2017

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AP Research Academic Paper

Sample Student Responses and Scoring Commentary

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AP® RESEARCH 2017 SCORING GUIDELINES
Performance Task Rubric: Academic Paper

Content Area	Performance Levels		
1 Understand and Analyze Context	The paper identifies a broad topic of inquiry and/or a purpose. 2	The paper identifies a focused topic of inquiry and describes the purpose. 4	The paper explains the topic, purpose, and focus of the inquiry and why further investigation of the topic is needed by connecting it to the larger discipline, field, and/or scholarly community. 6
2 Understand and Analyze Argument	The paper identifies or cites previous scholarly works and/or summarizes a single perspective on the student's topic of inquiry. 2	The paper summarizes, individually, previous scholarly works representing multiple perspectives about the student's topic of inquiry. 4	The paper explains the relationships among multiple scholarly works representing multiple perspectives, describing the connection to the student's topic of inquiry. 6
3 Evaluate Sources and Evidence	The paper uses sources/evidence that are unsubstantiated as relevant and/or credible for the purpose of the inquiry. 2	The paper uses credible and relevant sources/evidence suited to the purpose of the inquiry. 4	The paper explains the relevance and significance of the used sources/cited evidence by connecting them to the student's topic of inquiry. 6
4 Research Design	The paper presents a summary of the approach, method, or process, but the summary is oversimplified. 3	The paper describes in detail a replicable approach, method, or process. 5	The paper provides a logical rationale for the research design by explaining the alignment between the chosen approach, method, or process and the research question/project goal. 7
5 Establish Argument	The paper presents an understanding, argument, or conclusion, but it is simplistic or inconsistent, and/or it provides unsupported or illogical links between the evidence and the claim(s). 3	The paper presents a new understanding, argument, or conclusion that the paper justifies by explaining the links between evidence and claims derived from the student's research. 5	The paper presents a new understanding, argument, or conclusion that acknowledges and explains the limitations and implications in context. 7
6 Select and Use Evidence	Evidence is presented, but it is insufficient or sometimes inconsistent in supporting the paper's conclusion or understanding. 2	The paper supports its conclusion by compiling relevant and sufficient evidence generated by the student's research. 4	The paper demonstrates an effective argument through interpretation and synthesis of the evidence generated by the student's research, while describing its relevance and significance. 6
7 Engage Audience	Organizational and design elements are present, but sometimes distract from communication or are superfluous. 1	Organizational and design elements convey the paper's message. 2	Organizational and design elements engage the audience, effectively emphasize the paper's message and demonstrate the credibility of the writer. 3
8 Apply Conventions	The paper cites and attributes the work of others, but does so inconsistently and/or incorrectly. 2	The paper consistently and accurately cites and attributes the work of others. 4	The paper effectively integrates the knowledge and ideas of others and consistently distinguishes between the student's voice and that of others. 6
9 Apply Conventions	The paper's use of grammar, style and mechanics convey the student's ideas; however, errors interfere with communication. 1	The paper's word choice and syntax adheres to established conventions of grammar, usage and mechanics. There may be some errors, but they do not interfere with the author's meaning. 2	The paper's word choice and syntax enhances communication through variety, emphasis, and precision. 3

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NOTE: To receive the highest performance level presumes that the student also achieved the preceding performance levels in that row.

ADDITIONAL SCORES: In addition to the scores represented on the rubric, readers can also assign scores of **0** (zero).

- A score of <u>**0**</u> is assigned to a single row of the rubric when the paper displays a below-minimum level of quality as identified in that row of the rubric.

