An Examination of Advertising and Marketing for Career Academies

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Abstract

In high school settings, the small learning community (SLC) concept often manifests in the form of career academies. Career academies function as SLCs organized around career and technical education (CTE) themes; although, CTE is often misunderstood. This study examined a community outreach campaign that used traditional and nontraditional advertising and marketing outlets to combat negative media attention toward career academies. All media outlets examined were effective at reaching the targeted community, yielding a positive response in calls to action. Continued research is needed to better understand how advertising and marketing can be utilized in public education, specifically with combating negative views toward CTE.

Introduction

Over a six-year period, the Metropolitan Nashville Public Schools (MNPS) system engaged in a district-wide high school redesign initiative based on the small learning community (SLC) model to implement career academies across the district's comprehensive high schools. SLCs are intended to create smaller schools-within-schools to create a learning environment desired by students through small, interdisciplinary teaching and learning teams, curriculum that is rigorous and relevant, and inclusive instructional practices (Armstead et al., 2010). According to Armstead et al. (2010) students favor the model, and in in lower performing, large urban high schools SLCs have a positive impact. In MNPS, collectively, 41 unique career academies emerged across the 12 comprehensive high schools. Career academy themes included veterinary science, alternative energy, engineering, computer programming, and nursing, among other career and technical education (CTE) program areas. An early evolution of the high school redesign initiative was branding the 41 career academies as the *Academies of Nashville*.

As learners in the *Academies of Nashville*, students complete general education courses, electives, and specialized courses in their respective CTE pathways. Career academy teachers attempt to provide rigorous academic preparation for college and careers by incorporating interdisciplinary, real-world examples related to career academy themes to ensure relevance for students. Numerous studies demonstrate positive findings on achievement of students in career academies, including higher grades, decreased dropout rates, increased attendance, and increased graduation rates (Hemelt et al., 2019). In spite of documented benefits of implementing the SLC model, some members of the Nashville community were not supportive of the transition with its CTE focus.

During multiple school board meetings, community gatherings, school events, and digital conversations, the SLC model was chastised as vocational training rather than its intent of preparing students for post-secondary education and careers (Garrison, 2011a & Garrison, 2011b). Online criticism from community members about the Academies of Nashville emerged following media reports on the school system changes. Examples of community criticism include, "the Academies of Nashville system will weaken the intellectual aspect of the school" (Hargrove, 2011a, para. 30), "progress will flounder" (Hargrove, 2011a, para. 30), and "Hillsboro High School is in the process of becoming an 'Academies of Nashville School', which means that it will focus on technical and vocational training instead of college prep" (Hargrove, 2011b, para. 16). Beyond reader comments from online periodicals, community displeasure was also voiced through social media sites, school protests, and student demonstrations (Hargrove, 2011b). Therefore, to address concerns, MNPS devised a strategic communications plan that hinged on a community outreach campaign.

Prior to the *Academies of Nashville* community outreach campaign, MNPS used three pre-existing communication efforts. A Facebook page and Twitter account had been developed, but were seldom used and had little engagement by its followers. Additionally, a blog was developed to showcase student work and accomplishments; however, traffic and engagement with the blog plateaued within months of its creation. While there was an established audience for the social media outlets and the blog, each outlet struggled to reach new people and engage existing followers.

Literature Review
For more than forty years, initiatives have supported the development of communication practices in CTE programs at the secondary and postsecondary educational levels. Rice (1980) identified the need for community outreach in CTE, and Martin (1995) provided guidance for creating CTE marketing plans. Other research has previously demonstrated the need for a public relations action in CTE programs (Akers et al., 2001; Roberts & Dyer, 2004), and many states, including Washington, Arkansas, Maryland (Advance CTE, 2020a), Georgia, North Dakota (Advance CTE, 2020b), Colorado, and Idaho (Advance CTE, 2020c) have collaborated with stakeholders to enhance communications. However, no studies have investigated the application of strategic communication plans by CTE programs.

Enhanced school-choice policies throughout the country have resulted in an increased need to market schools and their programmatic offerings to both students and parents (Jabbar, 2016). According to DiMartino and Jensen (2016), effective use of marketing strategies can help schools appear more desirable in the competitive education marketplace. As Beal and Beal (2016) purported, the marketization of K–12 education has caused increased marketing efforts; however, little research has investigated the impact of school marketing strategies. Further, according to Excel*in*Ed (2021), "Parents and young adults agree that developing "real-world" skills, gaining work experience and completing career-focused coursework will set learners up for success after high school—but there is likely a significant gap between what parents believe schools are providing and what they are actually delivering" (p. 12). Further, "parents and young adults indicated that schools most frequently communicate about honors or advanced coursework and college acceleration opportunities–but they want to learn more about career-focused educational opportunities, especially work-based learning and CTE" (Excel*in*Ed, 2021, p. 17).

