CLASSROOM TO COMMUNITY: BRIDGING THE GAP BETWEEN HEALTH AND EDUCATION

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Executive Summary

Health and education are inextricably linked. Research shows that in the United States, children who are not motivated and unable to learn cannot achieve educational progress in school and later in life. Healthy kids attend more days of school, are more successful in the school setting, and achieve higher educational outcomes than their counterparts who struggle with health issues.\(^1\)

The CDC developed a Coordinated School Health model and a Whole School, Whole Community, Whole Child approach to provide health services and physical and health education to students in schools. However, policy implementation across the country is not consistent, and many students are left without access to these critical components that will provide them with knowledge, skills, and tools to make healthy decisions. There remains a large gap between the health needs of our schools and students, and what is currently available to meet those needs. It is necessary to recognize and understand that the school environment is perhaps the most valuable resource we have: most kids spend the majority of their days in schools, or in school-related programming.\(^2\)

Those in the academic and practice disciplines related to public health and education are beginning to understand that they can no longer work in siloes. To improve individual and community health outcomes, leaders must collaborate across sectors and work together to reach goals of healthier students in schools. A university with major resources, including a large volunteer base, has a unique opportunity to make a difference in the surrounding community and can address the large and increasing gaps in schools.

Classroom to Community is an innovative and interdisciplinary approach to providing health education in the school setting by training health graduate students to prepare and deliver health lessons. Through a strong and collaborative partnership between Maureen Joy Charter School and Classroom to Community, graduate students at University of North Carolina at Chapel Hill gain the practical skills they desire, and public school students gain knowledge and skills in various health topics. C2C intervenes early, in elementary and middle school, so that students can make healthy decisions, engage in healthy behaviors, and become better learners in order to succeed today and tomorrow.
Preface

Classroom to Community (C2C) was first started as a partnership between Emory University’s Rollins School of Public Health and several Teach For America classrooms across Atlanta. The program ran for two years, and during one of those years, was offered as a graduate course through Emory. Amy Bryson, one of the co-founders from Atlanta, brought C2C to the University of North Carolina at Chapel Hill in the fall of 2013, with the first cohort of UNC volunteers serving as health educators during the spring of 2014. During the first semester, C2C worked with 5th, 7th, and 8th grades at Maureen Joy Charter School (MJCS) in Durham, North Carolina. Six graduate students served a total of 128 students. At the end of the first semester of implementation, C2C leaders met with school administrators and presented school leaders with data related to growth in health knowledge and skills of classroom students. Following this meeting, school partners requested that Classroom to Community expand to more grades in order to serve more students, and increase the number of volunteer health educators per grade dependent on perceived need and number of students. In fall 2014, Classroom to Community worked with 5th and 6th grades, with four health educators per grade. The program at UNC is in its third semester of operation and gradually expanding to include more grades and more graduate student volunteers. By the end of the 2015 school year, C2C volunteers will have taught over 400 students in 4th-8th grades, through 32 health lessons and 90 hours of instruction.

The following program plan outlines the landscape of health and education in the United States and in North Carolina, discusses the opportunities related to innovative school-based health programs, presents the program rationale, activities, and evaluation of the current model at University of North Carolina at Chapel Hill, and discusses reflections and implications for replication at other campuses.
Statement of Need

I. Health’s Impact on Education: United States

To better understand the claim that healthy students make better learners, it is necessary to look at the different health outcomes that specifically affect a large majority of youth in the United States. For example, 20% of American youth suffer from vision problems. Among children ages 5-17, asthma is the leading cause of school absences from a chronic illness and accounts for an annual loss of more than 14 million school days per year, as well as more hospitalizations than any other childhood disease.\(^3\) On average, one-third of adolescent girls get pregnant every year. Many children and adolescents witness violence and aggression at home and in school, which has pervasive adverse effects on health and education outcomes throughout life. In 2008, there were 628,200 violent crimes and 868,100 thefts in the school setting among students ages 12-18.\(^1\) Students across the country are victims of bullying, verbal aggression, physical fighting, and hate-related language and acts.\(^1\) Many kids and teens do not eat breakfast, and do not meet the recommended amount of physical activity.\(^1\) One in five children and adolescents exhibit symptoms of a mental health illness,\(^4\) and many of those illnesses go untreated. Those children who have mental illnesses are more likely to drop out of school and experience long-term negative health effects.\(^5\) These statistics and others can be even worse for those children who live in poverty. As of 2009, 42% of school-age children lived in poverty.\(^6\)

The health outcomes described above greatly interfere with students’ learning. Even having one health problem can severely affect learning abilities during the school day.\(^1\) Students who experience physical, mental, or emotional health problems simply cannot succeed in the school setting as well as those students without health problems. One causal pathway identified by a leading scholar in this field, Charles E. Basch, incorporates five mechanisms by which
health problems affect students’ motivation and ability to learn actively in the classroom: 1) sensory perceptions, 2) cognition, 3) school connectedness and engagement, 4) absenteeism, and 5) temporary or permanent drop out. Basch argues that children who exhibit certain health issues will likely miss school, which will decrease their opportunities for social and academic growth, leading to potential drop out and a negative life trajectory.¹ Furthermore, school connectedness, or feeling connected to the school environment, is an important factor of academic achievement and educational attainment later in life. A school-based longitudinal study surveyed secondary school students during three different time periods: in Year 8, Year 10, and the year following graduation. The study concluded that students who experienced positive school connectedness and good social connectedness with their peers experienced better outcomes related to moods, substance use, and likelihood of finishing secondary school. Furthermore, the study concluded that positive school connectedness is a critical protective factor for substance use.⁷ Thus, if kids are not in school due to health-related or other factors, they are less likely to do well academically, have positive social experiences, stay in school, and succeed later in life.

II. Opportunity: Coordinated School Health Programs

Health education and other school-based health activities have always been a public health priority. Dating back to the 1890’s, when the first school health-nursing program was established in New York City, public health leaders have always understood the importance of this public health intervention in an institutional setting. More recently, in the early 1990s, leaders from over 40 organizations related to health, education, and social services concluded that healthy children are better learners. They also boldly stated that there are no traditional curriculums that can compensate for an empty stomach or a distracted mind.⁸ This conclusion is not surprising. As demonstrated previously, students with health problems that are distracting
and debilitating cannot succeed as well as their peers without health problems. The critical role that schools play in addressing health issues has been identified and understood by education professionals and policy makers alike. Policies have been proposed and guidelines have been developed. However, a national approach to school-based health education and health promotion programming has not been fully addressed.¹

In response to the variety of federal, state, and local policies, programs, and funding streams related to school-based health, the Centers for Disease Control (CDC) developed a Coordinated School Health (CSH) model in 1987 that addresses school health with a systems focus.² According to the CDC, a CSH approach should eliminate gaps and redundancies in funding and programming, allow for collaboration and partnerships across sectors, and focus on empowering students to make health decisions and engage in healthy behaviors.² The primary goals of a coordinated school health program, as outlined by the CDC, are to, “…promote health, prevent injury and disease, prevent high-risk behavior, intervene to help children in need or at risk, help those with special needs, and promote positive health and safety behaviors”.⁶ The eight components of a coordinated school health program should be health education, physical education, health services, nutrition services, counseling, psychological, and social services, healthy and safe school environment, health promotion for staff, and family/community involvement.⁹ Health education specifically should focus on information, strategies, and skills that are taught to students. These components of health education should allow students to change their knowledge, attitudes, behaviors, and skills related to health topics. The CDC prioritizes health instruction, and often times, teachers incorporate health topics into regular, everyday instruction. Related to physical activity, schools should encourage physical activity among students through a variety of ways including recess, classroom-based physical activity,
physical education, and after-school programming. Schools can also serve as medically accurate, skills-based, and age appropriate sources of sexuality education. Finally, schools can create an environment where students have the tools and skills to improve their health and overall well-being.

To expand on the coordinated school health model, the CDC introduced the Whole School, Whole Community, Whole Child (WSCC) approach. This updated and new approach builds on the essential elements of the CSH model and urges schools and communities to continue to work together to focus on the whole child, not just the child during the school day. The WSCC expands on two of the eight components of CSH by further dividing Healthy and Safe School Environment and Family and Community Involvement into four separate components. WSCC also focuses on engaging students and allowing them to contribute to their own learning and health. Both the CSH and the WSCC call for integration of policy, practice, process, and leaders across sectors in order to facilitate the creation of programming that addresses all aspects of learning and health, both in and outside of the classroom. The call to action put forth by the CDC two decades ago, and reinforced with the Whole School, Whole Community, Whole Child approach, indicates that the timing is now. Leaders across sectors must collaborate to meet the needs of students, families, and communities across the country.

III. Implementation: Historical Review and Current Realities

To assess school health policies and practices at the state, district, school, and classroom levels, the CDC periodically conducts a national survey in order to collect and analyze data related to these topics. A high level overview of the most recent survey in 2012 indicates that many districts across the state have implemented policies to address physical activity, health education, and health services in schools. However, there appears to be a drop-off in number of
states and districts that have actually implemented programs at school sites. For example, 88.2% of states and 62.1% of districts employ a health education coordinator. Regarding physical education policy, 93.6% of districts across the United States adopted a policy asserting that elementary schools will provide physical education. However, only 58.9% of districts required that elementary schools offer students regularly scheduled recess, and 34.2% of districts recommended that elementary schools provide regularly scheduled recess. Regarding health education, only 10.9% of elementary school districts, 30.4% of middle school districts, and 38.4% of high school districts required teaching of all 15 health topics as recommended by the CDC.

On a positive note, many schools throughout the United States do provide their students with some health services and health-related programs. However, the quality of these programs varies, and many schools lack the resources to implement quality programs for their students. Despite the clear link between health status and education outcomes, and the overwhelming conclusion that school-based health programs are critical, school districts and communities have often struggled to implement health education and health services in school settings. Some of these challenges can be explained by the need for teachers and administrators to focus the majority of their efforts on testing and improving academic skills. Perhaps most importantly, it is necessary to recognize that schools cannot address health problems on their own. As Basch points out, it must be a coordinated and collaborative effort in which communities, families, government bodies, health systems, media, and others are involved. Schools play a critical role, acting as the venue where the majority of youth spend their days. Furthermore, the time spent in a school setting only increases with before and after school programming.
IV. Health’s Impact on Education: North Carolina

In recent years, North Carolina has made significant progress in some health measures, including those related to school settings. For example, teen pregnancy rates for both Non-Hispanic White and minority populations across the state have decreased significantly since the 1990s. However, youth continue to exhibit risky behaviors. According to the most recent Youth Risk Behavior Survey (2013), approximately 30% of ninth-grade students throughout the state indicated that they have had sexual intercourse. That percentage increases to 64% among 12th-grade students. Furthermore, among those 12th grade students who indicated that they had sexual intercourse in the past three months, only 57.8% used a condom. Condom use has actually decreased among youth since 2003, from 62.1% reporting condom use in 2003 to 60.8% in 2013.