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AP® RESEARCH
2017 SCORING COMMENTARY

Academic Paper

Overview

This performance task was intended to assess students' ability to conduct scholarly and responsible research and articulate an evidence-based argument that clearly communicates the conclusion, solution, or answer to their stated research question. More specifically, this performance task was intended to assess students' ability to:

- Generate a focused research question that is situated within or connected to a larger scholarly context or community;
- Explore relationships between and among multiple works representing multiple perspectives within the scholarly literature related to the topic of inquiry;
- Articulate what approach, method, or process they have chosen to use to address their research question, why they have chosen that approach to answering their question, and how they employed it;
- Develop and present their own argument, conclusion, or new understanding while acknowledging its limitations and discussing implications;
- Support their conclusion through the compilation, use, and synthesis of relevant and significant evidence generated by their research;
- Use organizational and design elements to effectively convey the paper's message;
- Consistently and accurately cite, attribute, and integrate the knowledge and work of others, while distinguishing between the student's voice and that of others;
- Generate a paper in which word choice and syntax enhance communication by adhering to established conventions of grammar, usage, and mechanics.

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Making Health Education LGBTQ+ Inclusive in Vermont High Schools

Word Count: 5,009

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Context

It has been widely demonstrated that the health of LGBTQ+[1] youth is, on average, worse than that of their heterosexual and cisgender peers. In 2011, the Centers for Disease Control and Prevention (CDC) collected data utilizing the Youth Risk Behavior Survey about which "health-risk" behaviors 9-12th grade students across the United States participated in. "Health-risk" behaviors were classified as behaviors detrimental to one's health such as drinking (alcohol), smoking, violence, behaviors related to suicide, and various sexual behaviors. The study found that, generally, "health-risk" behaviors were more prevalent in sexual minority youth than in heterosexual youth by 63.8% for gay and lesbian youth and by 76% for bisexual youth.

This trend was also found to be true in the more specific results found by the study. To start, across the eight sites which assessed whether students had been a victim of dating violence, the median percentage of heterosexual students who had was 10.2%, while that of gay and lesbian students was 27.5% and that of bisexual students was 23.3%. In addition, across the nine sites which assessed if a student had drank alcohol before the age of 13, the median percentage of students who had was 21.3% for heterosexual students, 34.6% for gay or lesbian students, and 36.2% for bisexual students; and, in that same area of "health-risk" behaviors, the median rates of students who had had at least one drink of alcohol during the thirty days prior to the survey were 37.6% among heterosexual students, 47.5% among gay and lesbian students, and 55.6% among bisexual students. Other general trends found in this study included lower exercise rates, higher usage of technology, less frequent use of seatbelts, more frequent use of various drugs,

[1] LGBTQ+ stands for the lesbian, gay, bisexual, transgender, queer, and questioning community, and can include anyone who is not heterosexual-heteroromantic (straight) and cisgender (the opposite of transgender; someone who identifies with the gender that they were assigned at birth).

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more reports of sexual assault, and higher rates of obesity reported for LGB[2] youth than for heterosexual youth (Kann et all, 2011).

The "health-risk" behaviors that LGBTQ+ youth are experiencing or participating in are not only unhealthy, but can be deadly. A meta-analysis published in the *Journal of Homosexuality* in 2011 and completed by A.P. Hass, PhD, director of education and prevention at the American Foundation for Suicide Prevention, explains that, since the 1990s, population-based surveys of American youth which asked sexuality-related questions constantly found that suicide rates had consistently been two to seven times higher in LGB high school students than in heterosexual high school students. The previously mentioned CDC study found results consistent with the meta-analysis, finding that, across the states which assessed having attempted suicide in the twelve months prior to the survey, the median rate of suicide attempts in heterosexual youth was 6.4%, while it was 25.8% among gay and lesbian youth and 28% among bisexual youth (Kann et all, 2011). A third study, published in the *American Journal of Public Health* and organized by Brian Mustanski, PhD, director at the Institute for Sexual and Gender Minority Health and Wellbeing at Northwestern University, corroborated this finding as well. This study looked at 246 LGBT 16-20 year olds in the Chicago area and found that 31% of the participants had attempted suicide in their lifetime (2010).