"There is an information gap in how parents and young adults evaluate the quality of CTE pathways and the information schools currently provide" (Excel*in*Ed, 2021, p. 21). According to Advance CTE (2020a), adopting a digital approach can help reach local stakeholders and providing a diverse array of opportunities to engage with relevant content is essential.

Colley's (1961) Levels of Understanding model served as the foundation for this current study in advertising and marketing. Colley (1961) reported "all commercial communications that weigh on the ultimate objective of a scale must carry a prospect through four levels of understanding" (p. 25). The term *prospect* is used to describe any member of the audience impacted by the advertising campaign (Colley, 1961). As illustrated in Figure 1, all prospects begin in a state of unawareness and then advance through four levels of understanding: (1) awareness, (2) comprehension, (3) conviction, and (4) action. In level one, awareness, the prospect becomes conscious of the existence of a product, organization, or concept. During level two, comprehension, the prospect grasps the purpose of a product, organization, or concept and understands associated benefits. In level three, conviction, the prospect decides to support the product, organization, or concept. During the final stage, action, the prospect responds to the specific advertisement objective, such as purchasing a product, supporting an organization, or promoting a concept (Colley, 1961).
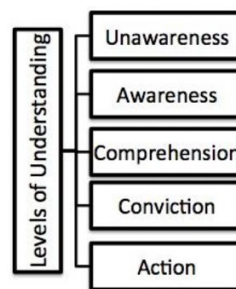

Figure 1. Colley's (1961) Levels of Understanding model.

Deighton (1984) clarified the value of an impression can carry an individual through Colley's (1961) Levels of Understanding. An impression can be made by a click, review, or visual intake of an advertisement. Prior to an impression, an individual may be at the unawareness level of a product, organization, or concept. However, after the individual has experienced an advertisement, calculated as an impression, he or she moves into the awareness level of understanding (Deighton, 1984).

According to Chen and Stallaert (2014), enhancements in information technology have profoundly changed online advertising, especially in the area of measuring the performance and targeting advertisements. Tracking clicks on a particular advertisement is usually marked as the measure of effectiveness, hence cost-per-click is exploited as a pricing standard for online advertising (Chen & Stallaert, 2014). Other measurements may include cost-per-impression (CPI) and click-through-rates (CTR). In CTE, using analytics-informed social media strategies can be beneficial in that these tools are both informative and entertaining (Advance CTE, 2020a).

CPI is the cost incurred for each viewer of an online ad; CPI equals advertising cost divided by total impressions (Chandler, & Munday, 2016). CTR is used as indicator of web users who intend to click when viewing advertisements on websites, representing a ratio of the number of

users that clicked on an ad to the number of times it was shown, and a higher CTR value is important to improving the visibility of an organization (Lakshmanarao et al., 2021). The return on investment (ROI) is one way to measure the efficiency of an investment and compare the efficiency to a number of other investments (Investopedia, 2012).

The most recent National Career and Technical Education Research Agenda (Lambeth, Elliot, & Joerger, 2008) encouraged research on best practices for marketing CTE programs. A search for studies that examined advertising, marketing, and public relations for CTE was conducted in the following journals: The Career and Technical Education Research Journal, the Journal of Agricultural Education, the Journal of Career and Technical Education, and the Journal of Research in Technical Careers. These discipline related journals yielded zero results. To be clear, no empirical evidence of the effectiveness of a local, targeted community outreach campaign regarding CTE exists.

Purpose / Objectives

The purpose of this study was to determine the impact of a community outreach campaign on social media platforms used for promoting career academies. The study was guided by the following research questions:
1. How do different media outlets affect the type and number of audience impressions during a community outreach campaign?
2. What is the return on investment of different media outlets used during a community outreach campaign?
3. How do community outreach campaign calls to action affect social media platforms patronized by an organization?
   a. What is the effect of calls to action on an organization's blog?
   b. What is the effect of calls to action on an organization's Facebook page?
   c. What is the effect of calls to action on an organization's Twitter account?
4. What are the click-through-rates of CTE digital advertising campaigns?