Regarding nutrition and physical activity related outcomes, North Carolina has improved on several fronts in the past decade. For example, the percentage of students who reported drinking a sugar-sweetened beverage one or more times every day in the past seven days has decreased from 38.8% in 2007 to 28.9% in 2013. In terms of fruit and vegetable intake, the percent of students who reported eating fruits and vegetables at least one time per day in the past seven days has increased from 14.8% in 2007 to 17.5% in 2013. Despite these increases, the majority of youth are still not getting the recommended amount of fruits and vegetables per day. Furthermore, as of 2009, 15% of children ages 2-4 were obese, 26% of children ages 5-11 were obese, and 28% of children ages 12-18 were obese. Additionally, only 34.7% of students ate breakfast on seven of the past seven days, and White students were much more likely to eat breakfast than their Black counterparts.
As previously demonstrated in the national setting, poor health status and complex health problems contribute to missed school days, loss of connectedness to the school setting, and adverse educational outcomes. Similar trends exist in North Carolina. According to the Child Health Assessment and Monitoring Program (CHAMP), as of March 2011, 49% of parents indicated that their child had missed one to four days of school due to an illness or injury. Furthermore, 9% of elementary, middle, and high school students missed school for at least two weeks in the past year due to an illness or injury. Students that missed two or more weeks of school due to illness or injury were more likely to have lower grades, more likely to have asthma, and more likely to have special health care needs than their student counterparts who missed less than two weeks of school.

In the school setting, North Carolina has reduced the nurse-to-student ratio from 1:2047 in 2001-2002, to 1:1185 as of 2009-2010. The most recent estimate from the North Carolina Department of Health and Human Services shows that each nurse serves an average of 1,177 students. However, that nurse-to-student ratio is approximately 57% higher than the federally recommended ratio of 1:750. Specifically regarding health education in schools, North Carolina Healthy Living Standards indicate that health education curriculum should be offered from kindergarten to high school. In order to graduate from high school, North Carolina students are required to have only one healthy living class in high school, which is supposed to be a combination of physical education and health. However, the state does not mandate any specific course requirement in grades K-8; it only recommends three to five days per week of physical education and assumes that approximately 2.5 hours per week are available for health education. In reality, recent budget cuts that greatly affect K-12 education in North Carolina have left many low-income counties and schools without the tools and resources to provide
health services and health education. Additionally, nationwide, many educators and parents feel that even if health education is offered to students, it is often inadequate.\textsuperscript{18} The lack of structure from the state and from districts regarding actual implementation of physical and health education programs leaves many school districts at a loss for how to provide these critical services to their students. A nationwide call to action set forth by the CDC presents opportunities for leaders to collaborate and produce innovative and interdisciplinary solutions to meet students’ health needs across the country.

V. Opportunity: University-Community Partnerships

Partnerships between institutions of higher education and community organizations provide an opportunity for both the community and the university to reap substantial benefits. This concept is not new in public health; most accredited public health schools agree that community-based practice is an essential component of a public health education.\textsuperscript{19} Furthermore, universities have long been committed to engaging in research and programmatic efforts that engage the community in a variety of ways. North Carolina is home to a large number of higher education institutions with various opportunities for students to engage in community-based programming. There are 16 public, four-year universities in the University of North Carolina network, as well as 77 private, four-year colleges and universities, and 87 two-year, community college programs that span all regions across the state.\textsuperscript{20} Among these institutions, there are 14 accredited public health programs, which provides ample opportunities for public health training and practice.\textsuperscript{21} Yet, schools of public health often struggle to create practice-based opportunities in the community for their students. Both students and universities see the value in these opportunities, and students are looking for ways to examine how their current and future work
will affect the local community. It is necessary to take specific and purposeful steps in order to create partnerships, and also address the potential challenges associated with this undertaking.

Specifically related to school-based health, a coordinated and collaborative approach to improve health outcomes in a school setting is more likely to be successful than a school attempting to achieve this problem on its own. Partnerships between institutions of higher education and K-12 schools represent specific challenges. Many in both fields believe that higher institutions and K-12 schools operate in completely different realms, and thus collaboration between the two is exceptionally difficult. Furthermore, schools often operate very independently; classroom teachers control their classrooms, school administrators oversee school operations, and a local school board ensures high quality operations. However, schools have recently been increasingly challenged to achieve higher standards and outcomes, many of which focus on social and large-scale determinants. School leaders have realized that engaging with community organizations, including institutions of higher education, can enrich the teaching and learning school environment, and improve student, family, and community outcomes.

These types of partnerships are also beneficial for those in the university setting. For example, university students can serve as mentors and role models for K-12 students. K-12 students can also broaden their knowledge and think more purposefully about their own academic and professional paths while observing their university-student mentors and interacting with them on a personal level.

With appropriate input and balance of decision-making from all partners, a collaborative partnership between an institution of higher education and a K-12 school can be very successful.
Program Identification, Adaptation, and Rationale

The University of North Carolina at Chapel Hill has one of the largest and best public health schools in the country: the Gillings School of Global Public Health. Gillings’s mission is to, “…improve public health, promote individual well-being and eliminate health disparities across North Carolina and around the world”.

Gillings offers numerous opportunities for students to collaborate with local organizations and work on different public health initiatives, such as health education, environmental health, refugee health, clinical care, and many more.

Capitalizing on university assets across North Carolina and focusing on the health education component of the coordinated school health model, a team of dedicated leaders from fields of health and education have created an innovative program that provides a health education curriculum for a local school and works to improve health outcomes and empower students to make healthy decisions now and later in life. Classroom to Community is a university-based program that partners with a local school in Durham, North Carolina. C2C is a community-university partnership that operates on a semester-cycle. Each semester, a five-member leadership team recruits volunteers from across health graduate schools at UNC-Chapel Hill. C2C leaders provide 12 training seminars and one-on-one coaching opportunities to lead volunteers through the skill-development of lesson planning and execution. Volunteers then teach four health lessons per semester at our partner school on topics ranging from mental health, substance abuse, healthy relationships, healthy decision-making, nutrition, and fitness.

There are many programs that address health needs in schools through a partnership that involved university students throughout the country. One of these programs is Peer Health Exchange (PHE), a model that exists in major cities including New York City, Chicago, Los Angeles, Chicago, Boston, and the Bay Area. Peer Health Exchange operates in low-income and
urban high schools, and recruits and trains undergraduate volunteers to teach PHE’s curriculum to high school students. PHE has implemented a rigorous evaluation and found that 92% of high school students that participated in PHE’s curriculum indicated they would use something they learned to make a healthy decision going forward. Furthermore, PHE high school students gained 38% in growth in health knowledge, based on a pre-post test design.

Peer Health Exchange has several strengths, including a robust evaluation that Classroom to Community leaders have adapted to the current implementation at UNC Chapel Hill. However, C2C recognizes the unique needs of the university and partner school, and has made two major changes to tailor the program to meet these needs.

The first change relates to the volunteer workforce. In fall 2014, the founders of Classroom to Community at UNC Chapel Hill sent out a survey to health graduate students in order to gauge interest in the proposed program. Of the 56 responses received, 77% expressed interest in creating culturally and age-level appropriate lesson plans to teach public health related information in a classroom setting. 80% wanted to learn how to clearly communicate health content, 71% wanted to learn to create outcome driven and skill-based lesson plans, and 68% were interested in learning to engage a classroom in a health-related lesson. Additionally, over 50% of respondents stated that they probably or definitely would be working with preschool through high school aged children in their future professions. Yet, 54% of respondents have never had experience engaging with students in a formal classroom setting.

These data demonstrate that there is a significant desire and need by professional graduate students at the UNC School of Public Health for additional opportunities with schools and youth in order to prepare them for their future health careers. This interest clearly exists, yet the opportunities available to graduate students to meet this interest are limited. Outside of a
possible capstone opportunity through the Health Behavior department, or a self-directed internship or volunteer opportunity, graduate students have few opportunities to engage in guided, direct, and consistent community service, especially in the school classroom setting. Classroom to Community leaders decided to focus primarily on recruiting graduate students to fill the health educator roles, in order to meet the needs described above and offer an opportunity for graduate students to engage in with the surrounding community, and build the skills they described on the interest survey.

The second change that C2C leaders implemented was finding a home for the program in the Gillings School of Global Public Health at the University of North Carolina at Chapel Hill. Although Classroom to Community has a solid foundation and background in teaching pedagogy and education, the program is housed in the School of Public health for a variety of purposeful and practical reasons. First and foremost, C2C has volunteers that teach health lessons, and therefore needs volunteers with at least some exposure to different health areas. Most health graduate students at UNC Chapel Hill have some sort of exposure, knowledge, and skills in these different health topics. Some volunteers are studying the content that they will be teaching in the classroom. For example, in fall 2014, one of the health educators was studying nutrition and planned the lesson related to nutrition for 5th grade students. This health foundation is critical for lesson planning and execution because C2C uses health standards, objectives, and several health behavior theories to inform lesson content. Furthermore, the C2C leadership team has identified a need for this program among graduate students in the School of Public Health, as highlighted previously. In the School of Education, students already have an opportunity to build these skills through placements that are coordinated by the School of Education. Finally, health graduate students need opportunities to learn how to effectively communicate health content to a variety
of audiences. Classroom to Community allows volunteers to build these skills, and eventually become health professionals that can successfully deliver health content and information today and in the future.

**Program Implementation**

I. **Key Partners**

   Classroom to Community is housed under the Student Health Action Coalition, a student-run organization at UNC Chapel Hill. C2C receives significant support from the School of Public Health in funding, space, and a volunteer force. C2C’s direct school partner is Maureen Joy Charter School. The UNC Gillings School of Global Public Health serves as an exemplary university-based home for Classroom to Community. Gillings is a school that promotes collaboration, innovation, and interdisciplinary thinking and programming.

   To find a partner school where health education delivery would take place, the founders of C2C at UNC identified three key criteria: 1) that the school served low-income, minority students, 2) that the school did not currently have any health education program and/or health services in place, and 3) that the school be within reasonable distance for volunteers’ commutes. These three criteria were critical, as they represent schools and students with the highest need for health education, and feasibility in programming. Despite close proximity, Chapel Hill-Carrboro City Schools were generally more affluent, higher performing, and had better access to internal and external resources through Orange County and UNC programs. Therefore, C2C turned towards Durham County. Maureen Joy Charter School is a public charter school serving approximately 600 K-8th grade students. Meetings with the school counselor and conversations with several classroom teachers showed significant interest in providing health services and education for students, as the school does not currently have a nurse or health education program.
for any of their students. C2C leaders presented a formal proposal to the school principal, showing the training syllabus for health educators as well as a planned teaching schedule and curriculum. The principal and C2C team leaders reached an agreement that reflects the current program being implemented at Maureen Joy. The partnership between C2C and Maureen Joy is one that is continuously collaborative and adaptive to feedback and data. The school counselor remains the main contact and champion of the program. She assists with facilitating meetings with school administrators, coordinates teachers’ schedules to incorporate health lessons, and assists with overall logistics and communication. The highest volume of constant contact between C2C leaders and the school counselor occurs at the start and end of a semester. Throughout the semester, coordination and contact shifts to each grade level’s team leader at MJCS. For example, when C2C volunteers teach 5th grade, C2C leaders communicate with the 5th grade team leader for all classroom related specifics.