From these findings, one can see that the LGBTQ+ youth of America are having a health crisis. This crisis is not being effectively addressed in health education laws. The law in only thirteen states requires that the discussion of sexual orientation be included in health education

[2] While the phrase "LGBTQ+"will be used by the author of this paper to refer to the community being discussed, when referring to other people's studies, the term that the researchers themselves use in the study will be used to describe the community. When "LGB" is used without the "T", it means that the study was done on non-heterosexual students and did not include specifically studying members of the transgender community.

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courses, and in four of those states, that discussion is mandated to include only "negative information" about sexual orientation. In addition, 16 states do not mandate HIV education. In Arizona, if HIV education is taught, it is not allowed to portray homosexuality in a positive light and, in Oklahoma, where HIV education is required, it is taught that "homosexual activity" is one of the things "responsible for contact with the AIDS virus" (Guttmacher Institute, 2017).

In many cases, however, even if a law mandates that LGBTQ+ topic be taught in health education courses, this mandated education does not necessarily occur. According to the Gay, Lesbian, and Straight Education Network (GLSEN)'s 2009 National School Climate Survey, only 3.8% of respondents reported that their health course acknowledged "sexual and/or gender orientation education".

Due to the state of the health of LGBTQ+ youth and the lack of health education laws attempting to address this issue, the question driving the research presented in this paper is "How LGBTQ+ inclusive are Vermont high school health education courses and what needs do students have in relation to the level of inclusivity present?"

Literature Review

One way that this health crisis could be at least partially addressed is through an LGBTQ+-inclusive health education curriculum. It has been established that health education, if presented properly, has the ability to affect the future behavior of its participants. In 1996, G. Kok, MSc and PhD, professor of applied psychology and former dean at Maastricht University, performed a meta-analysis of twenty-one meta-analyses that analyze the effects of health education and health promotion interventions and found that the education and interventions had a significant positive impact on the participants and their behavior thereafter. There are many

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case studies that support this notion as well. For example, a selective review published in 1997 in *The Journal of the Royal College of Paediatrics and Child Health* found that all of the interventions and education opportunities reviewed in some way had a positive impact on the health of its participants.

Not only has it been proven that health education generally positively affects people's health, but also that aspects of it can specifically positively affect the sentiment of students towards LGBT people. In 2015, V. P. Poteat, B.S. and PhD, professor at Boston College, conducted a study by surveying New England high school students to examine factors that contribute to the likelihood of behaving in an LGBT-affirming manner. The study found that, among other factors, peer discussions of sexual orientation-based issues, having LGBT friends, critical thinking, and self-reflection were "significantly associated with LGBT-affirming behavior". From this, one can deduce that, because health classes involve some form of critical thinking and self-reflection, if a curriculum was LGBTQ+-inclusive, the normally occurring peer discussions could be about sexual orientation and other important LGBTQ+ issues.

"LGBT-affirming" behaviors are necessary to teach in health classes not only because of their positive effects, but also because the alternative to "LGBT-affirming" behaviors is often bullying and harassment which can then lead to self-destructive behavior. A study done by Brian Mustanski in 2010 found that each time an LGBT person is "victimized" or is the recipient of "physical or verbal harassment or abuse", the likelihood of that person participating in "self harming behavior" increases, on average, by 2.5 times.

A model of an ideal health curriculum is the CDC's Health Education Curriculum Analysis Tool (HECAT). This tool is the national government-crafted standards for what health

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education should include and look like as well as an assessment tool to see if a health education curriculum is up to those standards. It goes into great detail, being divided up by chapter and additionally by module. Each module has a name such as "Healthy Eating", "Sexual Health", or "Tobacco", and within those modules are the tools to evaluate a health class on that specific part of the curriculum. The tool is a present example of an LGBTQ+-inclusive curriculum, including expectations such as learning how to support those with gender identities and sexualitites that differ from your own (2012).

Few previous studies have been done on the inclusivity of health education courses and the needs of the students who take them. One, however, was conducted through the use of focus groups by L. Kris Gowen in 2014 at Portland State University. The purpose of the study was to examine youth perspectives of sexuality based education in Oregon and see how inclusive the students thought it was in order to "create a framework of LGBTQ-inclusive sexuality education". This study was later published in *The Journal of Sex Research*.

