Master of Public Health

Integrative Learning Experience Report

BROADCASTING BETTER HEALTH:
HEALTH PROMOTION AND COMMUNICATION STRATEGIES AT A NONPARTISAN INSTITUTION

by

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submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

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Summary/Abstract

Abstract

Background: Health promotion is an important skillset in the field of public health, and physical activity is a health behavior that provides an excellent example of why it is important. Health communication is a developing aspect of health promotion and education that requires specific knowledge and expertise. Health literacy ties into both health communication and health promotion due to the need for audiences to understand the messages professionals give, and health literacy rates are extremely low in the United States. Finding ways to be innovative, change messaging, and ensure audiences understand health promotional or educational material is imperative to the public health mission. Utilizing theories such as the Health Belief Model and the Social Cognitive Theory are great options to tackle this knowledge and perception challenge.

Methods: The Applied Practice Experience was completed at the nonprofit, nonpartisan institution of the Kansas Health Institute during the Summer of 2024. Working with both project staff and the communication team, Karsen produced three distinct products discussed in this report.

Results: The three products that were produced over the course of the Applied Practice Experience were two podcast episodes, quantitative data analytics combined with qualitative interview transcripts, and a resource guide for closed captioning and transcription processes for the Kansas Health Institute staff members.

Discussion: This project paired with the previous coursework undertaken and extra experiences throughout the graduate student experience developed professional skills in the field of public health as well as communication. Limitations include the fact that some of the practices are not necessarily innovative, but the approach behind them is what is new to the field. Helping a nonpartisan institution such as the Kansas Health Institute produce high-quality products that educate the public pushes public health forward.

Subject Keywords: equitable, health literacy, nonprofit, Social Cognitive Theory, Health Belief Model, health education

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Chapter 1 - Introduction and Literature Review

Introduction to the Kansas Health Institute

The Kansas Health Institute (KHI) is a nonprofit, nonpartisan educational organization that is based in Topeka, Kansas. The Applied Practice Experience (APE) occurred from May 29th, 2024, to August 16th, 2024, with this site chosen specifically for its variety in audiences, programs and projects. KHI strives to improve the health of all Kansans through their products, which range from community convenings to data analysis reports and tools. 2025 marks the 30th anniversary of the institute informing legislators, advocates, and the public on important health topics using an evidence-based, unbiased approach.

Over the course of the summer with KHI, I had the opportunity to work with both project staff members and the communication team. Project staff are all analysts who are experts in research and different public health topics, who then work in collaboration with the communication team to have high-quality, audience-centered products at the end of each project. The communication team are all experts on different aspects of communication, such as graphic design, publication process, journalism, social media management, and more. A variety of health topics are covered each year, integrating current issues that are most pertinent to the state of Kansas. Thus, teamwork was paramount throughout the duration of the APE, as well as a broad range of engagement.

There were two major team members who facilitated my learning over the course of the APE. Kevin Kovach (DrPH) is a Senior Analyst and Portfolio Strategist at KHI and graciously acted as preceptor for the duration of the APE. His experience in the field of public health and academia provides the necessary prowess to guide an individual through public health in practice. Theresa Freed (M.A.) is the Director of Strategic Communication and Engagement and acted as supervisor during my time at KHI. Her leadership and extensive background covering a variety of communications roles provided an excellent person to enhance my skills in this area. Together, they provide extensive expertise in both public health and communications, weaving together projects and tasks for my interest in health communication.

Literature Review

Background

Health promotion and communication are incredibly important areas of knowledge for public health practitioners, with health promotion being "the process of enabling people to increase control over, and to improve their health" (Nutbeam & Muscat, 2021, p.1580). Health communication is an important aspect of health promotion to ensure that the target audience understands the information they are receiving (Sharma, 2021). Within public health, targeting health behaviors such as increasing physical activity, reducing smoking, or improving diets are areas typically addressed using health promotion (Islam et al., 2023; Milton et al., 2021; Ravi et al., 2021). Typically, interventions target specific areas, such as education/awareness, community engagement/collaboration, or changes in policies/systems/environments (Stauffer et al., 2024). Behavioral changes cover such a broad variety of topics that it is easier to focus on one to investigate health promotion. This review will focus on physical activity (PA) as an example health behavior that can be addressed through health promotion and communications strategies.

Physical Activity and Public Health

PA is "any bodily movement produced by skeletal muscles that results in energy expenditure" (Caspersen et al., 1985, p.126). This is more holistic than focusing on exercise or another restrictive view on how people are active. PA encompasses a wide range of activities, such as work-related tasks, exercising, doing household chores, and transportation, with PA usually associated with additional health improvements the more PA someone engages in (Warburton et al., 2006). The current PA guidelines for adults in the United States are 150 minutes/week of moderate-vigorous PA, or 75 minutes of vigorous PA, with two days of strength training (CDC, 2022).

It is well established that those living in the United States are not active enough, with only 28.3% of men and 20.4% of women reaching both aerobic and muscle-strengthening PA guidelines (CDC, 2022). In Kansas, the current percentage of adults who exercise is 26.8% which is lower than the national rate, as it sits at 30.4% (United Health Foundation, 2024). Kansas' health ranking in the United States has continuously gone down over the last 35 years (United Health Foundation, 2024), as shown in Figure 1.1. These health rankings incorporate multiple factors that impact overall health, including PA. With Kansas ranking 39th out of the 50

states when it comes to exercise (United Health Foundation, 2024), public health needs to address this issue.

Figure 1.1 KS Health Rankings Over Time (United Health Foundation, 2024)

PA has been tied to many mental and physical health benefits (Mahindru et al., 2023; Posadzki et al., 2020). Physical inactivity leads to higher rates of obesity, cardiovascular disease, and rates of mortality (Posadzki et al., 2020). With so many adults in the United States, and Kansas specifically, being physically inactive, this will lead to greater healthcare costs (WHO, 2024). An estimated $300 billion will be spent on healthcare problems from 2020 – 2030 globally, in public health care systems alone, that are preventable by being physically active (WHO, 2024).

Another issue is that those who are underserved or facing systemic barriers are less likely to meet PA guidelines (Bantham et al., 2021). Since underserved groups are also likely to have external factors (e.g. low socioeconomic status (SES), structural racism) they are dealing with, an intersectional and audience-focused approach should be taken when trying to address these barriers (Bantham et al., 2021). This is a key aspect of health promotion, which aims to increase individuals' autonomy to improve their own health (WHO, n.d.). Disparities for health promotion, specifically tied to PA, have increased in various populations due to COVID-19 (Sher & Wu, 2021).