The following list is a background of each of C2C’s key partners:

1) University of North Carolina Chapel Hill Gillings School of Global Public Health: The school of public health at UNC Chapel Hill provides a home for Classroom to Community that is supportive and credible. When proposing Classroom to Community to school partners, having a university attached to the program helps the program with credibility and sustainability. This partnership also allows C2C to use university resources, such as classroom space, copying, printing, and faculty and staff expertise in order to strengthen program activities. As an organization under SHAC, C2C has approval from the school to use these valuable resources.

2) Student Health Action Coalition (SHAC): SHAC formed in 1968 at the University of North Carolina at Chapel Hill and is the oldest free clinic in the United States, run
entirely by student volunteers from the Schools of Social Work, Public Health, Physical Therapy, Pharmacy Nursing, Medicine, and Dentistry. The students, under the supervision of UNC doctors and professors, combine their skills to provide free health services to local underserved individuals and communities, partner with communities to develop and implement sustainable programs, and create an interdisciplinary service learning environment for students in the health science programs at UNC. Because of its sustainable existence at the university and the alignment of its mission with C2C, SHAC serves as a strong umbrella organization for C2C.

3) Maureen Joy Charter School (MJCS): As previously described, Maureen Joy Charter School is a public charter school in Durham, North Carolina. As of now, this school site is the only partner C2C works with for delivering health education. 50% of the students at MJCS are African-American, and 48% are Latino. 92% of students use free and reduced price lunch. The administrators, teachers, and students at Maureen Joy are dedicated to high levels of academic achievement, and the students perform higher than their geographic and demographic counterparts. However, they do not currently offer any health education for their students. They do have a physical education teacher, and science teachers often incorporate health concepts into their lessons where appropriate.

II. Program Leadership

Before the beginning of the fall 2014 semester, the two co-directors at the time created a leadership structure. The structure has a three-tier leadership model in order to attract and develop new leaders to ensure sustainable leadership. This can pose a significant challenge in the graduate school setting, due to the fast turnover of students in two-year masters programs. At the top tier there are two co-directors responsible for the coordination of the partnership,
communication, logistics, data management, budget, and sustainability. At the second tier there are one or two curriculum specialists responsible for coordinating health curriculum with the school site, pulling resources and evidence based lessons, graduate student seminar planning and facilitation, graduate student coaching, lesson plan review and lesson execution evaluation. At the third tier there are two or three teaching fellows that serve in two capacities: first, if they are new to C2C, they serve as volunteers in order to learn internal program processes; second, they attend leadership meetings to engage in organization-level discussion and decision-making, as well as prepare for future movement up the leadership tiers. The skill sets of the leadership team span practice in health, education and community engagement to represent the interdisciplinary nature of the program. The current organizational chart for C2C is:

![Organizational Chart](chart.png)

A sample description of each leadership position can be found in Appendix A.

**III. Program Activities**

Classroom to Community Vision: To be the link between health and education by empowering
public school students to make healthy decisions, connecting communities to health resources, and building skills for graduate students.

Classroom to Community Mission: To support healthy schools and communities by developing a diverse and interdisciplinary network of leaders in health and education.

The primary program activities of Classroom to Community are to:

- Recruit, train, and connect a diverse team of passionate individuals working in the fields of health and education.
- Leverage the mindsets and frameworks of pedagogy and theory from both education and public health and the resources of universities to remove health as a barrier to educational attainment.
- Promote healthy behaviors in public school students through providing and improving health knowledge, skills, and literacy.
- Rigorously evaluate program work and disseminate best practices in order to become sustainable, scalable, and replicable.

With Classroom to Community, students in schools receive the health education they need and gain access to information on nutrition, exercise, mental health, sexual health, and resources in their community. Furthermore, graduate students gain a skillset that they can apply in their future professional careers to any community and setting. A full program logic model outlining inputs, activities, outputs, short-term outcomes, and long-term outcomes can be found in Appendix B.

a. Program Timeline

Recruitment for each semester begins before the actual semester starts. For example, C2C leaders begin recruiting for the fall semester at the end of the previous spring semester. C2C
leaders use several different avenues for recruitment. They utilize school-wide list-servs, as well as announcement boards and newsletters. Additionally, leaders use social media such as Facebook groups for public health students to promote the opportunity. Leaders also encourage former volunteers to share the program with friends, colleagues, and classmates. While the primary applicant pool comes from the School of Public Health, C2C has received applicants from the School of Nursing, the School of Social Work, other allied health programs, and from University undergraduates. Each interested student must complete a volunteer application, which requests relevant academic and professional experience, as well as ensures that participants understand requirements for commitment and are available to participate. A sample volunteer application can be found in Appendix C.

Following recruitment, C2C leaders meet to decide on volunteers for the current semester. The main elements considered in applicant decisions are: 1) passion for intersection of health and education, 2) value of participation in C2C for future career plans, 3) matching schedule to training seminar and teaching times (volunteers must commit to a 1.5 hour seminar per week, as well as have a three-hour open block during the school day to travel and teach), and 4) how many volunteers the partner school can accommodate at that time. Volunteers are sent an acceptance email and requested to accept or deny participation within one week. A full program timeline roadmap can be found in Appendix D.

b. Graduate Student Training and Curriculum

The graduate student training consists of professional development seminars that provide volunteers with the necessary skills and tools to be successful in the classroom. There are 12 total training seminars held weekly over the course of the semester. Each seminar last for 1.5 hours, with 30 minutes of optional, supported work time at the end.
The current professional development seminar topics are: Welcome to C2C and Overview of Program and Partnership, Teaching Pedagogy and Health Literacy, Observation Week at Maureen Joy, Planning Purposefully I: Model Lesson and Planning Overview, Planning Purposefully II: Writing Your Own Key Points and Assessment Questions, Planning Purposefully III: Pulling it All Together and Writing Your Own Lesson Plan, Execute Effectively: Best Practices in the Classroom, Lesson Preparation, Rehearsal, and Utilizing Data.

These topics represent a progression from program overview to the skills related to lesson planning and teaching, and end with lesson preparation, rehearsal time, and ways to use student data to improve teaching in the classroom. The seminars related specifically to lesson planning and execution are based on Teach for America’s Teaching as Leadership Framework and tools. For example, the progression from Planning Purposefully to Executing Effectively is a key component of Teach for America’s tools and resources related to highly effective teaching.²⁷

Seminar execution is based on the Train the Trainer model. This is a widely recognized and widely used model for training across many disciplines, including education, clinical care, public health preparedness, and others. The Train the Trainer model focuses on allowing experienced and trained teachers to train colleagues, or peers, in a specific skillset.²⁸ The current Classroom to Community model requires at least one leader of the leadership team to have a background in teaching. Currently, two of the C2C leaders are former Teach For America corps members, and all other leaders have at least some experience teaching and/or mentoring primary or secondary school-aged children. Additionally, in order to reasonably assume impact on graduate health educators’ learning and behaviors, the training model is rooted in Social Cognitive Theory (SCT) constructs such as observational learning, reinforcements, and self-efficacy. SCT asserts that learning happens through a reciprocal interaction of an individual, the
environment, and his or her behavior. In the majority of Classroom to Community training seminars, leaders model a skill or behavior, while volunteers observe (observational learning). Then the seminar allows for volunteers to practice the same skill or behavior they just observed to build self-efficacy through mastery experiences. These skills then translate into their lesson planning and teaching abilities in the classroom.

For lesson planning, C2C uses the Teach For America lesson plan template (Appendix E) and a backwards-planning design approach. This approach allows volunteers to plan their lesson on their assigned health topic in a very strategic way. First, volunteers build key points and summative assessment questions from their objectives. Starting with the end in mind -- the assessment questions -- allows teachers to establish clear points and skills that students must learn throughout the lesson to successfully master the content being taught. This first step is essential to the overall vision of the lesson plan and guides the volunteer in creating the main content of the lesson plan. The key points directly correspond to the new material, or new content, that the volunteer delivers to students and provides an effective way for graduate students to hone and tailor the health information to students’ levels and needs. The health lesson delivery follows a diffusion of responsibility model, often referred to as “I do, we do, you do”, which allows the transfer of knowledge and thus the thinking and explaining to shift from the teacher to the student over the course of the lesson. Each volunteer plans at least one lesson, and adapts the other three, which depends on how many volunteers are assigned to each grade level. The professional development seminars also prepare volunteers for how to adapt a lesson plan written by someone else, and provides them with time to practice teaching other volunteers’ lesson plans.
Perhaps the most challenging aspect of Classroom to Community is preparing volunteers for teaching to the specific audience of K-8 school-age children, often of different backgrounds and of lower literacy levels than our volunteers. The C2C leadership team recognizes this challenge and devotes several seminars specifically to understanding the differences between learning styles of adults and children, and younger children and older adolescents. Furthermore, volunteers are able to understand different learning styles such as visual, auditory, kinesthetic, and linguistic through the training provided by C2C leadership. Volunteers receive tools that assist them with lesson planning depending on the grade level they are assigned, as well as different examples of activities geared towards various learning styles.

c. Health Education Curriculum

The curriculum for health lessons is based primarily on North Carolina Health Standards. The standards available provide essential standards and clarifying objectives for grades K-2, 3-5, 6-8, and 9-12.1 A primary goal of Classroom to Community related to curriculum development is to customize the state standards and objectives to fit Maureen Joy’s individual needs. This is an approach that is extremely beneficial to both health educators and the school, as health educators are able to address specific classroom assets and challenges.

To adapt the standards and objectives to meet a partner school’s needs, it is necessary to communicate with school staff to better understand what their students and communities will benefit from. The C2C leadership team communicates with each grade level in order to take into account specific classroom’s needs related to these health standards. For example, for the spring 2015 semester, the leadership team met with the 7th grade teaching team to explore how the proposed health topics can specifically address the needs these teachers see in their classrooms.

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1 A complete outline of all standards and objectives for North Carolina can be found at [http://www.ncpublicschools.org/acre/standards/new-standards/#healthful](http://www.ncpublicschools.org/acre/standards/new-standards/#healthful).
every day. The 7th grade teaching team made it clear that they had noticed some mental and emotional health issues among their students, specifically the girls. This information has informed the lessons that the 7th grade volunteers have planned for the semester, and allows for individual tailoring of lesson content to Maureen Joy Charter School.

The leadership team created a curriculum outline for all grade levels for the four health lessons that C2C volunteers will teach. The outline is based on state standards and based on this critical school staff feedback. Some of the grade levels are split by gender, such as 4th grade. Thus for 4th grade, the curriculum outlines lessons one through four by gender and topic.