Although studies like this have been conducted, the researcher plans to fill a gap in knowledge with the study being presented because, due to the fact that the law and social climate varies state to state, results found by conducting a similar study in Vermont will differ to those found in Oregon.

Because the gap in knowledge that the researcher is filling is related to the location of the study, it is important that one knows about the context in which the research was conducted. As one can see in Title 16, Chapter 001, Subchapter 007 on the website of the Vermont legislature, no current law requires health education to be LGBTQ+-inclusive in Vermont (2016). It may seem to some that, because Vermont is generally considered to be a politically blue state that

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tolerance and acceptance of the LGBTQ+ community would coincide with that political affiliation, however, this is not necessarily true. According to the Vermont Secretary of State, about one tenth of Vermonters voted for one of the ten Republican candidates in the Presidential Primaries of 2016 (2016). As demonstrated by the Human Rights Campaign, all of the Republican presidential candidates had at least some anti-LGBTQ+ beliefs or policy plans (2016). On the other hand, according to the 2015 Vermont High School Youth Risk Behavior Survey, at least 12% of Vermont high school students identify as LGB, while questions about gender identity were not asked. This means that, in this election cycle, about 10% of the adults in the state supported candidates who were against the rights of, at bare minimum, 12% of the youth population in the state. In addition, this figure does not include the political preferences of non-voting age Vermonters nor does it include the transgender youth and LGBTQ+ adults that live in Vermont.

Methods

The researcher took a mixed method approach and both distributed a survey to and conducted interviews with high school students across Vermont.

A survey was chosen as part of the method because it gave the researcher the ability to reach more people from different areas than solely conducting interviews would have and therefore made the results of the study more applicable to the entirety of Vermont. In order to get the most responses and thus have the most accurate data, the survey was sent to all of the high school Gender and Sexuality Alliances (GSAs) in Vermont. The survey was targeted towards high school students who were currently taking or had taken a health education course in high school.

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The design of the survey was based on a study done by Russell Toomey, PhD, chair and professor at the University of Arizona, on the perceived effectiveness of GSAs. In order to study this, the researcher asked participants retrospectively about their experiences in GSAs in order to evaluate their effectiveness. The survey conducted in this study followed this design and asked the participants retrospectively about their experiences in health education courses.

The first section of questions had the participant answer on a four-point scale with there always being a fifth option of "not sure". The fifth option improved the validity of the results by decreasing the likelihood of participants not being able to remember and providing false information by just guessing their response. The scale provided was as follows:

0= I was not taught about LGBTQ+ people in the context of this topic

1= I was taught some about LGBTQ+ people in the context of this topic, but it was not enough for me to feel knowledgeable on the topic.

2= I was taught a substantial amount about LGBTQ+ people in the context of this topic.

3= I was taught everything I think one needs to know about LGBTQ+ people in the context of this topic.

The use of a four-point scale with a fifth option of "not sure" in order to have a broader and more informative range of answers as well as the wording of the descriptors for each number were adopted from Toomey's study. When interpreting the scale, 0 and 1 indicate that the respondent is undereducated on and 2 and 3 indicate the respondent has been sufficiently educated on the topic at hand.

In the first section of the survey, the participants were asked about the degree to which LGBTQ+-relevant information was taught in certain topics in their health education course. The

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topics were picked by examining both the Vermont law on what is required to be included in health education courses and the 2011 Youth Risk Behavior Survey results. This was in order to pick topics that have specifically LGBTQ+-relevant information related to them and that legally have to be taught in all Vermont health education courses so that the questions asked in the survey would be relevant to all potential participants. The topics inquired about in this section were: ‘Emotional and Social Development’, ‘The Bases of Human Sexuality and Reproduction’, ‘Anatomy/Physiology/Physical Development’, ‘Safe Sex Practices/Disease Prevention/Sexual Responsibility’, ‘Mental Health, Relationships’, ‘Parenting/Family’, ‘Drug Abuse’, ‘Sexual Violence’, and ‘Utilizing Health/Support Services’.