With all of the described connections that PA has with individuals' health, that then lead to greater healthcare costs as described above, it is no wonder that physical inactivity has become such a large public health concern. So much so, that the World Health Organization has declared

physical inactivity a global pandemic (WHO, 2024). Thus, there is obviously a large public health concern on how to improve the rate of PA in the United States, and Kansas specifically. One of the possible solutions to this is better leveraging of health promotion, with an emphasis on innovative health communication.

Health Promotion

Health promotion is a strategy used in the public health field to change a population's environment (e.g. physical, cultural, social) to empower those within it to have more autonomy over their own health behavior, while typically being paired with other constructs to address the gaps it fails to meet (Caron et al., 2023). Theories used for health promotion often align with disease prevention, making them perfect for program planning (RHIhub, 2025b). While planning, the audience for a program should be identified and dissemination strategies should be chosen (Kwan et al., 2022). Examples of dissemination methods include putting information on an organization's website, creating then distributing program materials, and publishing policy briefs (RHIhub, 2025a).

Each of these methods must consider an emerging science, called Designing for Dissemination and Sustainability (D4DS). D4DS stems from a communication theory, the Diffusion of Innovation theory (Kwan et al., 2022). When used in a public health setting, this becomes an aspect of health communication, in which professionals are creating and disseminating health information to people to empower them to make informed decisions (Kreps & Neuhauser, 2015). Health promotion incorporates health communication in many ways.

Heath Communication Strategies to Promote Health

As an area of expertise, health communication is a broad subject that has grown through the last four decades, using a multitude of different theories and models (Malikhao, 2016; Malikhao, 2020). Health communication has a history of being tied to patient-clinician interactions and health education (Lupton, 1994; Irwin, 1989). More recently, the channel that the information is flowing has been taken into consideration, from interpersonal such as patient-clinician already described, to organizational public relations or community engagement (Schiavo, 2013). Most recently, health communication has grown to be considering the different approaches for organizations and other entities, with an emphasis on using the plain language approach that ties into each organization's strategic health communications plan (Public Health Communications Collaborative, 2023).

Health communication information, increasingly tied to the digital world, is heavily found within grey literature (Stridsberg et al., 2022). Different aspects of health communication that are increasingly found in grey literature include health literacy (National Literacy Institute, 2024; NNLM, 2024), the importance of the plain language approach (PHCC, 2023), and the importance of understanding your audience and who they trust (ASTHO, 2024; NPIN, 2024). Recommended reading levels for written materials for the general public is now down to a sixth-grade level (National Literacy Institute, 2024), while 54% of adults in the United States have a literacy level below sixth grade (National Center for Education Statistics, 2019).

Part of the problem is that health communication as a field has no guiding paradigm (Hannawa et al., 2015), while the medical/health researchers and communication researchers remain siloed. This amplifies the research to practice gap, and exemplifies the need for interdisciplinary approaches to this problem (Gaysynsky et al., 2022). Even with the new frameworks being created, such as the Physical Activity Messaging Framework (PAMF) (Williamson et al., 2021), more is needed to advance the field. Innovation is needed (NPIN, 2024), and different strategies are being utilized to find the best evidence-based approaches.

The most common strategies used for health communication all address one of three levels: the individual level, the group level, and the structural level (Malikhao, 2020), with recent years the structural (or macro) level being more common (Hannawa et al., 2015). Again, there is no guiding paradigm, or overarching studies that help with the current fragmentation between those working from a health/medicine perspective versus those working from a communication perspective (Hannawa et al., 2015). However, it is a continuously expanding field, especially due to digital health communication and literacy (Maher & Singh, 2024). With this ever-expanding aspect, innovative approaches and methods for communication and literacy are being explored (National Prevention Information Network [NPIN], 2024). Health literacy and education are both extremely important aspects of health communication and health promotion (Truman et al., 2020).

Health Literacy and the Role of Digital Communication

Health communication is a growing area of public health, including health literacy, which is becoming an increasingly large problem for the United States (CDC, 2024a; CDC, 2024b; Healthy People 2030, 2020). So much so, Healthy People 2030 describes improving health literacy as a high-priority issue that is lacking evidence-based approaches currently (Healthy

People 2030, 2020). Health literacy's definition has also been expanded into two levels, with individual health literacy and organizational health literacy becoming different areas of addressing this public health issue (Santana et al., 2021). The individual level of health literacy focuses on addressing the ability of individuals to understand health material as well as then implement this knowledge into their behavior or actions (Santana et al., 2021), which is what most think about pertaining to this topic. Organizational health literacy instead focuses on what organizations or agencies do to facilitate the public making these decisions and changing their actions, to hopefully be healthier (Santana et al., 2021). Making these changes helps represent that health literacy is not fully reliant on the individual, and that public health agencies, health care systems, and more all have a responsibility to enable the public to improve their health literacy (Santana et al., 2021).

National health literacy rates are found using the National Assessment of Adult Literacy (NAAL) in the United States (Rikard et al., 2016), and the current rate is that nine out of ten adults struggle with health literacy (Network of the National Library of Medicine [NNLM], 2024). Health literacy does not necessarily correlate with English literacy, as those who are high in English literacy could still have low health literacy (Center for Health Care Strategies, 2024; Network of the National Library of Medicine [NNLM], 2024). Currently, the United States adult literacy levels state that 43 million U.S. adults have low literacy skills (National Center for Education Statistics, 2019). Health literacy is highly correlated with educational attainment, and low health literacy has been shown to be related to less health-related knowledge and poorer health status (Berkman et al., 2011).

Improving health literacy is important for addressing public health concerns through improving health equity, reducing health disparities, and improving individuals' ability to take care of themselves or dependents related to health information or resources (Agency for Healthcare Research and Quality, 2008; CDC, 2024b; Santana et al., 2021). Lower health literacy has been tied to a higher probability of emergency department revisits (Shahid et al., 2022), greater complication rates (Schillinger, 2020), greater mortality rates and poorer health status (Berkman et al., 2011). A common tactic over the past two decades has been to use the Internet to spread health information, but results have shown that access is still unequal, and does not help against inequities (Lee et al., 2021).

Using the Internet as a channel to improve accessibility and health literacy overall has fallen short, as the structural inequities that already exist, such as the digital divide, have then reinforced the disparities instead of reducing them (Bodie & Duta, 2008; Lee et al., 2021). It is also considered a subdivision of health literacy that must combine with digital literacy, becoming digital health literacy, but is also tied to other forms of literacy and social determinants (Van Kessel et al., 2022). Thus, there is no simple solution to solving this public health problem. Finding innovative approaches for delivering health information to the public that will help improve health literacy is an urgent task for those in public health.