An example of a curriculum outline for 4th grade is outlined below:

<table>
<thead>
<tr>
<th>Topic</th>
<th>State Standards</th>
<th>Objectives</th>
</tr>
</thead>
</table>
| **Lesson 1: Introduction to Health and Wellness** | Understand wellness, disease prevention, and recognition of symptoms.  
- Design a personal action plan for sufficient rest and sleep.  
- Recognize methods that prevent the spread of germs that cause communicable diseases. | SWBAT² define health and identify behaviors that affect their health (ex. eating, drinking, exercising, sleeping, bathing, understanding/cleaning their bodies [hands & teeth], forming relationships, etc).  
SWBAT explain what healthy behaviors (eating, drinking, exercising, sleeping, cleaning their bodies [hands & teeth]) look like.  
SWBAT design a personal wellness plan. |
| **Lesson 2 (Boys): Nutrition** | Understand the importance of consuming a variety of nutrient dense foods and beverages in moderation. | SWBAT explain the effects of eating healthy and unhealthy meals.  
SWBAT identify the sources of a variety of foods.  
SWBAT categorize foods and beverages that are more nutrient dense. |
| **Lesson 2 (Girls): Puberty &** | Understand the changes that occur during puberty and | SWBAT define puberty and recognize that individuals experience puberty at different |

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² SWBAT stands for “Student Will Be Able To” and is based on the Teach for America lesson planning model described previously.
| Hygiene Part I | adolescence. | Summarize physical and emotional changes during puberty.  
| - | Recognize that individuals experience puberty at different rates (early, average, late).  
| | | rates  
| | | SWBAT describe basic reproductive anatomy  
| | | SWBAT describe physical and emotional changes during puberty  
| **Lesson 3 (Boys): Puberty & Hygiene** | Understand the changes that occur during puberty and adolescence.  
| | - Summarize physical and emotional changes during puberty.  
| | - Recognize that individuals experience puberty at different rates (early, average, late).  
| | - Summarize physical and emotional changes during puberty.  
| | - Recognize that individuals experience puberty at different rates (early, average, late).  
| | | SWBAT define puberty and recognize that individuals experience puberty at different rates  
| | | SWBAT describe basic reproductive anatomy  
| | | SWBAT describe physical and emotional changes during puberty  
| | | SWBAT describe how to take care of themselves during puberty  
| | | SWBAT create a personal puberty wellness plan  
| **Lesson 3 (Girls): Puberty & Hygiene Part II** | Understand the changes that occur during puberty and adolescence.  
| | - Summarize physical and emotional changes during puberty.  
| | - Recognize that individuals experience puberty at different rates (early, average, late).  
| | | SWBAT describe how to take care of themselves during puberty  
| | | SWBAT create a personal puberty wellness plan  
| **Lesson 4 (Girls): Healthy Relationships** | Understand healthy and effective interpersonal communication and relationships.  
| | - Explain the importance of showing respect for  
| | | SWBAT explain why having healthy relationships is important  
| | | SWBAT compare and contrast healthy and unhealthy relationships  

27
<table>
<thead>
<tr>
<th>Lesson 4 (Boys): Emotional Learning</th>
<th>Understand the relationship between healthy expression of emotions, mental health and healthy behavior.</th>
<th>SWBAT design a plan for creating and maintaining healthy relationships.</th>
</tr>
</thead>
</table>

Typically, the curriculum specialist on the leadership team will create a guide for volunteers to use when planning their lesson. In addition to including standards and objectives, the guide will include evidence-based resources and curricula that volunteers are encouraged to use when planning their lesson. Since there are a variety of evidence-based health education curricula available, it is the volunteer’s responsibility to synthesize information and resources and determine the best and most appropriate tools to use in the lesson.

C2C leaders also encourage the use of health behavior theories to inform lesson planning. In order to reasonably assume impact on students, C2C has rooted health lesson planning and delivery on several theories and constructs for achieving health behavior change:

1) The Health Belief Model (HBM): volunteers use this model to increase knowledge and skills of their classroom students by applying the six concepts of perceived susceptibility, perceived severity, perceived benefits, perceived
barriers, cues to action, and self-efficacy. An example related to sexual health is outlined below:

<table>
<thead>
<tr>
<th>Concept</th>
<th>Condom Use Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Perceived Susceptibility</td>
<td>Classroom students understand and believe they are at risk for negative sexual health outcomes such as STIs, HIV, and pregnancy.</td>
</tr>
<tr>
<td>2. Perceived Severity</td>
<td>Students learn that the consequences of these negative sexual health outcomes are severe enough to attempt to avoid.</td>
</tr>
<tr>
<td>3. Perceived Benefits</td>
<td>Students believe that using condoms will protect them from the negative sexual health outcomes.</td>
</tr>
<tr>
<td>4. Perceived Barriers</td>
<td>Students identify their own barriers to condoms use during the health lesson, and discuss ways (with each other and with the health educator) to reduce those barriers.</td>
</tr>
<tr>
<td>5. Cues to Action</td>
<td>Students write down personal goals and ways that they will use to remind themselves to be safe and use condoms.</td>
</tr>
<tr>
<td>6. Self-Efficacy</td>
<td>Students will practice negotiating condom use and feel confident in sexual relationships going forward.</td>
</tr>
</tbody>
</table>

2) The Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TRB): both of these theories focus on the factors that affect individuals and determine the likelihood of whether or not an individual will perform a certain behavior. TPB is a continuation of TRA and adds in an additional concept that how easy or difficult individuals perceive a specific behavior to be will determine their likelihood of doing it. TRA asserts that behavioral intention is the best predictor of that behavior. Volunteers use these two models by using teaching pedagogy tactics such as checks for understanding (assessing knowledge and behavioral intention throughout the lesson), gradual release of responsibility (perceived ability to perform a behavior), student-driven learning, and behavior management.
d. Program Budget

Classroom to Community provides its program and services free of cost to students and graduate students. Therefore, the operating budget is made up of grant funding and in-kind donations from university organizations and departments, and community organizations that program leaders apply for and solicit throughout the year. The current operating budget consists of $1,100 in monetary grants, in-kind donations of space and copies, and approximately $100,000 in donated time from program volunteers and leaders. The current revenue streams of Classroom to Community come from SHAC, the Office of Student Affairs at the UNC Gillings School of Public Health, and from other small-scale grants from organizations such as CVS. Due to the fact that C2C does not currently have its’ own 501(C)(3) status, the ability to apply for grant funding is fairly limited. While SHAC does have 501(C)(3) status, it does not allow for its’ sub-programs to use that status frequently.

C2C sustains financially primarily due to its low overhead costs—ensured through volunteer leadership time and donation of resources such as transit, printing, incentives and celebration funding. Classroom to Community’s current indirect costs are only $150, which covers some of the travel expenses of leaders and volunteers to the school partner site. This is less than 13% of the budget. A proposed three-year budget can be found in Appendix F.

Program Evaluation

In order to develop an evidence base and assure a high quality program, the C2C leadership team has conducted process and outcome evaluations for the two complete semesters.

The purpose of the process evaluation is to ensure that the program is being implemented with true fidelity to continue to determine and document core program components and non-negotiables, and so that the leadership team can assess all aspects of the program and make
improvements for the future if necessary. A process evaluation is conducted on each training seminar, with seminar leaders evaluating within a week of completion. Process evaluation questions on satisfaction are also assessed from volunteers at mid-point. At the end of the semester, one leader compiles all process evaluations and feedback to share with the team for further discussion and problem solving for future iterations.

The purpose of the outcome evaluation is to assess impact on our two populations of focus: graduate student and public school students. The graduate student outcome evaluation uses a pre-post test model, and assesses knowledge of concepts in health education, confidence in areas related to lesson planning and execution, and examines intended future plans. The post test also includes a section related to seminar quality and value; volunteers report on which of the professional development seminars were most valuable, which were least valuable, what other skills or topics they wished leaders had addressed, and any other helpful feedback. All responses are anonymous and recorded through an online survey developed through Qualtrics.

The outcome evaluation related to growth in health knowledge and skills of public school students is also a pre-post test design. Volunteers create assessment questions based on the health objectives they are teaching, and one of the leaders compiles all assessment questions by grade level. Grade level teachers then distribute the pre-test assessment questions to all students before health lessons begin. The post-test assessment questions are given to students at the end of each lesson during the four weeks of health lesson delivery. Each volunteer grades their own classroom’s assessments, using a normed exemplar response, and uses an Excel spreadsheet to track growth and performance of individual students and of the entire class. This allows volunteers to take ownership of the increase in knowledge and skills of their classroom and make changes to lesson plan delivery over the course of the four weeks to continue to improve student
outcomes. For example, if students do not do well on a post-test for a specific health topic, there may have been some miscommunication of health content delivered on that day. The volunteer can revisit the questions missed during the following lesson and ensure that students achieve full mastery of the content.

**Conclusions and Implications**

The evidence presented below outlines reflections and outcome evaluation data from the two complete, successful iterations of the program thus far. C2C leadership is working to rigorously evaluate the program and although internal leadership staff completes the current evaluation, future program iterations would benefit from an outside evaluator. The lessons learned focus primarily on challenges associated with creating and maintaining a university-community partnership, and reflections on graduate student training.

**I. Graduate Student Outcomes**

The table below illustrates changes in knowledge, confidence, and future plans before participating in Classroom to Community and immediately after program completion in fall 2014. It is important to note that some of the questions changed between the pre-assessment and post-assessment surveys. The changes were reflections of a continuous conversation between all members of the leadership team. These changes explain why some of the questions below do not have a “post” or “change” value. Additionally, certain questions were added to the post-assessment and thus do not have a “pre” or “change” value. Additionally, there were 9 respondents for the pre-survey and 8 respondents for the post-survey. There was one participant who dropped out in the first week of C2C seminars. Overall, volunteer health educators exhibited a growth in knowledge and confidence in topics related to those covered by Classroom to Community training seminars. Specifically concerning knowledge and confidence related to
teaching techniques, all respondents exhibited an increase after participating in C2C. All values below indicate an average number among all respondents.