In the next section of the survey, participants were asked if they had or had not learned about certain LGBTQ+ related health topics. These topics were chosen by examining the CDC’s HECAT in order to find topics that are not required by the Vermont law to be taught in health education courses but that would be crucial in an inclusive health education course. The topics of inquiry in this section were: ‘Various gender identities/What it means to be transgender’, ‘Different romantic/sexual orientations’, ‘The difference between gender and sex’, and ‘How to be respectful to and support those who have a different gender identity and/or sexuality than you’.

The next two questions asked participants to choose three of the formerly discussed topics that they felt they knew the least about and three that they would have liked to know more about. This was to help determine areas where students feel they are lacking knowledge on and to help determine what is not being sufficiently taught in current health education courses.

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At the end of the survey, participants were asked about demographic information as well as asked if they would be willing to be interviewed and if they would like to be updated on the research being conducted. Present was also a text box in which the participant was prompted to add any other thoughts they had "about how LGBTQ+-inclusive your health education was, what you would have liked to learn about, etc.?" This provided an opportunity for the researcher to receive qualitative results from people who did not want to be interviewed.

The second portion of the method involved interviewing high school students. The purpose of individually interviewing students was to receive more in depth qualitative results about health education experiences and to get direct feedback from students. The researcher based this portion of the study after Gowen's previously mentioned study. Because the objective of the study mentioned is very similar to that of this study, the researcher at one point considered modeling this study directly after the former and utilizing focus groups as the method by which to conduct this study. However, due to ethical concerns about anonymity and time and logistical constraints of the researcher and the participants of the study, it was decided that focus groups would not be the most effective way to conduct this study. Instead, the researcher decided to distribute the survey in order to achieve the breadth of participants and perspectives that focus groups achieve and the interviews in order to receive the in depth, qualitative testimonies that focus groups achieve.

Although this study conducted individual interviews and Gowen's conducted group interviews, because the objective of the two studies was similar, the nature of the interviews in this study was based off those in Gowen's. Like in Gowen's study, the researcher took a semi-structured approach to the individual interviews conducted and had a predetermined set of

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questions to ask each participant but also explored new avenues of questioning and clarification if the interview lead in that direction. As done in Gowen's study, the interview was made up of two types of questions: questions about participants' past experiences in health education courses, and questions about what participants would want to be done to improve those experiences for others in the future. Questions about past experiences included questions such as "Describe your overall experience in your health education course- how LGBTQ+-inclusive was it? How was the LGBTQ+ community portrayed?" and "What types of safe sex practices were discussed in your health class?". Questions about improvement of experiences included questions such as "You indicated in the survey that you would have liked to learn more about (topic that the participant indicated on the survey that they would have like to learn more about). Can you expand on that? What would you liked to have learned about that you didn't? What would you liked to have been taught that wasn't?". In order to acquire interview subjects, participants of the survey were asked if they would be willing to interviewed. The interview subjects were then randomly selected from those who indicated that they were willing to be interviewed. Interviews were conducted both via Skype and in person depending on the availability of the participant.

The descriptive-interpretive method used to analyze the gathered data was adopted from *A Handbook of Research Methods for Clinical and Health Psychology* by Jeremy Miles and Paul Gilbert. To start, the researcher transcribed the recorded interviews. Then, the data was divided into meaning units. Meaning units are "… parts of the data that even if standing out of context, would communicate sufficient information to provide a piece of meaning to the reader." The meaning units were then sorted into two domains- meaning units that described participants' past

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experiences in health education courses, and meaning units that described things that participants wished would have happened in their health education courses or would recommend to happen in future classes. Then, the data in each domain was categorized by meaning (also known as open coding). Finally, using essential sufficiency and trying to fully depict the phenomenon explained in the data in the simplest way possible, the researcher abstracted the main themes and findings of the study (2005).