Theoretical Models

Health promotion strategies utilize many different theories and models used throughout public health (e.g. Theory of Planned Behavior, Self-Determination Theory, Transtheoretical Model) including the two that were used in the production of the APE products: the Health Belief Model (HBM) and Social Cognitive Theory (SCT) (Raingruber, 2014).

Health Belief Model

HBM was developed as a framework to address why people were not receiving screenings and other preventative measures in the United States in the 1950s by a group of scientists (Becker, 1974; Rosenstock, 1974), making it a fantastic option to incorporate into public health work. HBM typically measures the perceived susceptibility, perceived seriousness, perceived benefits, perceived barriers, cues to action, and self-efficacy of those about a specific illness or disease, while acknowledging modifying factors (e.g. education, SES) influence on behavior (Glanz et al., 2015).

In health promotion, it has been shown that knowledge must be conveyed to individuals and that knowledge must typically change their perspective for behavior to then change when a cue to action is utilized (Ersin & Bahar, 2011). Efforts are now being made to incorporate HBM into communication research, such as with vaccination campaigns (Jones et al., 2015). When tying this specifically to health literacy, the higher health literacy level someone has, the more health promoting behaviors people tend to engage in, and this means that providing multiple avenues to increasing health literacy is tied to getting people to make healthier behavior changes (Ghorbani-Dehbalaei et al., 2021). Methods to target low literacy include incorporating audio-visual methods of communication, using the plain language approach or plain language summaries, and ensuring written information is to an understandable reading level (Anderson et

al., 2022). Tailoring these messages is important so that it can be understood by the audience (NPIN, 2024), as minorities perceive messages as blaming currently (Gafari et al., 2024; Williamson et al., 2020).

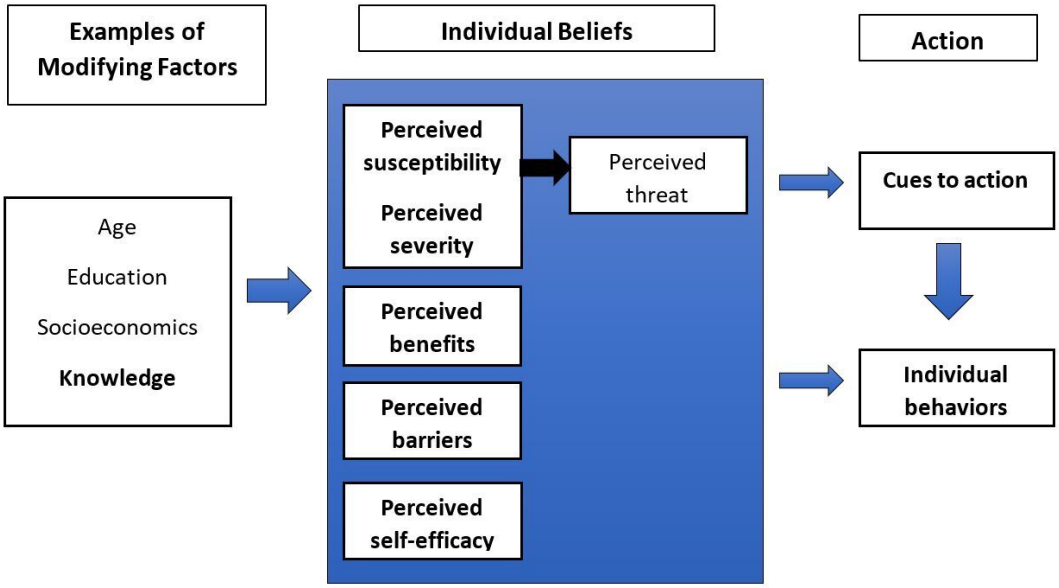

Figure 1.2 Health Belief Model diagram (Nelson et al., 2021)

Social Cognitive Theory

SCT is rooted in psychology that has been adapted by many disciplines through its focus on human behavior, specifically observational learning (Bandura, 1986). This theory looks at how personal factors, environmental factors, and behavior all interact with one another in reciprocal determinism, know that people learn from observing others, are more likely to do a healthy behavior with higher self-efficacy, and have outcome expectations that the benefits of that behavior outweigh the negatives (Glanz et al., 2015). Many health promotion studies have been based on SCT, including those that use different digital communication strategies (Ghahramani et al., 2022). In digital communication, SCT needs to be worried about tailoring messages to specific audiences so that they are most effective (Oyibo, 2021).