Graduate Student Outcomes, Fall 2014, N=9 (Pre-Survey), N=8 (Post-Survey)

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Pre</th>
<th>Post</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Knowledge: Please rate your knowledge of the following topics using a scale of 1-5 (1=know very little, 5= extremely knowledgeable)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. How much do you know about the connection between health and education?</td>
<td>3.50</td>
<td>4.25</td>
<td>+.75</td>
</tr>
<tr>
<td>2. How much do you know about lesson planning?</td>
<td>2.89</td>
<td>4.13</td>
<td>+1.24</td>
</tr>
<tr>
<td>3. How much do you know about teaching pedagogy?</td>
<td>3.11</td>
<td>4.00</td>
<td>+.89</td>
</tr>
<tr>
<td>4. How much do you know about health literacy?</td>
<td>3.20</td>
<td>4.00</td>
<td>+.80</td>
</tr>
<tr>
<td><strong>Confidence: Please rate your confidence in the following areas using a scale of 1-5 (1=very little confidence, 5=extremely confident). How confident are you in your ability to:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Develop a skills-focused health education lesson plan?</td>
<td>3.50</td>
<td>4.50</td>
<td>+1.00</td>
</tr>
<tr>
<td>5. Adapt health education materials?</td>
<td>3.63</td>
<td>4.38</td>
<td>+.75</td>
</tr>
<tr>
<td>6. Teach a skills-focused lesson plan to a group of students?</td>
<td>3.50</td>
<td>4.50</td>
<td>+1.00</td>
</tr>
<tr>
<td>7. Keep the pacing of the lesson plan on track to ensure completion within a given period of time?</td>
<td>2.75</td>
<td>4.50</td>
<td>+1.75</td>
</tr>
<tr>
<td>8. Maintain student engagement throughout the lesson?</td>
<td>3.00</td>
<td>4.63</td>
<td>+1.63</td>
</tr>
<tr>
<td>9. Check for comprehension of material during and after a lesson?</td>
<td>3.63</td>
<td>4.38</td>
<td>+.75</td>
</tr>
<tr>
<td>10. Use data to critically reflect on teaching performance and improve lesson plans and teaching strategies?</td>
<td>3.40</td>
<td>4.38</td>
<td>+.98</td>
</tr>
<tr>
<td>11. Work with under-served populations?</td>
<td>3.80</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Future Plans: Please rate your post-graduation intentions in the following areas using a scale of 1-5 (1=very unlikely, 5=very likely). How likely is it that you will:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Pursue a career in school health? (Changed to question below for post-assessment)</td>
<td>3.43</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>12.2 Pursue a career in health education?</td>
<td>--</td>
<td>4.63</td>
<td>--</td>
</tr>
</tbody>
</table>
13. Pursue further graduate education?  3.00  --  --
15. Pursue a career working in under-served communities after graduation?  4.00  5.00  1.00
16. Pursue a career in public health leadership? (Changed to question below for post-assessment)  3.71  --  --
16. Advocate in future roles for the bridging of health and education?  --  4.88  --

II. Maureen Joy Student Outcomes

The following outcome test scores reflect the class average for each topic, as well as average growth from the pre-assessment. Reported scores reflect the average percentage of questions that the students answered correctly, disaggregated by classroom. The pre-assessment was administered before health lessons began in an attempt to assess the knowledge of Maureen Joy students in each topic. Overall, class averages were very high: primarily in the high 70’s, 80’s and low 90’s, on a percentage scale of 0 – 100. The growth was also impressive and showed the tremendous opportunity for expanding knowledge and strengthening skills among Maureen Joy students.

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Class Average</th>
<th>Average Growth from Pre-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Exercise</td>
<td>86.36%</td>
<td>71.59%</td>
</tr>
<tr>
<td>2 Healthy Balanced Meals</td>
<td>89.94%</td>
<td>58.17%</td>
</tr>
<tr>
<td>3 Nutrition Labels</td>
<td>81.05%</td>
<td>45.63%</td>
</tr>
<tr>
<td>4 Affording Healthy Food</td>
<td>93.45%</td>
<td>91.53%</td>
</tr>
</tbody>
</table>

Class Averages and Class Growth of Knowledge in Health Topics by Grade Level, Based on a Pre-Post-Test Design

5th Grade – Classroom 1
N=19

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Class Average</th>
<th>Average Growth from Pre-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Exercise</td>
<td>86.36%</td>
<td>71.59%</td>
</tr>
<tr>
<td>2 Healthy Balanced Meals</td>
<td>89.94%</td>
<td>58.17%</td>
</tr>
<tr>
<td>3 Nutrition Labels</td>
<td>81.05%</td>
<td>45.63%</td>
</tr>
<tr>
<td>4 Affording Healthy Food</td>
<td>93.45%</td>
<td>91.53%</td>
</tr>
</tbody>
</table>

5th Grade – Classroom 2
N=16
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Class Average</th>
<th>Average Growth from Pre Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Exercise</td>
<td>80.40%</td>
<td>75.13%</td>
</tr>
<tr>
<td>2 Healthy Balanced Meals</td>
<td>87.24%</td>
<td>75.0%</td>
</tr>
<tr>
<td>3 Nutrition Labels</td>
<td>77.78%</td>
<td>52.61%</td>
</tr>
<tr>
<td>4 Affording Healthy Food</td>
<td>92.86%</td>
<td>92.35%</td>
</tr>
<tr>
<td>5th Grade – Classroom 3 N=17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson</td>
<td>Class Average</td>
<td>Average Growth from Pre-Assessment</td>
</tr>
<tr>
<td>1 Exercise</td>
<td>90.00%</td>
<td>67.65%</td>
</tr>
<tr>
<td>2 Healthy Balanced Meals</td>
<td>83.33%</td>
<td>53.34%</td>
</tr>
<tr>
<td>3 Nutrition Labels</td>
<td>84.92%</td>
<td>68.88%</td>
</tr>
<tr>
<td>4 Affording Healthy Food</td>
<td>89.80%</td>
<td>67.44%</td>
</tr>
<tr>
<td>5th Grade – Classroom 4 N=19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson</td>
<td>Class Average</td>
<td>Average Growth from Pre-Assessment</td>
</tr>
<tr>
<td>1 Exercise</td>
<td>83.18%</td>
<td>71.60%</td>
</tr>
<tr>
<td>2 Healthy Balanced Meals</td>
<td>83.92%</td>
<td>60.96%</td>
</tr>
<tr>
<td>3 Nutrition Labels</td>
<td>58.15%</td>
<td>46.30%</td>
</tr>
<tr>
<td>4 Affording Healthy Food</td>
<td>84.61%</td>
<td>55.87%</td>
</tr>
<tr>
<td>6th Grade Girls – Classroom 1 N=20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lesson</td>
<td>Class Average</td>
<td>Average Growth from Pre-Assessment</td>
</tr>
<tr>
<td>1 Identity</td>
<td>66.23%</td>
<td>-.47%</td>
</tr>
<tr>
<td>2 Peer Pressure</td>
<td>77.78%</td>
<td>19.84%</td>
</tr>
<tr>
<td>3 Alcohol</td>
<td>78.13%</td>
<td>48.13%</td>
</tr>
<tr>
<td>4 Drugs</td>
<td>82.03%</td>
<td>55.68%</td>
</tr>
</tbody>
</table>
### 6th Grade Girls – Classroom 2
**N=19**

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Class Average</th>
<th>Average Growth from Pre-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Identity</td>
<td>75.85%</td>
<td>14.81%</td>
</tr>
<tr>
<td>2 Peer Pressure</td>
<td>83.04%</td>
<td>21.09%</td>
</tr>
<tr>
<td>3 Alcohol</td>
<td>79.46%</td>
<td>47.62%</td>
</tr>
<tr>
<td>4 Drugs</td>
<td>88.10%</td>
<td>49.72%</td>
</tr>
</tbody>
</table>

### 6th Grade Boys – Classroom 3
**N=30**

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Class Average</th>
<th>Average Growth from Pre-Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Identity</td>
<td>80.40%</td>
<td>34.26%</td>
</tr>
<tr>
<td>2 Peer Pressure</td>
<td>89.80%</td>
<td>44.29%</td>
</tr>
<tr>
<td>3 Alcohol</td>
<td>98.90%</td>
<td>56.19%</td>
</tr>
<tr>
<td>4 Drugs</td>
<td>85.00%</td>
<td>56.03%</td>
</tr>
</tbody>
</table>

### III. Lessons Learned

The main lessons learned from two complete semesters of Classroom to Community at UNC Chapel Hill indicate that there are accomplishments to celebrate and many ways to improve going forward. Students at Maureen Joy Charter School demonstrated mastery and growth related to health topics of the C2C curriculum. Graduate student volunteers gained confidence and self-efficacy related to knowledge about health and education, and skills related to lesson planning and lesson execution. The partnership between C2C and Maureen Joy remained very strong, and the leadership team has received positive feedback from partner teachers and encouragement from the school counselor. C2C has gained more attention throughout the campus, especially among allied health graduate students. This increased attention will hopefully increase the number of applications for the next iteration of the program.
in fall 2015. C2C leaders have also created a partnership with the school community, as well as parents of students, through a health fair that took place at Maureen Joy in March 2015. This represents an additional way to engage with the school, the students, their parents, and the community at large. The leadership team proposed this idea to the administration and received the approval to plan a health fair that coincides with the school’s curriculum night. C2C leaders reached out to a variety of community resources, including the local public health department, the local parks and recreation department, mental health services, vision services, and dental services. The leadership team also planned several tables that were led by C2C leaders and volunteers, including a nutrition facts game, and a physical activity obstacle course.

Despite the overwhelming successes of two complete semesters of implementation, C2C leaders encountered several areas that could be improved in the future. For example, the level of communication between grade level teachers and the C2C team depends largely on the teaching team itself. Some teachers are more willing and more available to have consistent communication with the C2C team, and others are more hands-off with program activities. This creates inconsistencies related to the strength of the relationship between the classroom teacher and the volunteer health educator. Often times, volunteers have indicated that they would have appreciated a more consistent and reciprocal relationship with their classroom teacher. C2C leaders have advocated for a mentoring relationship, but the principal at Maureen Joy has been hesitant to increase the workload for his classroom teachers.

There are also various challenges that exist with creating and maintaining a partnership between a university and a school in the local community. It is necessary to address goals and objectives from the onset of partnership creation, and ensure that all key partners come to a common agreement. For example, one of the key components of a successful partnership
between these two fields is that the university-based leaders prioritized teachers’ needs. A successful partnership should respond to classroom needs identified by the teachers in the classroom who interact with students on a daily basis. Throughout program implementation, leadership must ensure that all partners are consistently committed and focused as time goes on. A program can often lose momentum if key partners lack or lose, energy and focus. Finally, a program and partnership cannot continue long-term without full commitment from high-level leadership, both from the university and K-12 setting. Without institutional commitment, these partnerships are likely to fail in the long run. C2C leaders have prioritized classroom teachers’ needs, and strived to ensure that the school’s needs are met in order to facilitate smooth program implementation. However, this prioritization has resulted in situations where graduate students needs’ fall behind the needs of the school partner.

In the current program model, graduate students are eligible to apply for the program and serve as semester-long volunteers. While the current model exists only as a volunteer program, C2C would benefit from existing as a formal service-learning course for students. With a formal graduate course curriculum, students would be able to receive academic credit and seminars could be extended to three hours. Integrating C2C as a service-learning course into the formal curriculum of a public health graduate course of study would provide several benefits for both the university and for enrolled students. There are many definitions of service-learning, but the one that APPLES Service-Learning program at UNC Chapel Hill uses is: “Service-learning is a course-based educational experience in which students participate in an organized service activity that meets identified community needs and integrates the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline and an enhanced sense of personal values and civic responsibility.” The benefits of service learning to
both the community and to students are significant. Students are able to engage in formal coursework and also engage in efforts that significantly benefit the surrounding community. A proposed graduate course syllabus can be found in Appendix G.