Methods / Procedures

During the *Academies of Nashville* community outreach campaign, both traditional and non-traditional media outlets in Nashville were selected to market the *Academies of Nashville* throughout the community. Media outlets were selected based on content marketing strategy in which content is created and shared using blogs, videos, print and other media to attract and engage a target audience (Pulizzi & Barrett, 2009). Traditional advertising methods selected were newspaper print and digital advertising. The potential audience reach, and cost efficiency were factors in selecting these outlets (Clippenger, 2012). Twenty-five print advertisements ran in *The Tennessean*, the city newspaper, over a four-month period. The digital advertising campaign also ran through *The Tennessean* website during the same period. These traditional advertising outlets were supplemented through non-traditional advertising channels.

Metro Transit Authority (MTA), the local public bus transportation system, bus and bench advertising were selected due to mobility and impression estimates (Advertising Vehicles, 2012). Ten buses and six bus benches displayed *Academies of Nashville* advertisements for two months. Additionally, a thirty-second commercial ran twice during the previews before every movie for three months in movie theaters located in Nashville and a digital campaign was launched on

local ticket sales and movie review websites during the same period. The final non-traditional outlet used was point-of-purchase (POP) television. More than 100 different fifteen-second commercials were broadcast at local gas stations throughout the county.

CTE students wrote statements describing the enhanced abilities they had because of their participation in CTE served as the content for advertisements. For example, one student in a video production CTE program of study wrote, "I can write, produce and direct my own TV show, and I still have a curfew" and another student, a female, in an architecture and construction CTE program of study wrote, "I can design and build a house, and I can do it in heels." These "I Can" statements highlighted different schools and were used in each advertising outlet. According to Lubienski and Lee (2016), the way schools promote themselves to families speaks to how schools engage in the local education market. Therefore, the "I Can" statements were selected for each advertising outlet based on the proximity of the outlet to the physical school location and relevance of the statement to the advertising space or location.

According to the final stage of Colley's (1961) Levels of Understanding model, prospects respond to the specific advertisement objectives. In the present study, each advertising outlet (print ad, bus wraps, bench wraps, movie theater, and POP TV) was associated with a call to action encouraging readers and viewers to visit the *Academies of Nashville* blog and follow the *Academies of Nashville* on Facebook and Twitter, which served as the advertisement objective. According to Colley (1961), monitoring response to advertising allows for advertising campaign results to be measured. Therefore, community responses to the outreach campaign calls to action were utilized for data collection.

Additional data was collected by audit requests and contractual agreements. An audit request was issued to *The Tennessean* to collect subscription numbers, newspaper sales information, and digital campaign analytics for collecting print advertisement data. An audit request was issued to MTA to obtain time framed public impressions for collecting bus and bench wrap advertisement data. An audit request was issued to Regal Cinemas and ScreenVision movie theaters to obtain ticket sales information and digital campaign analytics for collecting movie theater advertisement data. Contractual agreements with local gas stations informed POP TV advertisement data collection.

The Google Analytics service was used to obtain detailed information about visitors to the *Academies of Nashville* blog. Similarly, Facebook's insights feature was utilized to obtain detailed information about visitors to the *Academies of Nashville* Facebook page. Finally, Sprout Social, a social media management tool, was used to obtain detailed information about follower interactions on the *Academies of Nashville* Twitter feed.

All data were analyzed using descriptive statistics.

Results

Research question 1 asked how different media outlets affected the type and number of audience impressions during a community outreach campaign. Table 1 shows the number of impressions obtained by each media outlet, by school, during the community outreach campaign. The Academies of Nashville received 17,762,952 impressions during the campaign.

Table 1
Impression by Outlet by High School.

School	MTA		The Tennessean		Movie Theater		Point-Of-Purchase	Total
	Bus	Bench	Print	Digital	Video	Digital		
HS1	360,000	-	106,484	205,000	-	300,000	380,000	1,351,284
HS2	360,000	-	180,142	205,000	-	300,000	380,000	1,425,142
HS3	360,000	-	183,150	205,000	-	300,000	380,000	1,428,150
HS4	360,000	-	243,434	205,000	-	300,000	380,000	1,488,434
HS5	360,000	407,400	243,434	205,000	244,992	300,000	380,000	2,140,826
HS6	360,000	407,400	332,600	205,000	-	300,000	380,000	1,985,000
HS7	360,000	407,400	80,142	205,000	-	300,000	380,000	1,732,542
HS8	360,000	407,400	-	205,000	244,992	300,000	380,000	1,897,392
HS 9	-	-	362,584	205,000	-	300,000	380,000	1,211,584
HS10	360,000	407,400	100,000	205,000	-	300,000	380,000	1,752,400
HS11	360,000	407,400	163,292	205,000	-	300,000	380,000	1,815,692
HS 12	-	-	166,300	205,000	244,992	300,000	380,000	1,296,292
Total	4,320,000	2,444,400	2,161,562	205,000	734,976	300,000	4,560,000	17,762,952

Note. HS1 = high school 1; HS2 = high school 2…HS12 = high school 12.