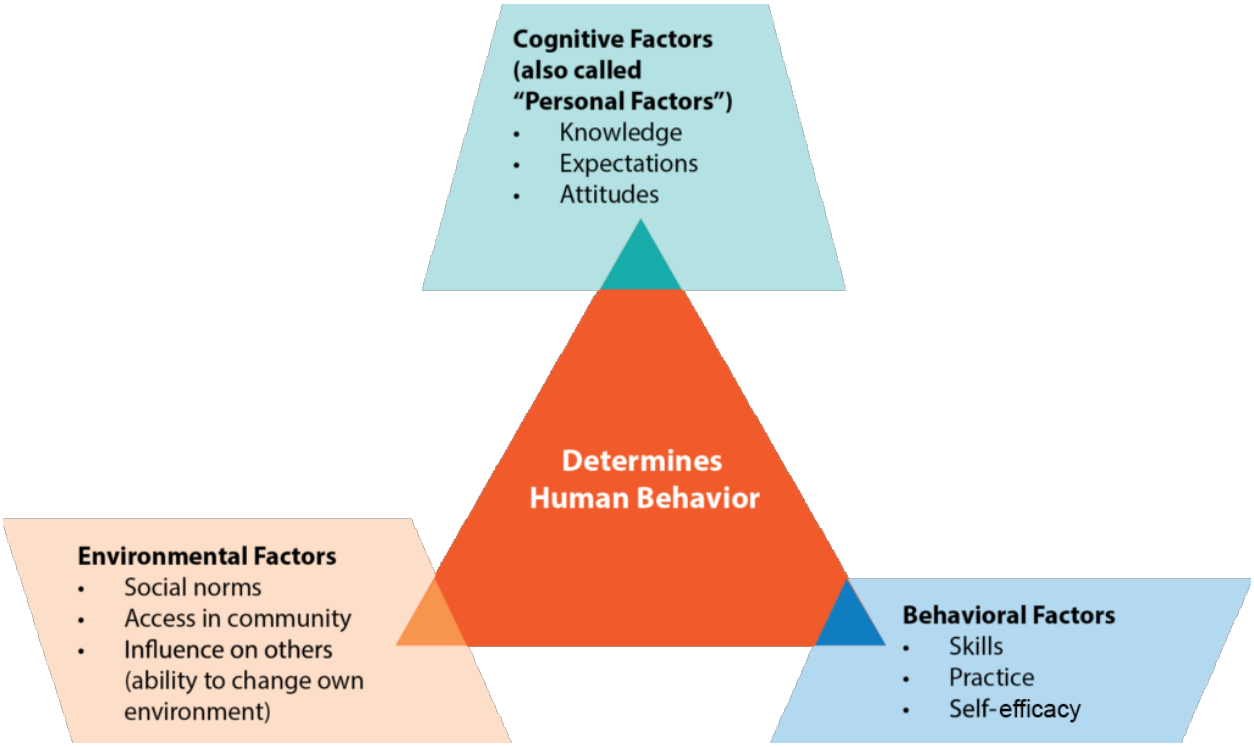

Figure 1.3 Social Cognitive Theory diagram (USAID, 2020)

Chapter 2 - Learning Objectives and Project Description

Agreed upon before beginning my APE at KHI, were the following list of goals and activities decided upon by the site preceptor, Kevin Kovach, and agreed upon by the committee members:

- Learning Objectives
    - Karsen will learn how to plan and implement a practical scoping literature review.
    - Karsen will learn how to synthesize information on a public health topic into a blog post.
    - Karsen will learn about the value (benefits and costs) of different local health department structures (single-county, multi-county, city, etc.).
    - Karsen will learn about dissemination strategy and communications.
- · Activities to be Performed
    - Karsen will plan and implement a practical scoping literature review on the topic of local health department structures.
    - Karsen will complete a first draft of a report on this topic.
    - Karsen will write a blog post summarizing the content from the literature review.
    - Karsen will assist with disseminating population health products.

Issues arose, however, addressing some of these objectives and activities. One such issue was that the literature review over the strengths and weaknesses of multi-county health departments did not have enough research for a comprehensive literature review to be conducted. Thus, the literature review was not finished, and all associated activities were no longer conducted. With the interest in health communication and integration with the communication team, a pivot was performed on what the products and activities of the APE would result in.

New activities to be completed over the course of the APE were decided after meeting with both Kevin Kovach and Theresa Freed, tied to my interest in health communication. Kevin agreed to change the literature review task into performing a qualitative analysis of my choice, which ended up being several interviews after more discussion. Then, a blog post was to be written based on the themes found throughout the transcripts. Theresa offered a larger presence on the podcast project team to observe and participate in a unique dissemination strategy environment. Communication as a field is also invested in equity and accessibility, so learning

about how these two tie into health promotion in communication products was agreed upon as well.

Interviews were conducted over current graduate public health education in Kansas instead, with the public health blog post becoming delayed. Six interviews with current MPH students in Kansas or recently graduated (within the previous year) individuals were performed, investigating the current state of education in graduate programs. Instead of the literature review, Karsen contributed to the *Health on the Plains* podcast team, as well as focused on accessibility (see Table 2.1).

Dissemination strategy and communications were still activities that were performed due to the nature of working with both project staff and the communication team. Different aspects were learned through attending weekly Strategic Communication and Engagement (SCE) meetings, the SCE annual retreat, attending the Annual Insurance Update (AIU) convening, and participating in the biweekly blog/podcast workgroup.

Table 2.1 Summary of Portfolio Products

Portfolio Product		**Description**
1	*Health on the Plains* (*HotP*) Podcast Episodes 11 and 12 https://www.khi.org/podcast/	Two podcast episodes were fully developed from start to finish throughout the course of my internship, with the entire team providing feedback on items such as what questions to ask during the interview, who to target with the episode topics, and what the best dissemination strategy would be. I also participated in the filming, as well as post-production activities such as captions.
2	*HotP* Podcast Analytics + Six interviews and analyses	Throughout the APE, quantitative data was gathered through tracking analytics for the podcast that were distributed and discussed at organizational meetings, helping decide future dissemination strategies. Six interviews of current or recent graduates of MPH programs in Kansas were performed, which were then analyzed using a grounded theory approach. These themes and specific quotes will be utilized in a future blog post for the KHI website. As it was known these interviews would be used for such a purpose, not all research guidelines were adhered to, due to time restraints.
3	Best Practices Resource Guide for Closed Captions for KHI Employees	A best practice resource guide for closed captions as well as what to do in instances where information must be corrected in a video meant for public education, to be used as a reference for those working at KHI.

Chapter 3 - Results

Two *Health on the Plains* (*HotP*) podcast episodes were developed, approved, filmed, produced, and published over the course of the APE (see Appendix 1). These episodes were filmed in the KHI office over one interview, then split into a two-part series, a different approach to the typical process. This was decided due to wanting to limit budget costs, such as travel reimbursements, as well as the fact that the guest was traveling through Topeka. Ensuring accessibility for said episodes through closed captioning and transcripts was required, so those were produced as well. Several quantitative data sets of podcast analytics were collected, tracking the trends in views, listenership, and social media reach, then interpreted for other interprofessional team members about previous episode trends (see Appendix 2). Ensuring as many people had access to these podcast episodes followed the idea of having a cue to action in the HBM and that educating individuals would lead to changes in personal factors, as discussed in SCT.

The approach utilized for the accessibility product was to develop an organizational resource of a best practices resource guide for correcting/updating health communication social media posts, specifically within closed captioning or transcripts. It provides reputable information for many issues that were continually appearing, such as someone stating incorrect information in a convening (public conversation that KHI moderates), whether closed captions need to be verbatim, and other such topics. As KHI hosts educational forums and convenings on a variety of topics, an easily available source was needed for consultation over recurring problems. This guide provides examples of what to do as well as links to multiple credible sources in the event of unaddressed issues arising. This product serves as a cue to action for anyone within the organization who is confused about what to do or where to look for information regarding these issues, an example of observational learning, making the constructs in SCT and HBM applicable in dissemination in workplace settings as well.

