapters of this book, the need for quality assessments and indicators have been noted as critical components for the future of technology education (see Chap. 7). Such indicators provide fuel for political presentations in which it is important to cite data proving the worth of technology education. These 'quality indicators' can provide selected 'vital signs' to change technology education in both politics and policy making, showing a subject area that provides many positive attributes in the education of all students.

Technology education associations have played significant roles in helping the profession obtain research funding, articulating research findings both inside and outside of the profession, advancing ideas and practices, promoting researchers, universities, and their projects, and conducting research using association staff. However, the task of making technology education of value in politics and to policy makers can more easily be expressed than accomplished. Enough people need to be convinced that a strong knowledge of technology is an important requirement for their daily lives, that they cannot live without technology, that it is imperative to educate a next generation of technologists, innovators, designers, and engineers who will become the thinkers and leaders of tomorrow-and, that such an education comes primarily through technology education.

This task needs to be addressed with all of the enthusiasm and energy that is used to elect a nation's president, prime minister or premier. It involves all of the work of a master political strategist and a constant, unrelenting quest to provide the best technology education possible to students currently in school. Work is needed to make technology teaching a 'personal issue' in the lives of everyone, including politicians and policy makers. The task at hand is monumental. Making technology education of such value would have significant positive impacts for any country in

terms of thinkers, makers, inventors, product designers, and innovators leading in a successful thriving environment. The country that creates the next generation student with these qualities will be well positioned to become a world economic, political, and societal leader.

How does the field of technology education reach such a momentous achievement? The answer relates to the ability of the field to be distinctive in the school curriculum and in creating a positive perception in the minds of parents and decision makers. It is, in other words, an issue of branding (Starkweather 2011). In addition, discords between the aspirations for the subject and its actual delivery in the classroom must be narrowed. The public needs to be educated about what technology education is. Technology educators must help people trust and believe in the worth of technology education, creating the desire and need for the subject in schools. Technology education does not have a bad image; it has little or no image.

Technology education must look closely at the essential characteristics that describe the subject and then start shaping a culture of what they want to be. The idea of the subject as being all things to all people must be addressed by a specific focus for the subject. Patience will be important while striving for consistency, staying focused, believing in ourselves, and providing strong models based on research. The charge is one of developing a profound sense of mission and sharing it with anyone who is willing to listen, and in some cases with those who aren't.

Who, then, are the stakeholders of technology education? The short answer is "everyone". However, the real stakeholder may be "you". Any person can help empower the teacher, who in turn empowers the student through learning technology. That student then becomes the future engineer, teacher, architect, skilled tradesperson, and other types of technological workers. The distinctive characteristics of technology education addresses our ability to tinker, design, create, critique, make, invent, and attempt to better ourselves and the environment, affecting our culture and world. The human being is constantly trying to satisfy wants and needs by creating, shaping, and adjusting technological worlds.

But not all students will be employed in a technology-related field. Many will carry their technology learning with them into their futures. They will improve their technological capability, design and invent, become innovative in many ways, and address societal problems through technological solutions.

Technology educators want their subject to be a valued part of a student's overall education. They want to provide education in a quality way by creating the next generation of technological thinkers. Achieving the desired perception requires hard work and dedication to ideals, being advocates of what we do, and staying informed about the latest education and technological developments. Attaining these public and professional characteristics requires more than an 'average' advocate for technology education. It requires a large group of advocates who are unrelenting in their desire to have a valued, strongly positioned school subject. That large group of advocates is very often a technology education professional association.

Often the potential allies for technology education do not know that the subject exists. This is a major disconnect. For example, corporations who could benefit from having employees with a technology education background are often totally

unaware of this type of school education. Rather, it is assumed that a student who has taken mathematics and science also has a fluency in technology and engineering. The field of engineering often perpetuates this misnomer by requiring that students take all of the mathematics and science courses that they can take in order to become an engineer. While this is important, technology education may be the main reason that a student chooses to become an engineer or technologist in the first place. The technology education profession and its associations have a major ongoing task of creating allies with corporations that desire this type of learner.