Classroom to Community has responded to the national call to action to improve health outcomes in the school-based setting. This program plan serves as a guide for implementation, as well as a thoughtful reflection of the intricacies of program management, partnership facilitation, graduate student development, and health education implementation in the classroom setting. The vision is that all students in classrooms across North Carolina, and across the country, will have access to health knowledge and skills that will empower them to make healthy decisions and engage in healthy behaviors today and tomorrow.
Appendices

Appendix A: Sample Leadership Positions Descriptions

**Teaching Fellow Position Description:**
A C2C teaching fellow is typically someone who has never participated in C2C but has significant teaching experience and is interested in leading C2C during his or her time in graduate school. A C2C teaching fellow essentially shadows the program as a volunteer to see how the program runs, but also gains insight into leadership activities. A selected teaching fellow will attend all seminars and leadership team meetings, assist in major functions and decisions of program as needed, write two lessons plans, adapt two lesson plans and teach four health lessons (if needed by school and program demand). The fellow will develop an overall understanding of organization structure and logistics to prepare for position of curriculum specialist. Time Commitment: 1 semester, approximately 5 hours per week.

**Curriculum Specialist Position Description:**
A C2C curriculum specialist is typically someone who has participated in C2C for 1 or more semesters, and/or has significant teaching and/or curriculum design experience. The curriculum specialist will obtain health topics and details from teaching partners, determine specific grade level objectives from teacher input, write key points and assessment questions, pull EBI and relevant resources for teaching volunteers, assist in seminar delivery, lesson plan review and quality control, lesson delivery assistance and evaluation, and assist in program evaluation. Time Commitment: one semester to yearlong commitment, approximately 6 hours per week.

**Co-Director Position Description:**
A C2C co-director is typically someone who has participated in C2C for 2 or more semesters, has served at least 1 semester in a leadership position, and/or has significant experience in teaching, community partnerships, or non-profit management. A co-director coordinates the partnership, writes syllabus and schedules teaching dates/time, coordinates and facilitates seminars, coordinates program logistics (copies, travel), writes grant proposals, promotes organization (PR and marketing), recruits volunteers, conducts program evaluation. Time Commitment: Yearlong commitment (May to May), approximately 6-10 hours per week.
Appendix B: Program Logic Model

**Inputs**
- Program directors and leadership team
- Partnership with local school leaders
- Partnership with Public Health School at local university
- Classroom space for professional development seminar
- Age and grade-level appropriate curriculum of health topics to be translated to health lessons

**Activities**
- Recruit university graduate students for program participation
- Conduct professional development seminars recruited students
- Graduate student health educators plan at least one lesson on an assigned health topic
- Each graduate student health educator executes four health lessons at partner school

**Outputs**
- Graduate student health educators recruited meet needs of partner school
- Increased knowledge of assigned health topic for graduate student health educators
- All four lessons are delivered and executed effectively

**Outcomes**
- Increased level of skills in public health theory, pedagogy, and lesson planning for graduate student health educators
- Increased knowledge in health topics for students at the partner school

**Impacts**
- More educated and skilled graduate students who recognize the critical connection between health and education
- Increased access to health resources for partner school and surrounding community
- Improved health behaviors and status for student learners
Appendix C: Sample C2C Volunteer Application

The Classroom to Community application involves 3 components:

1) A completed application form
2) A current resume
3) Spring class and work schedule (to the best of your knowledge—please keep us updated as these change)

Please email your completed application, resume, and schedule to Classroom to Community (c2c.unc@gmail.com) by midnight Wednesday, December 3rd.

The basics: Classroom to Community is a semester-long professional development volunteer program under the Student Health Action Coalition (SHAC) at UNC-Chapel Hill that puts you in a new kind of classroom.

You will spend time at UNC learning critical skills in teaching and leadership, then practice teaching in 4th-8th grade classrooms at Maureen Joy Charter School. This is a collaborative, interdisciplinary volunteer experience designed for graduate students from all disciplines in public health, nursing, and medicine. Others may apply as well, but priority will be given to current students in health professions.
Classroom to Community sessions will meet weekly during evenings for an hour and a half at SPH during the spring semester. The weekday will be determined based on group availability. Participants are expected to attend every class session. During the last two months of the semester, participants will travel to Maureen Joy to teach four, one-hour health lessons in their own classroom of approximately 20 students.

**IMPORTANT INFORMATION ABOUT CLASSROOM TO COMMUNITY**  
(Please read before submitting your application)

**Q: Do I get course credit for participating in Classroom to Community?**

**A:** While there is not direct credit for acceptance and participation in C2C, you may seek out your own independent study or practicum study credit with a Professor in your department. The course would be 3 credits and we have tools to help you facilitate this agreement, as well as assistance to help you meet goals and deadlines. If you are interested in gaining credit you must secure this ASAP—November or December for the following semester. Email us if you would like assisting documentation (ex: Independent Study application, syllabus of work, etc). If you are not seeking credit, this program is situated under SHAC’s Community Outreach division and therefore has similar volunteer training and participation elements. You will gain a critical skill set that will be applicable to future careers in public health.

**Q: How many hours per week should I anticipate for participation?**

**A:** You should expect about 3-4 hours per week in the beginning of the program between meetings and preparation for your lessons. Training sessions are weekly for 1.5 hours during the evening with optional 30 minutes of additional supported work time. During teaching weeks in March and April, you should expect about 6-7 hours per week between meetings, preparation, and travel/teaching. Biggest time factor is that you will need one 3-hour block of time during the school day (8:30 am – 2:30 pm) for travel and teaching.

**Q: What are the dates and times of the required training sessions?**

**A:** Sessions will be held weekly 1/12 – 4/20 (excluding holidays and Spring Break), along with one group observation trip to Maureen Joy during the week of 1/19 (two options of times will be available and decided upon as a group to ensure everyone can attend). Timing of classroom teaching will be dependent on your classroom teacher and your schedule but will occur 4 times during March and April.

**Q: What costs are associated with participation?**

**A:** C2C and SHAC will pay for most needed materials for lesson plans and teaching (as well as printing if timing deadlines met). Participants are responsible for covering the expense of gas back and forth to the school site, but carpooling is encouraged and in some cases provided.

**Q: How do I get to my partner teacher’s school?**
A: You will need to provide your own transportation to and from the school—about a 25-minute drive (13 miles). If you don’t have a car, don’t worry—we may be able to arrange for carpooling.

Q: Do I need to have prior teaching experience or coursework to participate?

A: No. Overall, we are looking for people who are interested in learning and want to grow as educators, community partners, and leaders.

Q: What do previous students say about the trainings?

A: C2C existed as a partnership between Teach For America and Emory’s Rollins School of Public Health the past two years. While the model and curriculum are being significantly modified for the UNC partnerships and setting, check out the course blog and read additional Emory stories written about the course here: http://classroom2community.blogspot.com/http://emoryhealthmagazine.emory.edu/issues/2012/summer/briefs/teach_health_for_america/index.html http://news.emory.edu/stories/2012/03/er_rollins_teach_america_classroom_community/campus.html

Q: Who teaches Classroom to Community?
A: Classroom to Community will be led by a dynamic group of current students who are passionate about the intersection of health and education.

**PERSONAL INFORMATION**

1. Name: __________________________

2. Email address

__________________________

3. Phone Number: _______________

4. School (please check all that apply):

   __ School of Public Health
   __ School of Nursing
   __ Other (please specify): ____________
   __ School of Medicine
   __ School of Social Work

5. Department/area of specialty (if applicable): ______________________________

6. Graduation Year: __ 2015
                       __ 2016
                       __ 2017
                       __ 2018
7. Will you have a 3-hour period of free time in your spring schedule between the hours of 8am and 2pm?

____YES      ____NO

8. What days and times will you be available for a weekly nighttime meeting at the School of Public Health? Check all the times you are available:

<table>
<thead>
<tr>
<th></th>
<th>5 - 6:30</th>
<th>5:30 - 7</th>
<th>6 – 7:30</th>
<th>6:30 – 8</th>
</tr>
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<tbody>
<tr>
<td>Monday</td>
<td></td>
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<tr>
<td>Tuesday</td>
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<td>Wednesday</td>
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<tr>
<td>Thursday</td>
<td></td>
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</tbody>
</table>

9. Do you have a car? (This is not an excluding answer – we can arrange for carpool)

____YES      ____NO

SHORT ANSWER

Please answer the following questions. Each response should be no more than 150 words.

9. Why do you want to participate in Classroom to Community?

10. Describe your career aspirations for the next 5-10 years after completing your degree program.

11. What assets would you bring to the C2C program that make you a unique candidate?

12. Optional: Explain any previous experience working with children or teaching.
### Appendix D: Program Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity &amp; Growth Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Establishing Program</strong></td>
<td><strong>Growth Goal</strong>: To determine need and interest at both community and university level, plan logistics, and coordinate partners to meet this need.</td>
</tr>
</tbody>
</table>
| Aug 2013   | ● Establish program directors with common interest and needed skill set  
                             ● Create email account |
| Sept 2013  | ● Identify university and community need through surveys and conversations with key stakeholders  
                             ● Secure university partnerships (umbrella organization, academic advisers, potential course offering)  
                             ● Write and present formal program proposal |
| Oct 2013   | ● Write seminar syllabus and schedule seminars for graduate volunteers  
                             ● Secure partner school(s):  
                                 - Pitch to guidance counselor or interested health or science teacher  
                                 - Pitch to principal for final approval (if working school wide)  
                                 - Teacher application/request forms (if working with individual classrooms across schools) |
| Nov 2013   | ● Create and circulate program application, recruit volunteers  
                             ● Finalize teaching partners and logistics (secure health topics/requests, teaching day/time preferences, testing days and holidays to avoid)  
                             ● Apply for grants through university or outside sources |
| Dec 2013   | ● Review applications and accept participants  
                             ● Finalize seminar dates and teaching logistics (times, dates, grade level assignments for volunteers)  
                             ● Create/adapt evaluation metrics for process and outcome measures  
                             ● Continue to apply for grants |
| **1st Iteration of Program** | |
| January 2014 | ● Launch C2C Weekly Seminar  
                             ● Conduct Pre-Program Evaluation for graduate volunteers  
                             ● Begin process evaluations on seminars  
                             ● Volunteers observe school site--meet students and host-teacher, gain context/perspective of school  
                             ● Meet with partner classrooms/teachers and other stakeholders to ensure smooth logistics and continue to build partnership |
| February 2014 | ● Continue C2C Weekly Seminars  
                             ● Send out parent consent/information form to parents of participating |
<table>
<thead>
<tr>
<th></th>
<th>students in selected classrooms</th>
<th>Provide full curriculum (objectives, key points) for school/parent reference</th>
<th>Review and provide feedback for lesson plans</th>
<th>Continue process evaluations on seminars and lesson plans</th>
<th>Collect Health Pre-test scores from students in school (score and enter data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2014</td>
<td>Continue C2C Weekly Seminars</td>
<td>Continue process evaluations on seminars and lesson execution</td>
<td>Volunteers teach 4 health lessons</td>
<td>Provide feedback on teaching execution</td>
<td>Collect Post-test scores per each lesson (score and enter data)</td>
</tr>
<tr>
<td>April 2014</td>
<td>Final Semester Celebration Dinner (all stakeholders invited)</td>
<td>Conduct Post-Program Evaluation for graduate volunteers</td>
<td>Create student achievement data report to share with school (teachers, support staff and principal)</td>
<td>Synthesize process and outcomes evaluations and provide next steps in Semester Summary Report</td>
<td>Meet with key stakeholders at partner school to present overall data and pitch partnership renewal (expansion or status quo)</td>
</tr>
<tr>
<td>2nd Iteration of Program</td>
<td><strong>Growth Goal:</strong> Double semesters of C2C from just Spring semester to both Fall and Spring, allowing for the doubling of overall impact (2x amount of graduate volunteers trained and 2x number of students served).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 2014</td>
<td>Determine number of classrooms, volunteers and semesters of C2C in following year</td>
<td>Create next round syllabus</td>
<td>Create and circulate program application, recruit volunteers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June-July 2014</td>
<td>Make modifications based on evaluation</td>
<td>Create additional leadership tier/structure to increase sustainability</td>
<td>Create website</td>
<td>Apply for grants or secure repeat budget funding</td>
<td>Review applications and accept participants</td>
</tr>
<tr>
<td>August 2014</td>
<td>Finalize teaching partners and logistics (secure health topics/request, teaching day/time preferences, testing and holiday schedule to avoid)</td>
<td>Finalize seminar dates and teaching logistics (times, dates, grade level assignments for volunteers)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Create/adapt evaluation metrics for process and outcome measures for semester