Lastly, a literature search on multi-county health departments was performed and stopped after there was not enough content saturation for a comprehensive literature review to be performed over the topic. The site preceptor instead had Karsen choose a qualitative data collection method to perform and interpret. Therefore, she interviewed six current MPH students or recent graduates (within the last year) who are attending (or attended) a university in Kansas,

after an interview guide (see Appendix 3) was designed and agreed upon by the site preceptor. The information from these interviews serves as a call to action for those in higher education, changing knowledge and attitudes about what students should be doing or learning, therefore leading to a change in the educational environment.

Eventually, a blog post is to be written and published from the qualitative analysis that was performed on the transcripts of these interviews. A guided theory approach was used, as insights were generated from the data itself (Chapman et al., 2015). This was logical to examine the individual student experiences and find the broader concepts and themes throughout, based on our interview guide, meaning it was an inductive process (Charmaz, 2015). Each interview provided a 30+ page transcription that was then coded, with overarching themes being found. Quotes that were most eloquent pertaining to the themes were highlighted to be included in the later blog post. The blog post is yet to be completed but is scheduled to be published mid-2025.

A deeper appreciation for strategic planning was gained through the meetings and discussions Karsen attended, gaining applied knowledge of the information learned in coursework through electives, completing the graduate certificate for Strategic Health Communication. Understanding how important audience is when developing a product was one of the highlights, as well as connecting this to the *why* of products. This also included the process and structure of the organization itself and the role that equity and accessibility play in the design of educational, nonpartisan products. Tying together all the projects and products, a framework was developed to visualize the deeper understanding (see Figure 3.1). This framework was presented in an end-of-internship presentation not included within the contents of the report.

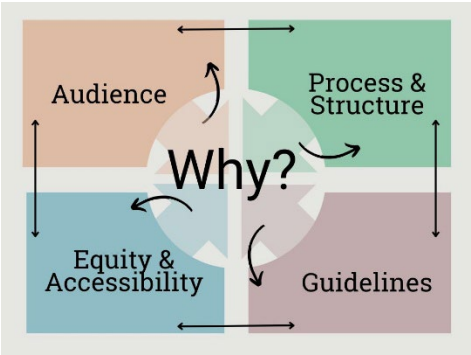

Figure 3.1 Karsen's Strategic Health Communication Framework

Chapter 4 - Discussion

Overall

Podcast episodes act as a cue to action for the audience, and the information provided in each episode can change individuals' knowledge, attitude, self-efficacy and possible perceived barriers or benefits about certain topics. If those working in rural communities hear about an approach that has worked elsewhere and implement it in their own communities, this could lead to possible environmental changes or serve as a different cue to action. Tying together these constructs from SCT and HBM, these podcast episodes should educate the public and shift practices from others in similar environments.

Taking the podcast products, and the multitude of discussions I was engaged with, an agreement was reached that using a culture-centered approach with a podcast focusing on a broad topic such as rural health is a successful way to uplift the voices of those community experts that otherwise lack resources to share their knowledge. This tactic will hopefully provide an innovative approach to improving health literacy through unconventional methods such as podcasting. Social media, phone hotlines, and other unique channels have been used in the past to reach under-resourced populations, with an emphasis on asking them how they would like to be reached being recommended (Northwest Center for Public Health Practice, 2025). Having research conducted to discover the best approach for these rural populations will lead to best recommendations. In the "Extra Experiences" section an extra research project that was undertaken discussing this will be described.

Tracking analytics and analyzing the methods of the project team through process mapping allows the organization to investigate the podcasts reach as well as where "hang ups" occur. Since this is an ongoing project, with the capacity and resources to grow, it is important to conduct these evaluations to continue to see a product's efficiency. Over time, if found to be effective, this product and process can be included in a study to embrace podcasting as an innovative health communication tool. The process mapping was an assignment within the MPH 840 Public Health Field Experience course but led to important discussions with the project director.

Shifting focus, enhancing KHI's accessibility and providing the tools and resources that were lacking moves the field forward through the acceleration of implementation, leading to real-world impact. Ensuring all have access to information is a part of enhancing accessibility which also improves equity and helps reduce health disparities. With health disparities being a target area for those working in public health, including KHI, developing the guide provided a rich resource for all within the organization. This accessibility and leadership helps move the entire field of public health forward.

Lastly, gaining feedback during interviews from those who are entering the public health workforce (recently) allows for changes to be made in the design or implementation of graduate public health education in Kansas. Improving education for future students ensures those receiving the education build the timeliest skillset, as well as reduces barriers for those switching from students to experts in the workforce upon graduation.

Limitations include the fact that podcasting itself is not a new concept, but the use behind it is what makes it an innovative approach. Personal limitations also include not developing a brand-new product single-handedly, as well as an incompletion (currently) of the blog post. Public health is a field of teamwork however, and my experience at KHI emphasized that more than anything else, while explaining some of the limitations.

Extra Experiences

There are multiple "extra experiences" throughout my graduate education that provided more opportunities for learning and growing. The entirety of my graduate career, I have been a Graduate Teaching Assistant (GTA) to the Department of Kinesiology for Kansas State University. Learning how to teach provided necessary experience of discussing and educating those on topics that they do not have background in, as well as a different comprehension level. All of this is an extremely important aspect of health communication.

Secondly, I presented a research poster at the Annual American Public Health Association (APHA) Conference: *Exploring the impact of food insecurity, sleep quality and quantity on physical activity levels in midwestern college students*. This research ties into the emphasis area competencies through the statistics ran and investigation of population health, as well as how PA is impacted through other characteristics (investigating social, behavioral, environmental factors that contribute to participation in PA). As my first experience presenting at

a national conference, it gave valuable insight into quickly summarizing complex health information into a digestible amount while interacting with stakeholders.

Next, I was able to present at the Active Living Conference in March of 2025, tying previous experience at KHI to the evidence-based approach used: *Amplifying rural health: Podcasting as a culture-centered approach to health communication*. This Speed Talk tied together the academic background and theory underlying the project (Culture-Centered Approach) to convey to others the usefulness of said approach, while helping address another emphasis area competency. It also enhanced the skills of being concise and answering questions on the fly from a group of people who do not have the same background, while representing two important organizations: KHI and Kansas State University.

Finally, having the opportunity to participate in the *Frontier Field Trips* over the course of my Kansas State University education provided unique experiential learning opportunities that are otherwise unavailable to students. Traveling to Charleston, South Carolina; San Francisco, California; and Council Grove, Kansas without having to worry over most of the financial burden to then experience educational lectures, gain archival research experience, and engage in purposeful discussions over a variety of interdisciplinary topics with those from many different backgrounds and experiences provided remarkable memories as well as multiple skills.