Research question 2 asked for the ROI of different media outlets used during a community outreach campaign. The ROI was measured using the cost per impression (CPI) of each outlet as a whole (Table 2). The CPI was calculated using the equation provided previously by Chandler & Munday, (2016), indicating that the CPI is equal to the advertising cost divided by the total number of impressions. The total CPI for the entire outreach campaign was $0.005 per impression.

Table 2
Cost-per-impression by Advertising Outlet.

	MTA		The Tennessean		Movie Theater		Point-Of-Purchase	Total
	Bus	Bench	Print	Digital	Video	Digital		
CPI	0.004	0.004	0.013	0.013	0.017	0.017	--	0.005

Note. Cost-per-impression (CPI) is shown in dollar amount. Point-of-purchase (POP) CPI is not available, as cost for POP advertising was gifted from a community partner and remains unknown to the researchers.

Research question 3a asked for the effect of calls to action on an organization's blog. Data from the community outreach campaign was compared to the next best period (November 2011-February 2012) to show percentage change, as shown in Table 3. When comparing Table 3 to the next best period for the Academies of Nashville blog, every measure improved. There was a 943.84% overall increase in blog visits, a 1,020.28% overall increase in unique visitors to the blog, and an 880.63% overall increase in page views on the blog.

Table 3
Academies of Nashville Blog Analytics.

Month	Page Visits		Unique Visitors		Page Views		Visit Duration	
	#	% growth	#	% growth	#	% growth	#	% growth
Nov. 2011	100	-	73	-	198	-	3:26	-
Sept. 2012	606	506%	525	619%	1,182	497%	1:12	-
Dec. 2011	176	-	143	-	344	-	2:14	-
Oct. 2012	765	335%	684	378%	1,442	319%	1:14	-
Jan. 2012	392	-	272	-	523	-	2:53	-
Nov. 2012	865	121%	708	160%	1,582	202%	1:04	-
Feb. 2012	506	-	408	-	1,205	-	2:23	-
Dec. 2012	1,296	156%	1,126	176%	2,173	80%	0:52	-

Research question 3b asked for the effect of calls to action on an organization's Facebook page. As shown in Table 4, prior to the beginning of the community outreach campaign, the Academies of Nashville Facebook page had 39 likes and limited engagement by its users. By the end of 2012, the Facebook page had 173 likes, an increase of 544%. Additionally, Facebook analytics indicated the Academies of Nashville had a social influence score of 60 and a social engagement score of 20, an increase of 700% and 500%, respectively. A Klout score is a single number that represents the aggregation of multiple pieces of data about social media activities (Rao et al., 2015). Beyond social influence and engagement, a change in audience demographics occurred as well.

Research question 3c asked for the effect of calls to action on an organization's Twitter account. As indicated in Table 5, prior to the beginning of the community outreach campaign the Academies of Nashville Twitter feed had 26 followers and limited engagement by its users. By the end of 2012, the Twitter account had 213 followers, an increase of 919%. Additionally, Twitter analytics indicated that the Academies of Nashville had a social influence score of 63 and a social engagement score of 21, an increase of 585% and 450%, respectively.

Table 4
Academies of Nashville Facebook Page Analytics.

	August 2012	December 2012	Growth
Number of Fans	39	173	544%
Gender			
Impressions			
Male	35	2,837	8,206%
Female	23	5,694	24,857%
Age Impressions			
13-17	1	1,086	108,700%
18-24	5	1,915	38,400%
25-34	13	1,927	14,923%
35-44	18	1,941	10,883%
45-54	15	1,079	7,293%
55+	6	583	9,8`7%
Total Impression	122	27,500	22,640%
Reach	58	8,531	14,808%
Engagement	1%	11%	10%
Social Score			
Influence	10	60	700%
Engagement	5	20	500%

Research question 4 asked for the click-through-rates of CTE digital advertising campaigns. The CTR was calculated using the CTR equation provided by Chandler & Munday, (2016); the total number of clicks divided by the total number of impressions. The CTR for *The Tennessean* was 0.9% and the CTR for movie theaters was 0.04%, as shown in Table 6.

Table 5
Academies of Nashville Twitter Account Analytics.