Selected charitable foundations have provided their support for technology education through funding, such as the Gatsby and Nuffield Foundations and Wellcome Trust in England or the Foundation for Technology and Engineering Education and the Technical Foundation of America in the United States. All of these support leadership initiatives to advance technology education and have done much to help the profession in their respective countries.

Other allies of technology education, who also are often overlooked, include the national academies of technology, engineering or science, which commission various studies to address opportunities and initiatives that will support and further define technology education. These academies often work with associations, foundations, and government ministries to advance STEM education.

Showcasing Success

Nothing creates value like success. Student achievements will tell the best stories for technology education. Such success should not only come through competitions, but through measurements that the public and educational systems value. These successes should be articulated with a rigorous publicity campaign that goes beyond the school walls. Often, it is the association that articulates these successes throughout the educational community and to the general public.

Positive and trusted images of technology education must come from what we do through student achievement, which should be showcased at every opportunity. In a related vein, systematic, sound research about teaching and learning should inform teacher developments, further strengthening their ability to adjust and reform technology education. Constantly striving for such successes and informing others of the quest for quality technology education will eventually lead to a valued subject area that strongly contributes to the education of all students.

Making technology education of value begins with passionate leaders who start small, but have a vision, passion, and the leadership ability to build groups focused enough to create success beyond what could be imagined. Corporate leaders such as Ray Kroc of McDonalds, Richard Branson of Virgin Atlantic, and Sam Walton of Wal-Mart are excellent examples of such leaders. They were builders of something that became larger than they probably ever dreamed.

Every teacher can become a passionate leader of technology education, building something larger than they can imagine. Causing technology education to become

an integral part of every person's basic education is the life's work of a technology teacher. As with other passionate leaders, technology teachers need to lead the cause in making technology education a valued education that is desired and sought by parents and policy makers. When the politicians and policy makers are upset at potential cuts to technology education, members of the field will know that they have been successful at making technology education of value.

Summary

This chapter began with a quote from Einstein and the idea that success breeds value. To be valued is to be meaningful, relevant, beneficial, significant, and a priority. Being "valued" is one of the major challenges that technology educators have faced during the relatively short history of their profession. Associations have played a key role in way that technology education has advanced over the years to where it is today. Associations have created an opportunity for technology educators to work together to address issues and advance causes strengthening their profession.

Technology education advocates have had a history of positioning and repositioning technology education. They have changed the names of their profession as technology has advanced. They have increased funding, advanced educational initiatives, strengthened data gathering, provided research to guide the profession, and worked to raise the value of technology education as a part of the overall education of a student. These successes are noteworthy and must be continued if the profession is to be vibrant in the future.

Future technology education associations will have to make the teaching of technology a personal or core issue and create an association with a sense of purpose that consumes one's professional career if the association is to be productive and viable. Association leaders will have to constantly search for what that personal or core issue(s) is to remain a productive association. The issue(s) may vary from country to country, with the common denominator of needing a compelling issue causing one to join and be involved. It is the heart of future association membership. The core issue is the 'life's work' of an association, driving politics and policy making to advance the profession.

A tremendous amount of work has been accomplished to progress technology education to this point. Now, with the changing nature of society, technology educators must adapt and capitalise on the qualities produced by this type of education.

The opportunities to influence the politics and policy for technology education are vast. The amount of work to be accomplished is great. The stakes for technology educators—and ultimately students as future workers and citizens—are high. The reason for what must be done is very clear. No other field can show how technology and technological literacy can be taught to prepare young minds toward a creative and satisfying life like technology education.

References

- Coerver, H., & Byers, M. (2011). *Race for relevance: 5 radical changes for associations*. Washington, DC: American Society for Association Executives.
- Nour, D. (2011). *Return on impact: Leadership strategies for the age of connected relationships*. Washington, DC: American Society for Association Executives.
- Sladek, S. (2011). *The end of membership as we know it*. Washington, DC: American Society for Association Executives.
- Starkweather, K. N. (2011). Branding: Putting a little dent in the universe. *Technology and Engineering Teacher*, 70(6), 36–40.