All these extracurricular activities performed over the course of my graduate education provided an enhanced learning environment that cannot be replicated through coursework alone. I am grateful to have had the opportunity to be engaged in experiences such as these, as they helped build the repertoire of knowledge, skills, and confidence that have delivered me to this report and presentation. Soon, this repertoire will be extensively used in public health practice.

Conclusion

Overall, the spread of innovative ideas such as podcasting as a health communication strategy and the enhancement of accessibility furthers both the fields of public health and health communication. Integrating these two topics together will expand research options, provide collaboration between silo-ed areas, and develop new skills in the current and future workforce. All this combined should combat health disparities, improve health equity, and improve health in Kansas and beyond.

Chapter 5 - Competencies

Student Attainment of MPH Foundational Competencies

Table 5.1 Summary of MPH Foundational Competencies

Number and Competency		Description
2	Select quantitative and qualitative data collection methods appropriate for a given public health context	Analytics provide quantitative feedback for audience reach and dissemination strategies used without extra work, since most social media provide that with an organizational account. Interviews were conducted because they provide rich context which is important to ensure someone is not writing from only their perspective while speaking for a group in a blog post.
4	Interpret results of data analysis for public health research, policy or practice	Analytics provide numbers for audience reach and how effective the dissemination strategies used were, while were analyzed using a grounded theory approach. However, it is important to note that the final product was known from the start, so strict adherence to the research framework was not condoned due to time restraints.
16	Apply leadership and/or management principles to address a relevant issue	Building a transcription and closed captioning resource guide for other KHI team members empowers others and helps guide decision making on these topics at a later point in time.
18	Select communication strategies for different audiences and sectors	Since rural individuals can be difficult to reach, but so many people now own phones, podcasts are a new communication strategy to reach these target audiences. Sending information through established email chains and to those who have affirmed interest in this area helps get the information to those who want it or need it most.
21	Integrate perspectives from other sectors and/or professions to promote and advance population health	All areas of KHI work require teamwork and interprofessional communication, but the podcast episodes highlight this most effectively. Project staff are those who design questions, host the podcast and perform the interview, while the communication team produce the product and provide helpful input on dissemination strategy.

Competency 2: Select quantitative and qualitative data collection methods appropriate for a given public health context

Deciding what data collection methods are appropriate for a given public health context was performed through a combination of quantitative social media platform analytics (views,

likes, shares, etc.) and choosing to conduct six interviews (a qualitative data collection method) with current or recent graduates of MPH programs in Kansas. To collect the quantitative data, organizational accounts on social media platforms like Facebook, LinkedIn, Instagram, etc., track the engagement with each post (e.g. how many people interact/see a post, and how). Each month, this information is collected and discussed during a meeting with all contributors. Discussions examine the different dissemination strategies as well as their success. Choosing to track these analytics gives organizations like KHI, as well as others in the public health field, the ability to track what strategies work best and what topics most interest their audience. With analytics being free with an organizational account, it is also a cost-effective method as well.

For qualitative data collection, interviews were used instead of focus groups due to the depth of information needed about individual experiences and perspectives on current higher education practices for public health (specifically graduate school). This was beneficial, as finding a time that would work for six separate schedules who were located across multiple states would not have been as efficient. With a limited amount of time due to APE constraints, this was a much wiser course of action. Since group dynamics were not a part of the qualitative data that would be included in the blog post, it was deemed best to interview each person individually.

After the preceptor agreed to the interview guide that was developed, the six interviews were conducted over Zoom or Teams. Each interviewee chose. All interviews were recorded with guest consent, then later transcripts were downloaded through whichever application was used (Zoom vs Teams). A guided theory approach was then used on mentioned transcripts, coded for arising topics, and recurring themes were found throughout all six that were then used to decide on the blog post topic and quotes.

Competency 4: Interpret results of data analysis for public health research, policy or practice

Similar to competency two, this was met through the previously described podcast analytics and interview transcripts. In this competency, we go further with the results of the previous competency and then find the meaning within them. Interpreting the quantitative data created discussions during project meetings over what dissemination methods were most effective, what topics gained the most listens, and what social media platforms had the most

audience reach and engagement. During each project meeting, I would present the analytics to staff and provide the interpretations to the group. Examples of the interpretations include: (1) LinkedIn is the most successful social media platform for audience reach and engagement, (2) Audiences listen most often through YouTube, and (3) at least two posts on other social media such as Facebook and X (formerly known as Twitter) combine into a similar reach as LinkedIn alone.

Interpretations like the ones above then spurred conversations about what platforms should be used and how often, as well as which dissemination strategies should be used with upcoming episodes. Platforms with less engagement per post such as Facebook and X were prime discussion topics.

With qualitative analysis being a specific science, it is important to note that the interviews were only intended to be published in a blog post. Thus, it was decided with the site preceptor that time-intensive aspects of qualitative analysis (e.g. multiple coders, iteration to the research extent) could be trimmed. A grounded theory approach was used, meaning no theoretical framework or preconceived themes were used, as an inductive approach was used (Chapman et al., 2015; Charmaz, 2015). Once all interviews were completed, familiarization of the data occurred, which then led to the emergence of patterns.

These patterns were turned into coding, which in turn led to the themes throughout all six transcripts. Examples of codes that were noted include: previous public health experience, public health education being unpopular or not well-known, current position and duties associated with it, importance in being multifaceted professionals, applied experience being just as important as education, increasing public health connections. Some became themes that tied into the topic for the blog post – increasing connections in public health and public health education. Specific quotes that would emphasize this topic well were highlighted. As shown, interpretation was still a key aspect of this task. The blog post remains incomplete, but is scheduled to be published mid-2025.

Competency 16: Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making

Guiding decision making was the key goal for the product that accomplished this competency, the Best Practices Resource Guide for Closed Captions for KHI Employees. KHI provides various forms of media every month that becomes widely available, and many people on different project teams had questions arising about what to do with specific issues that arose. Examples include people talking over each other to the point of no words being heard, someone stating an incorrect fact, and if closed captioning needs to be verbatim. With the knowledge that other issues would arise, I developed a resource guide to empower the communications team members and foster collaboration with the project staff. Deciding what to do when an issue arises can cause tension, and this product describes what to do in multiple instances while providing links to a variety of resources to tackle these and other problems, in case of new issues. This resource helps with management and leadership, as well as empowering others and guiding decision making.