Results

Survey:

The survey yielded results from students from over 20 different high schools across the state of Vermont. The respondents were 82.1% members of the LGBTQ+ community, 52.2% female, 14.9% male, and 32.9% another gender (such as genderqueer, genderfluid, agender, etc.). The majority of the results from the survey can be seen in Tables 1, 2, 3, and 4. The results from the end section of the survey where participants were asked to add any other comments that they had on their health education experience will be included with the results from the interviews because the results were both qualitative in nature and therefore analyzed in the same manner.

Table 1 depicts the results of the section that asked participants to rate their health education experience for each topic based on the provided scale. As one can see on the table below, 0 and 1 were the most chosen responses, with 0 being chosen 50% of the time and 1 being chosen 25% of the time. In addition, 2 was chosen 14% of the time, 3 was chosen 8% of the time, and not sure was chosen 3% of the time. Table 2 displays the results from the section where students were asked if they learned about specific topics in their health education course.

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As one can see on the table below, it was most often indicated that the student did not learn about the topic in question, with no being chosen 69% of the time, yes being chosen 23% of the time, and not sure being chosen 8% of the time.

Tables 3 and 4 demonstrate the results when participants were asked both what topic they felt they knew the least about and what topic they wanted to learn more about in terms of LGBTQ+ related information. As can be seen in the tables below, 'Safe Sex Practices/Disease Prevention/Sexual Responsibility' and 'Emotional and Social Development' were the top two chosen topics for both questions. Also notable is that 'Utilizing Health/Support Services' was the fourth most chosen topic in Table 3 and the third most chosen topic in Table 4.