<table>
<thead>
<tr>
<th>September 2014</th>
</tr>
</thead>
</table>
| - Launch C2C Weekly Seminar
| - Conduct Pre-Program Evaluation for graduate volunteers
| - Begin process evaluations on seminars
| - Volunteers observe school site--meet students and host-teacher, gain context/perspective of school
| - Meet with partner classrooms/teachers and other stakeholders to ensure smooth logistics and continue to build partnership
| - Begin training new leaders through fellow and specialist positions

- ... April 2014 (see previous cycle of C2C from January-May and repeat over course of 2 semesters)

<table>
<thead>
<tr>
<th>3rd Iteration of Program</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth Goal:</strong> Sustain number of semesters of C2C and expand number of graduate volunteers and classrooms/students served by 33%.</td>
</tr>
</tbody>
</table>

For the 3rd iteration of the program, the main activities will largely remain the same (see previous two iterations). However, depending on sustained leadership, there may be some modifications that may be implemented.
## Appendix E: Lesson Plan Outline

<table>
<thead>
<tr>
<th>C2C Member</th>
<th>Classroom:</th>
<th>Date to be taught in classroom:</th>
<th>Rough? Final?</th>
</tr>
</thead>
</table>

### FIVE-STEP LESSON PLAN TEMPLATE

<table>
<thead>
<tr>
<th>VISION-SETTING</th>
<th>OBJECTIVE</th>
<th>KEY POINTS</th>
</tr>
</thead>
</table>
|                | What is your objective? | - What key ideas and understandings are represented by this objective?  
|                |                      | - What knowledge and skills do students need to access these key ideas and understandings? |

<table>
<thead>
<tr>
<th>ASSESSMENT &amp; DESIRED RESPONSE/EXPECTED ANSWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe, briefly, what students will do to show you that they have mastered (or made progress toward) the objective.</td>
</tr>
<tr>
<td>Attach your daily assessment, completed to include an exemplary student response that illustrates the expected level of rigor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1. OPENING ( _ min._ )</th>
<th>MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>How will you communicate <em>what</em> is about to happen? How will you communicate <em>how</em> it will happen?</td>
<td></td>
</tr>
<tr>
<td>How will you communicate its <em>importance</em>? How will you communicate <em>connections</em> to previous lessons?</td>
<td></td>
</tr>
<tr>
<td>How will you engage students and capture their interest?</td>
<td></td>
</tr>
</tbody>
</table>
### 2. INTRODUCTION OF NEW MATERIAL (___ min.)
How will you explain/demonstrate all knowledge/skills required of the objective, so that students begin to actively internalize key points? Which potential misunderstandings do you anticipate? How will you proactively mitigate them? How will students interact with the material? How/when will you check for understanding? How will you address misunderstandings? How will you clearly state and model behavioral expectations? Why will students be engaged?

### 3. GUIDED PRACTICE (___ min.)
How will students practice all knowledge/skills required of the objective, with your support, such that they continue to internalize the key points? How will you ensure that students have multiple opportunities to practice, with exercises scaffolded from easy to hard? How/when will you monitor performance to check for understanding? How will you address misunderstandings? How will you clearly state and model behavioral expectations? Why will students be engaged?

### 4. INDEPENDENT PRACTICE (___ min.)
How will students independently practice the knowledge and skills required of the objective, such that they solidify their internalization of the key points prior to the lesson assessment? When and how would you intervene to support this practice? How will you provide opportunities for remediation and extension? How will you clearly state and model behavioral expectations? Why will students be engaged?

### 5. CLOSING (___ min.)
How will students summarize and state the significance of what they learned? Why will students be engaged?
Appendix F: Sample Budget

<table>
<thead>
<tr>
<th>Financial Sustainability Projection - Summary of Years 0 to 3</th>
<th>Year 0 (start up year):</th>
<th>Year 1 (current year):</th>
<th>Year 2:</th>
<th>Year 3:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Funds Raised/Needed</strong></td>
<td>850</td>
<td>1,100</td>
<td>3,500</td>
<td>5,250</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indirect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>Volunteer</td>
<td>Volunteer</td>
<td>Volunteer</td>
<td>Volunteer</td>
</tr>
<tr>
<td>Rent/Utilities</td>
<td>In Kind</td>
<td>In Kind</td>
<td>In Kind</td>
<td>In Kind</td>
</tr>
<tr>
<td>Travel (mileage to partner school, 46 miles round trip)</td>
<td>Volunteer</td>
<td>150</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Marketing/promotion (website domain, host, business cards)</td>
<td>0</td>
<td>0</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Professional Fees (present/attend professional conferences, consultants on accounting/budget, branding, website)</td>
<td>0 Volunteer</td>
<td>1,250</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td><strong>Direct</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching supplies (chart paper, markers, craft supplies, manipulatives, food samples, etc)</td>
<td>300</td>
<td>550</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Additional Copies, not covered by in-kind</td>
<td>65</td>
<td>100</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Training supplies (binders, clipboards, chart paper, markers, teaching resources)</td>
<td>300</td>
<td>300</td>
<td>600</td>
<td>600</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td>665</td>
<td>1,100</td>
<td>3,500</td>
<td>5,250</td>
</tr>
</tbody>
</table>
Appendix G: Sample Graduate Course Curriculum

Classroom to Community: Bridging the Gap Between Health and Education

Course Syllabus
In-Class Seminar: Mondays, 5-7:50

Instructors

Anna Falkovich, MPH
Co-Director, Classroom to Community
Maternal and Child Health

Amy Bryson, MPH
Director & Founder, Classroom to Community
Health Behavior

Staff

Teaching Assistant

Guest Lecturers

Beth Moracco, PhD
Research Associate Professor, Health Behavior
Adjunct Professor, Maternal and Child Health

Alison Fragale
Associate Professor
Kenan-Flagler School of Business

Tim Flood
Associate Professor
Kenan-Flagler School of Business

Marcia Roth, MPH
Director of Training Initiatives in MCH
Department of Maternal and Child Health
Adjunct Instructor, Health Behavior

Course Overview

This course allows university health graduate students in various disciplines to develop and practice skills related to lesson planning, health education, health literacy, and health communications. Students will learn theories related to public health and teaching pedagogy, and be able to apply those theories during their practice throughout the semester. Each student will be paired with a classroom at Maureen Joy Charter School in Durham, North Carolina. Maureen Joy does not currently provide health education classes and does not currently have a school nurse on staff. Enrolled students will be filling an important need in this school and in the larger...
community. Students will also have an opportunity to reflect on their service through continuous thought-provoking assignments and group discussions.

**Learning Goals:**
1. Describe how poor health outcomes affect educational outcomes in a K-12 setting;
2. Identify major gaps in health education in local community schools and throughout North Carolina;
3. Indicate knowledge of skills related to lesson planning, lesson execution, and health communications;
4. Analyze the intersection of public health and education.

**Course Activities:**
1. Teach four health lessons throughout the course of the semester;
2. Analyze data related to health knowledge and adjust lesson content and teaching strategies as necessary;
3. Critically reflect on and evaluate primary students’ knowledge through rigorous evaluation methods.

**Core Competencies Addressed:**

**Communication & Informatics:**
1. Demonstrate effective written and oral health communication skills appropriately adapted to professional and lay audiences with varying knowledge and skills in interpreting health information.
2. Engage in collective information sharing, discussion, and problem solving.

**Diversity & Cultural Competency:**
1. Demonstrate awareness of and sensitivity to the varied perspectives, norms and values of others based on individual and ethnic/cultural differences (e.g., age, disability, gender, race, religion, sexual orientation, region, and social class).
2. Show effective and productive skills in working with diverse individuals including coworkers, partners, stakeholders, and/or clients.
3. Develop, implement, and/or contribute to effective public health programming and conduct research that integrates: (1) knowledge levels of health access among individuals and within communities, and (2) culturally appropriate methods for conducting practice or research.

**Leadership:**
1. Create a climate of trust, transparency, mutual cooperation, continuous learning, and openness for suggestion and input with co-workers, partners, other stakeholders, and/or clients.
2. Exercise productive organizational, time-management, and administrative skills.
3. Develop knowledge of one’s individual strengths and challenges, as well as mechanisms for continued personal and professional development.

**Professionalism & Ethics:**
1. Apply evidence-based concepts in public health decision-making.
2. Consider the effect of public health decisions on social justice and equity.

Program Planning:
1. Discuss social, behavioral, environmental, and biological factors that contribute to specific individual and community health outcomes.
2. Identify needed resources for public health programs or research.

Systems Thinking:
1. Respond to identified public health needs within their appropriate contextual setting.

Class Organization

During the first month of the course, students will attend weekly seminars that will introduce theories and knowledge related to health education, health behavior, teaching pedagogy, health literacy, and lesson planning. Roughly halfway throughout the semester, students will attend a weekly seminar in addition to teaching four health lessons at Maureen Joy. The seminar sessions during those four weeks of teaching will be largely dedicated to work time and group discussions so that enrolled students can share teaching experiences, enter evaluation data, and work on any outstanding assignments.

Requirements

Seminar Attendance & Class Participation (25% of final grade): All students are expected to attend each seminar and participate in class activities and discussions. Attendance is absolutely crucial, as each seminar will introduce a necessary skill related to the theories and skills described above. Students will also be expected to come to seminar prepared to discuss the readings assigned for that particular date.