Competency 18: Select communication strategies for different audiences and sectors

As described previously in this document, KHI has project staff and a communications team. Different people from these teams must come together to work on different projects and products constantly. *Health on the Plains (HotP)* is a rural health focused podcast that covers a variety of topics, with each episode theme depending on the expertise and experiences of the guest. The project team works together to decide who the target audience is, the dissemination channels and strategies, and if any alteration from the norm will occur (e.g. filming location). These decisions are made in meetings both before each episode is filmed as well as after an episode is produced. As a member of the podcast team, I provided my own insights and feedback on who to target, how to distribute the episode, etc., during these meetings. Examples of these insights include: (1) wanting to target specific audiences such as medical students due to the *HotP* episodes I helped film including a doctor as the guest, and (2) agreeing to experiment with the structure of episodes by splitting this interview into two parts so that analytics could be tracked on audience reaction.

Competency 21: Perform effectively on interprofessional teams

As described previously in this document, KHI has project staff and a communications team. Different people from these teams must come together to work on different projects and products constantly. This competency describes the interprofessional team that develops and produces the *HotP* podcast. The podcast team is comprised of three project staff members who focus on topics, questions, recording (if traveling), and hosting the podcast. This includes the host of the podcast who is the project director, the CEO of KHI, and another analyst. The host and project director comes up with a list of topics and possible guests, as well as interview questions once a guest is approved. The CEO of KHI is part of the strategic dissemination process and provides input on what audience to send information to. This analyst is a secondary figure in the podcast and was the role that I stepped into over the duration of my APE. Their role is to help film episodes, provide thoughts during team meetings over dissemination, topics, etc., and sometimes does closed captioning.

Also on the podcast team are four communication team members who focus on producing the end products (full episodes, webpage, social media posts, etc.) and providing feedback on targeting and dissemination strategies. The Director of Strategic Communication and Engagement provides a managerial role similar to the CEO, in the approval process. A graphic designer works to produce the episodes and make any additional materials necessary. The digital communications specialist schedules all posting on platforms. A publication specialist reviews each product ensuring high-quality results. Each member also can attend the team meetings and provide input on best dissemination practices, thoughts on topics, etc. Working with all these individuals combined into the project team meetings gave wonderful insights and opportunities to learn, as well as chances to voice my own feedback. As described in previous competencies, my role was to provide insight into guest choices, dissemination strategies, discuss question choices, help film, produce closed captioning, and shoot b-roll footage and pictures. Working closely with the host, I helped develop project management tools through the new software systems, decide on questions, and engage in the team meetings. The graphic designer and I worked together through filming, as they covered the main footage while I took care of b-roll and trailer video footage. With the digital communication specialist, we planned social media posts and discussed what analytics meant for dissemination strategies. Altogether, collaboration is how the podcast is successful.

Student Attainment of MPH Emphasis Area Competencies

All PA emphasis area competencies were completed through required coursework, with more details to the courses described below in their own sections. Two competencies (two and five) were explored more deeply through two separate conference presentations, further described below.

Table 5.2 Summary of MPH Emphasis Area Competencies

MPH Emphasis Area:			
Number and Competency		**Description**	**Required Coursework**
1	Population health	Investigate the impact of PA on pop. health & disease outcomes	KIN 612
2	Social, behavioral and environmental influences	Investigate social, behavioral, environmental factors that contribute to participation in PA	KIN 610 and KIN 805
3	Theory application	Examine and select social/behavioral theories/frameworks for PA in community settings	KIN 610 and KIN 805
4	Developing and evaluating physical activities interventions	Develop/evaluate PA interventions in diverse community settings	KIN 610 and KIN 805
5	Support evidence-based practice	Create evidence-based strategies to promote PA & communicate them to community stakeholders	KIN 612

Emphasis Area Competency 1: Investigate the impact of PA on pop. health & disease outcomes

This competency was explored in the required elective KIN 612: Policy, Built Environment (BE) and Physical Activity. While this course discussed how each of these constructs weave together to influence behavior, especially PA, there was one assignment in particular that achieves this competency. An article critique is presented to the course by each student, in which they portray the evidence between the BE or policy and the effects they have on PA in the population while utilizing the social ecological model. The student leading this

critique describes the methods and results of said article to the class, and facilitates several discussion questions. After the discussion, students then all describe the limitations and ways to improve the study.

Emphasis Area Competency 2: Investigate social, behavioral, environmental factors that contribute to participation in PA

There were two required elective courses that provided a background in this competency, KIN 610: Program Planning and Evaluation, and KIN 805: Physical Activity and Human Behavior. During KIN 610, students achieve this competency through the design and planning of a PA intervention. In KIN 805, this is covered through the first debate in which they must defend a position after examining peer-reviewed literature. Emphasis area competency two comprises investigating social, behavioral, environmental factors that contribute to participation in PA. This was enhanced through a research project presented at the Annual American Public Health Association (APHA) Conference in October of 2024: *Exploring the impact of food insecurity, sleep quality and quantity on physical activity levels in midwestern college students*. A secondary data analysis of data from the College, Nature, and Psychological Well-being Survey was conducted utilizing a subset of this national study. This original data set is investigating how time spent in nature impacts mental health as well as PA. Data for this specific analysis was a subset focusing on how food insecurity, and sleep quality and quantity impact PA levels for a specific student population.

Emphasis Area Competency 3: Examine and select social/behavioral theories/frameworks for PA in community settings

Two courses helped achieve this emphasis area competency; KIN 610: Program Planning and Evaluation, and KIN 805: Physical Activity and Human Behavior. In KIN 610, students design and plan a PA intervention targeting a specific group of people. This program needs to be evidence-based and have a guiding framework. Integrating this is one part of the design process, and becomes the backbone that other parts of the program build from. In KIN 805, students learn theory application by giving a theory presentation in which a critique of the theory-based PA intervention is performed that was described in a peer-reviewed article. This shows how students gain the skills of finding limitations within different frameworks.

Emphasis Area Competency 4: Develop/evaluate PA interventions in diverse community settings

This competency is met through two required elective courses; KIN 610: Program Planning and Evaluation, and KIN 805: Physical Activity and Human Behavior. During KIN 610, students plan an entire PA program targeting a specific population. The intervention that Karsen participated in designing was aimed at delaying the onset of dementia in older adults through a wellness program that targeted healthy diet and increasing PA. In KIN 805, the students' final project is also developing a theory-based PA intervention. This project includes performing a needs assessment, proposing detailed intervention content, and a plan for how the intervention will be evaluated. Karsen created an intervention focused on increasing PA in college students through technologies they already use such as Canvas and creating an app that hosts many of the tools students described as being helpful for increasing PA.