Table 1

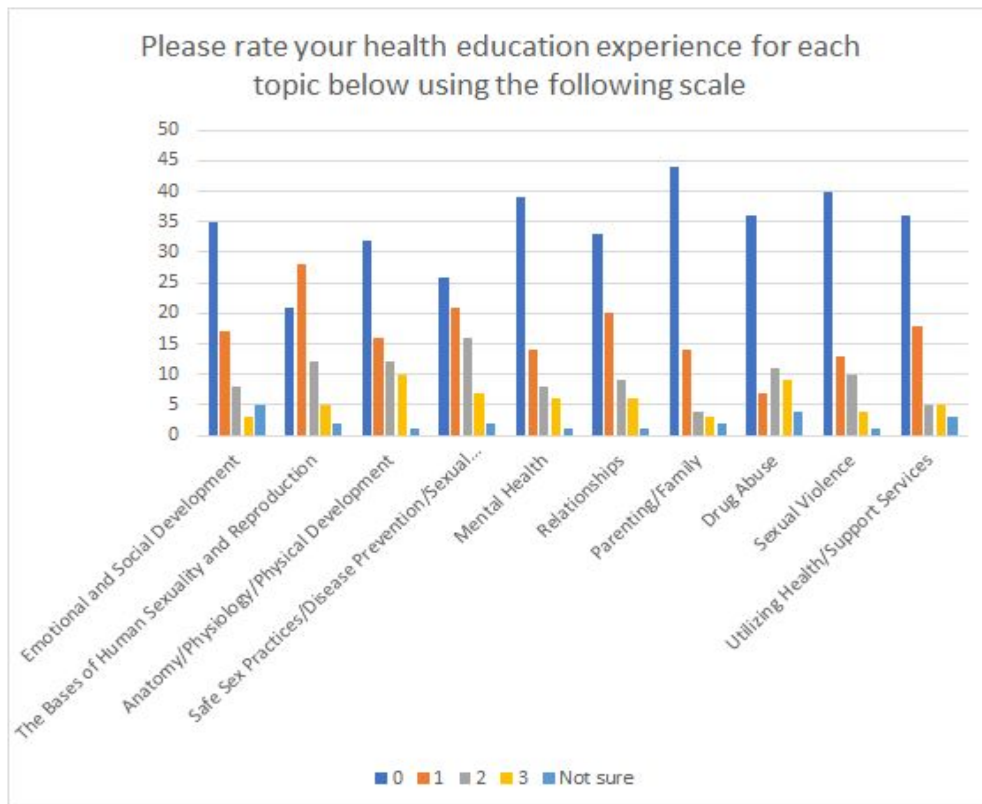

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Table 2

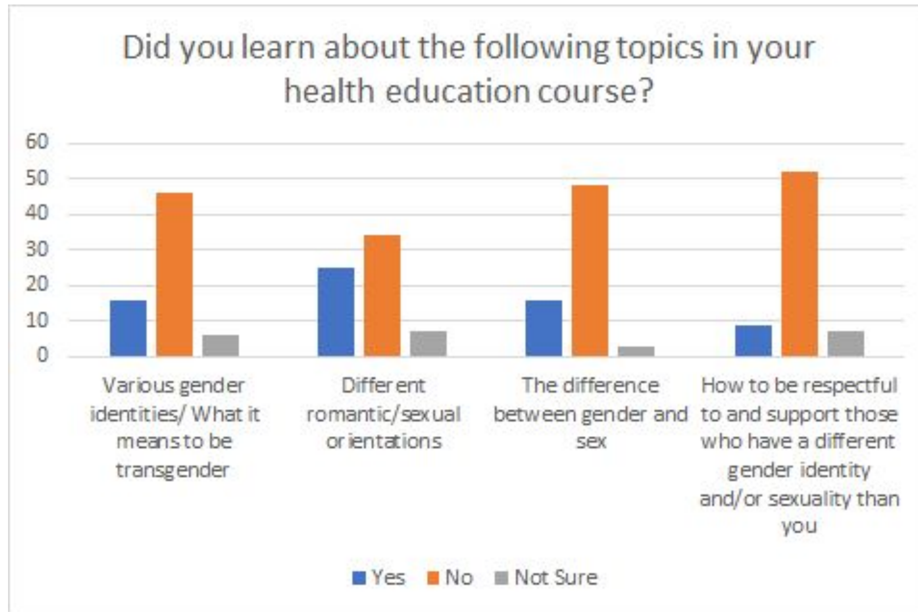

Table 3

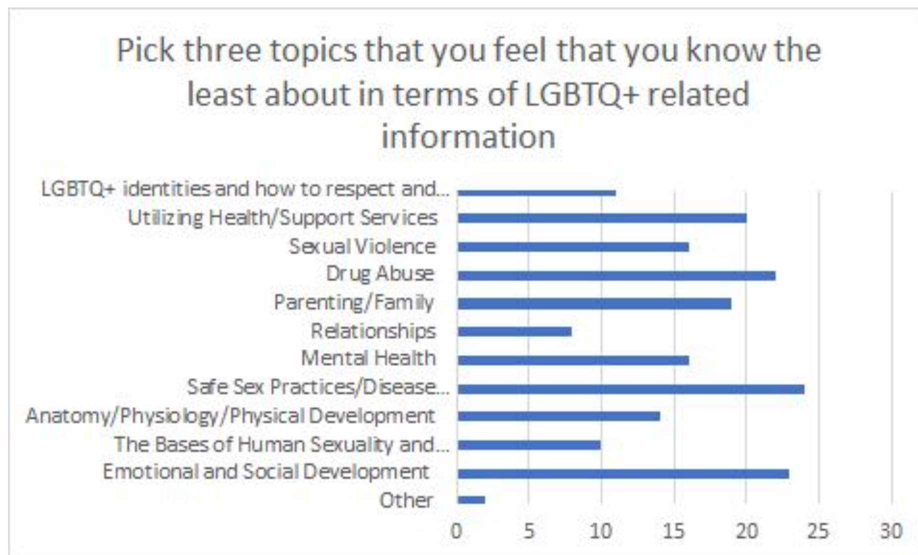

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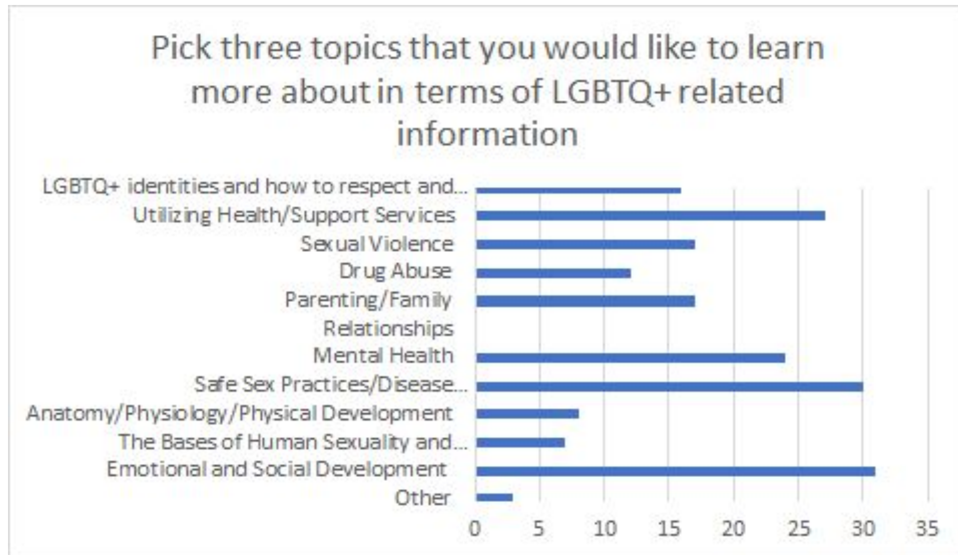
Table 4



Qualitative Data:

48% of survey participants either were interviewed or left additional comments at the end of the survey.

The first trends discussed will be those found in the domain which included participants' past experiences in health education courses. To start, the number of times that health teachers mentioning the LGBTQ+ community or inclusivity was mentioned in the responses was a little more than half of the times that health teachers not mentioning the LGBTQ+ community or exclusivity was mentioned. Of those inclusive mentions, a little less than 33% were followed by a qualifying statement that then mentioned a "but" statement such as, after stating that the teacher did mention what it meant to be transgender "but nonbinary genders weren't really discussed" or had a negative connotation associated with it such as "they skimmed over the LGBT community briefly."

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These statistics above did not include mentions of outside sources brought into the classroom to teach about the LGBTQ+ community. 28% of the participants who were either interviewed or wrote in the text box participants reported learning LGBTQ+ related information from sources brought into the classroom specifically for that purpose. This was not one of the questions asked, so these mentions were unprompted. Organizations mentioned that were brought into classes include Planned Parenthood, Outright Vermont, Hope Works, and Women Helping Battered Women.