	August 2012	December 2012	Growth
Number of Followers	26	213	919%
Interactions			
Mentions	20	103	615%
Retweets	9	52	107%
Social Score			
Influence	13	63	585%
Engagement	6	21	450%

Conclusions, Implications, and Recommendations
The present study investigated the impact of a community outreach campaign for CTE. Many public misconceptions of CTE exist with many people viewing CTE as inferior to general

academic coursework (Kacirek et al., 2010). Due to these misunderstandings there is a further stressed importance in advertising and marketing campaigns that position CTE in a positive fashion. These community outreach campaigns are important for school districts, schools, students, and teachers. In fact, in a review of needs assessments for agricultural education teachers, of the six major competencies that consistently recurred during the 32-year time period from 1983 to 2015, developing public relations programs was second (DiBenedetto et al., 2018).

Table 6
Click-through-rate by Outlet.

Outlet	Number of Clicks	Number of Impressions	CTR
The Tennessean	1,845	205,000	0.9%
Movie Theaters	120	300,000	0.04%

All forms of advertising used in the present study yielded positive results, demonstrating effectiveness in community outreach. Collectively, the seven media outlets generated 17,762,952 impressions in the Nashville community. The cost-per-impression was $0.005, demonstrating the cost efficiency and potential reach of traditional and nontraditional advertising (Clippenger, 2012; Harper, 2012).

The digital campaign results from *The Tennessean* (0.9%) and movie theaters (0.04%) were effective, given the national digital advertising click-through-rate is 0.03% (Nielsen, 2012). The public transportation bus and bus bench advertising were also effective. These demonstrated an affordable and high impression rate in line with previous advertising ventures (Advertising Vehicles, 2012). The researchers conclude that using the "I Can" statements throughout messaging was helpful at achieving success because this approach used a steady format. Moreover, "preparing for the real world" is a proven message for CTE recruitment" (Advance CTE, 2021, p. 2), and, according to Advance CTE (2020), "consistent and ubiquitous core messages will increase an audience's awareness of the educational and career opportunities CTE can open up to them, and drive action" (p. 6).

Using Klout scores, the researchers conclude that social media outlets used by the *Academies of Nashville* were effective at influencing visitors; however, were not effective at engaging visitors. Klout scores serve as a measurement of influence and engagement (Rao et al., 2015). A high Klout score indicated that posts generated by the *Academies of Nashville* drove action to those around them, democratizing influences. A low engagement score, however, indicated that followers did not seek to have an online conversation about the *Academies of Nashville*. It is recommended that future research investigates precursors of follower engagement with social media.

Beyond the quantitative data provided in the present study, qualitative support for success of the community outreach campaign exists. After the campaign, positive press about the *Academies of Nashville* appeared in the local market, demonstrating greater acceptance and understanding of the high school redesign initiative. Press content contrasted stories and news from previous years (Hargrove, 2011a & Hargrove, 2011b). In the *Nashville Arts Magazine*, Cole (2012) stated, "We are lucky in Nashville to have the Academies of Nashville, small learning communities in most

of our public high schools that are aimed at helping students find their spark, whether it is in arts or math or science" (p. 59). Likewise, reports in *The Tennessean* even stated "vocational-education has come a long way since the automotive repair, home economics and cosmetology classes of yore" (McBride, 2012, para. 7).

To provide greater insight to the impact of the outreach campaign, the researchers recommend conducting a community awareness study. Data from a community awareness study would provide enhanced knowledge about community understanding of the *Academies of Nashville* and establish baseline data upon which future studies could be compared.

Findings of this study should be viewed in light of some limitations. First, because the data were collected in 2012, social media outlets used in this study were a limitation. Specifically, though Instagram and Snapchat were in early existence during the campaign, the *Academies of Nashville* did not have a presence on either platform due to their lack of popularity and engagement. The researchers recommend CTE programs implementing a marketing campaign expand social media platforms include outlets most frequently used by the target audience. Second, the data were collected nine years prior to analysis. However, data analyzed were existing administrative data, which is used widely in educational research (Siddiqui, 2019). To address this limitation, the researchers compared forms of media used in this study to those used in 2021. According to HubSpot (2021), the top primary forms of media used in content marketing for 2021 were videos, blogs, and infographics, respectively. The community outreach campaign in this study used videos, blogs, and print advertisements; however, the print advertisements did not incorporate infographics. Therefore, the researchers recommend incorporating infographics into marketing campaigns.

As society demands up to date media and information, schools must frequently provide information about education and educational programs (National School Public Relations Association [NSPRA], 2012). While "prospective parents and students are attracted to the "real world" benefits of CTE" (Advance CTE, 2017, p. 1), much remains unknown about advertising and marketing in CTE. As the present study introduced work on the application and evaluation of advertising and marketing in CTE, continued research efforts are essential to better understand how such these strategies can manifest and be utilized in public education.

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