Emphasis Area Competency 5: Create evidence-based strategies to promote PA & communicate them to community stakeholders

This competency was explored in the required elective KIN 612: Policy, Built Environment (BE) and Physical Activity. This course achieves this competency through a group project in which students develop an evidence-based intervention and present the intervention to partner community stakeholders. Further exploration occurred through a separate research project, presented at the Active Living Conference in March of 2025: *Amplifying rural health: Podcasting as a culture-centered approach to health communication*. This project takes a rural health podcast that uses a culture-centered approach and describes how it could be a beneficial and useful tactic in increasing both active living and PA. This addresses the goals of this competency: create evidence-based strategies to promote PA and communicate them to community stakeholders.

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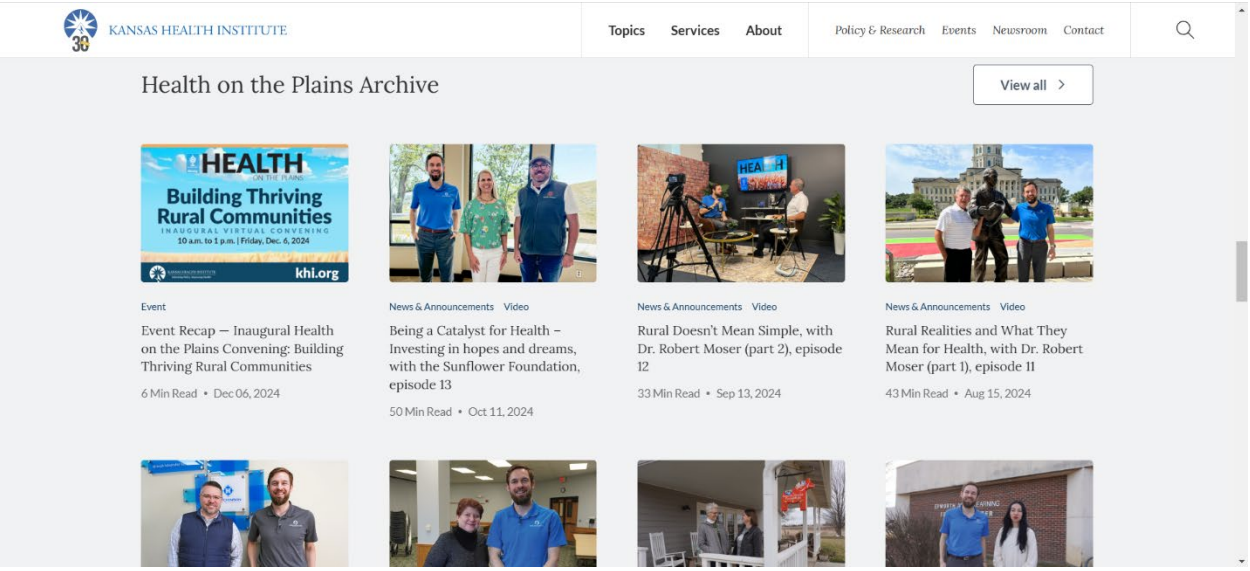
Appendix 1



Health on the Plains Archive on the Kansas Health Institute website: https://www.khi.org/podcast/

Episodes 11 – 12 were produced during the APE

Episode 11 on YouTube: https://www.youtube.com/watch?v=bVWk2WFMh_0&list=PL6IaLmVo_p0lka_BxVGEN3v8Fu4Cm7wJz&index=3

Episode 12 on YouTube: https://www.youtube.com/watch?v=nyZ8n6lxTh0

Appendix 2

Podcast analytics
8/8/24

PODCAST/WEBCAST

Podbean/YouTube

PODBEAN - HOTP

All time downloads: **799**
Episode 10: **90**
Episode 9: **60**
Episode 8: **93**
Episode 7: **69**
Episode 6: **48**
Episode 5: **106**
Episode 4: **62**
Episode 3: **62**
Episode 2: **82**
Episode 1: **127**

YOUTUBE - HOTP

Episode 10: **155** views | **302** Impressions
Episode 9: **90** views | **2.1k** Impressions
Episode 8: **118** views | **200** Impressions
Episode 7: **116** views | **4.7k** Impressions
Episode 6: **38** views | **383** Impressions
Episode 5: **137** views | **956** Impressions
Episode 4: **119** views | **1.6k** Impressions
Episode 3: **82** views | **779** Impressions
Episode 2: **196** views | **654** Impressions
Episode 1: **229** views | **1.2k** Impressions

SOCIAL
Health on the Plains
Facebook:
Episode 10 post 1: **59** impressions | **46** Post Reach | **4** Engagements
Episode 10 post 2: **78** impressions | **66** Post Reach | **0** Engagements
Episode 9 post 1: **165** impressions | **143** Post Reach | **5** Engagements
Episode 9 post 2: **112** impressions | **89** Post Reach | **1** Engagements

Twitter:
Episode 10 post 2: **213** views | **2** engagements
Episode 10 post 1: **308** views | **6** engagements | **2** link clicks
Episode 9 post 2: **116** views
Episode 9 post 1: **205** views | **3** engagements | **1** detail expands

LinkedIn:
Episode 10 post 1: **1,546** Impressions | **113** Engagements | **62** Clicks | **43** Reactions | **7** Reposts
Episode 9 post 1: **298** Impressions | **15** Engagements | **9** Clicks | **6** Reactions | **0** Reposts
Episode 8 post 1: **368** Impressions | **25** Engagements | **8** Clicks | **12** Reactions | **3** Reposts

Appendix 3

Interview Guide

Background

1. Can you describe your path in choosing to work in public health?
2. What type of work are you doing now and what do you want to be doing later in your career?

MPH Program

1. You are getting/have received your MPH from [program name here], correct? What motivated you to pursue an MPH, given the various educational and career paths that are available?
2. What attracted you to the MPH program at [program name here]?
3. What is your favorite and least favorite things about your program?

Integrating with PH Practice

1. How has/did your MPH program tried to connect you or other students with public health professionals or work on real life public health issues?
2. Do you think this could be improved and if yes, how might it be improved?
3. Thinking about your classmates and professors, how do you think the people in your MPH program could contribute more to improving public health in Kansas now?

Future of PH

1. Where do you see the field of public health headed in the future and where do you see yourself fitting into this?
2. What transformations in public health education would help better prepare graduates for this future?

Final Question

1. Is there anything else you would like to discuss about your public health educational experience that we have not touched on?