Lesson Plan Assignment (35% of final grade): All students are required to write one lesson plan based on an assigned health topic and grade level. Each lesson plan will be held to a specific standard that will be explicitly explained during class time. Lesson plans must include all associated materials, which may include: worksheets, guided notes, Powerpoints, visual/audio aids, assessment questions in the form of an exit ticket, and handouts.

Reflection Papers (10% of final grade): To encourage critical thinking throughout the course, students will write three self-reflection papers during the duration of their service. Each paper will ask about a different component of their service and allow them to evaluate their experience and critically express their views on service learning as a whole. An additional reflection paper will be related specifically to the data collected on primary students’ performance after two health lessons. Enrolled students will be asked to reflect on their class performance and growth, and to devise strategies related to improving performance and growth for the remaining two health lessons.

Final Paper (10% of final grade): The final paper will be due during finals week. Each student will write an 8-10 page paper related to the intersection of health and education and how to
encourage further collaboration across various sectors invested in this intersection. Each student will either propose an evaluation plan to assess a current program in any region of the country, or propose a policy at the local, state, or federal level that would allow for collaboration at this intersection.

**Professionalism & School Conduct (20% of final grade):** The success of this course depends heavily on the continued partnership and relationship between the UNC Gillings School of Public Health and Maureen Joy Charter School. The most important aspect of this course is the commitment to Maureen Joy and the primary students at the school. Graduate students will be expected to respect and promote this partnership through promptness, professionalism, respect, and collaboration. The leadership team will continuously evaluate enrolled students’ performance and professionalism in order to ensure that the school’s needs are routinely being met.

**Disabilities**

If you have a disability or condition that compromises your ability to complete the requirements of this course, please notify me within one week of receiving this syllabus. I will make every reasonable effort to assist you.

**Diversity Statement**

It is my intention to respect all types of students and viewpoints and I expect you to extend the same courtesy to your classmates.

**Academic Integrity**

Students are expected to adhere to the Honor Code. For more information, please visit honor.unc.edu.

**Required Books**


**Topics and Schedule**

**Date & Topic**

<table>
<thead>
<tr>
<th>Date &amp; Topic</th>
<th>Readings &amp; Assignments:</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Allensworth D, Lewallen TC, Stevenson B, Katz S. Addressing the</td>
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</tbody>
</table>
needs of the whole child: what public health can do to answer the 
education sector’s call for a stronger partnership. *Prev Chronic Dis.* 

**Objectives:**

Class introductions; overview of course & assignments; introduction 
to partner school (Maureen Joy Charter School); introduction to 
service-learning component of course; introduction to intersection of 
health & education based on assigned readings.

<table>
<thead>
<tr>
<th>September 7th: The History of Health Education</th>
<th>Readings &amp; Assignments:</th>
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**Objectives:**

Overview of basic theories of health education and health promotion; 
overview of university-community partnerships and value of 
partnership to both partners; assignment of grade levels and topic 
areas for teaching.

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<tr>
<th>September 14th: Link Between Health &amp; Education</th>
<th>Readings &amp; Assignments:</th>
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<tbody>
<tr>
<td><strong>Observation Week at Maureen Joy</strong></td>
<td>Taylor. Chapters 1-4</td>
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</table>

**Objectives:**

Introduce evidence-base for this service-learning course; explain and 
analyze the link between health and education; identify major health 
concerns in Durham classrooms; prepare for observation at Maureen 
Joy: schedule, expectations.

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<tr>
<th>September 21st: Teaching Pedagogy &amp; Health Literacy</th>
<th>Readings &amp; Assignments:</th>
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<tr>
<td><strong>Assignment Due:</strong> Part I of “Exploring Your Content”</td>
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<tr>
<td>Date</td>
<td>Readings &amp; Assignments</td>
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</table>
| September 28th: Planning Purposefully I | **Readings & Assignments:**  
*Assignment Due:* Reflection Paper #1  
Explore different learning styles and identify teaching strategies that cater to those learning styles; understand how to develop content based on grade level and skillsets; analyze how to incorporate concepts of health literacy into lesson planning. |
| October 5th: Planning Purposefully II | **Readings & Assignments:**  
*Assignment Due:* Part II of “Exploring Your Content”  
Objectives: | **Objectives:**  
Introduce a model lesson plan of a health education topic; discuss the different components of a lesson plan. |
| October 12th: No Class | **Assignment Due:** Key points & assessment questions for lesson plan due by October 11th, 11:59 PM. Upload to Sakai. |  
Delve deeper into the main components of a successful lesson plan; understand how the objectives of a lesson related to the key points and assessment questions. |
| October 19th: Planning Purposefully III | **Readings & Assignments:**  
*Assignment Due:* First complete lesson plan & associated materials due by October 23rd, 11:59 PM. Materials can be in rough-draft form. Upload to Sakai. | **Objectives:**  
Explore additional components of an effective lesson plan: |
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings &amp; Assignments:</th>
</tr>
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<tbody>
<tr>
<td>October 26th: Execute Effectively</td>
<td>Hook/opening, the introduction to new material (INM), guided practice (GP), and independent assessment; understand how to add in checks for understanding for students throughout lesson plan.</td>
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<td></td>
<td><strong>Assignment Due:</strong> Revise and finalize lesson plan and materials. Upload lesson plan and materials to Sakai by October 29th, 11:59 PM.</td>
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<td><strong>Objectives:</strong> Describe different ways to engage students in the classroom through constant actions and engaging tasks; highlight importance of giving explicit directions that include movement (when and how), voice (whispers vs. silent), and participation (specific actions); understand how and when to incorporate checks for understanding throughout the lesson; practice behavior management and ways to re-direct bad behavior during a lesson.</td>
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<tr>
<td>November 2nd: Final Lesson Prep &amp; Rehearsal</td>
<td><strong>Teaching Week 1</strong></td>
<td><strong>Readings &amp; Assignments:</strong> Come to class prepared to practice your first lesson. Have at least 2 copies of all materials for your practice session. Make sure you are ready to deliver at least 5 minutes of your first lesson plan to the rest of the class.</td>
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<tr>
<td></td>
<td><strong>Objectives:</strong> Understand how to adapt a lesson plan; think critically about how to adapt first week lesson plan; prepare for first lesson plan delivery; practice giving clear directions, behavior management skills, and timing of lesson plan; collaborate with other students in order to enhance creativity and strengthen lesson plan delivery.</td>
<td></td>
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<td></td>
<td><strong>Assignment Due:</strong> The U.S. Department of Education. Using Data to Influence</td>
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</tbody>
</table>
**Classroom Decisions. Available at:**

**Objectives:**
First week teaching reflections: group discussion and opportunity to share experiences; continue to develop behavior management skills, timing of lesson plans, and other skills related to lesson plan delivery; enter post-assessment data for your class into shared spreadsheet; discuss use of data.

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<th>Date</th>
<th>Objectives</th>
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| November 16th: Effective Communication Skills | **Readings & Assignments:**  
* Assignment due: Reflection Paper #2  

**Guest Speakers:**
Alison Fragale & Tim Flood, UNC Kenan Flagler School of Business  
**Teaching Week 3**

**Objectives:**
Learn and explore strategies related to effective health communication skills; work in groups to prepare and deliver a communications pitch; think about how to enhance lesson plan delivery after this seminar.

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<th>Date</th>
<th>Objectives</th>
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| November 23rd: Midpoint Data Reflection & Lesson Prep | **Readings & Assignments:**  
* Assignment Due: Reflection Paper #3  

**Objectives:**
Prepare for meaningful last two lessons; prepare Health Masters’ Certificates for students; create any additional resources to be sent home with students; reflect on mid-seminar data; adjust lesson content & execution if necessary.

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<th>Date</th>
<th>Objectives</th>
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| November 30th: Final Reflection & Class Wrap-Up | **Readings & Assignments:**  
* Assignment Due: Upload final paper to Sakai by December 9th, 11:59 PM.  

**Objectives:**

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**Assignments**

**Exploring Your Content**

Part I
1) Students will use this assignment to begin exploring their assigned topic area. Exploration should include looking at the resources in Sakai, and using different search engines to find best practices in teaching the specific content. This assignment will also allow students to think critically about their topic area and discover the most important takeaways for classroom students from the topic.

2) Students should also try and find experts at UNC or elsewhere related to their topic areas.

Part II

1) Students will use this part of the assignment to begin brainstorming the vision for their lesson plan. Brainstorming should include reflecting on that week’s class session and starting to write key points and assessment questions for their lesson plan.

2) Key points and assessment questions must be aligned. For example:

<table>
<thead>
<tr>
<th>Key Point</th>
<th>Related Assessment Question</th>
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<tbody>
<tr>
<td><strong>What:</strong> healthy relationships have the following qualities: trust, mutual respect, support, honesty, fairness/equality, and good communication. Unhealthy relationships have the following qualities: fear, distrust, poor communication, disrespectful behavior, violence, and dishonesty.</td>
<td>What are 3 qualities of a healthy relationship based on what we learned today?</td>
</tr>
<tr>
<td><strong>Why:</strong> healthy relationships are important because they reinforce positive self-esteem, confidence, and overall good health.</td>
<td>Why are healthy relationships important?</td>
</tr>
</tbody>
</table>

Reflection Papers

*Paper #1:* For this assignment, please take 2-3 pages to reflect on the importance of a university-community partnership and the value of service-learning courses that encourage students at a major university to contribute to the community. Feel free to use the experiences described by guest speakers in the class thus far, as well as any outside literature you find relevant. You may also use your own personal experiences that address this topic to contribute purposefully to the assignment.

*Paper #2:* This paper will allow you to reflect on two weeks of teaching, as well as conduct a mid-program evaluation. A few questions to consider:

- Critically reflect on your own teaching in the classroom for the first two lessons: what were your strengths? What were your weaknesses?
- When were your students most engaged? Least engaged?
- How has the data reflected your teaching thus far: Are students’ scores relatively equal? Are the scores high (80% and above)? If not, why might that be? Do you have students who you think may be falling behind throughout the lesson?
- Considering how your students are doing and how you think the lessons have gone, how can you change your lesson plan execution/delivery to address these gaps?
- Is there anything that might help you as you continue teaching? Are there ways the leadership team and/or Maureen Joy classroom teachers can assist you?

**Paper #3:** Now that you have finished teaching, reflect on your experience as a whole and what needs or gaps have been left unaddressed. You may take this paper in any direction you see fit, but make sure that you reflect critically on your teaching experience. A few questions you may choose to answer:

- Did you feel your kids truly understood and learned the skills you taught them? Support your answer with any data you have.
- What were the overall positives of your teaching experience? Any negatives?
- How is the system designed to ultimately support our students? What value do you see in providing health education? Use any outside literature or data you have.
- Did you see any gaps in your classroom that you did not have time/did not know how to address? An example might be that kids do not have a trusted mentor to turn to, and we might not necessarily be able to provide them with one.
- What is the importance of a strong community partnership for programs like this one? How do you engage and satisfy all key stakeholders, especially ones in a school setting?
References