A common theme throughout responses was the discussion of health education teachers. 33% of the mentions of teachers followed the mentions of exclusivity discussed above and indicated that the teacher's lack of mention of the LGBTQ+ community was not out of malice but because of various other reasons. These reasons included: lack of class time- "… they really can't… go in-depth within a four-month period.", the teacher's lack of knowledge- ", I found that they wanted to be more inclusive but didn't have the information to be and didn't want to be giving out false information", and curriculum restrictions- "It seems that in some areas, the curriculum was dated and there was little she could do."

Of the overall number of mentions of teachers, whether following a mention of exclusivity or not, 60% were of the previously discussed nature and indicated that the exclusivity of the LGBTQ+ community was not the fault of the teacher. Half of the other 40% included "…the sex ed teacher told me "we'll get to that" but it was swept under the rug and never talked about." and, when discussing their teacher's reaction to a student mentioning and asking questions about gender, "The teacher said 'Oh yeah that's cool' and had no real reaction". The other 20% commended their teachers on how inclusive they made the class, saying things like

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"My health teacher is progressive and wants to cover everything." and "She made it personal and wanted everyone to feel accepted."

Also in this section, students mentioned things that they were and were not taught. The three topics that students mentioned were brought up the most in health class were what it means to be gay lesbian, or bisexual, what it means to be transgender, and safe sex practices for all types of relationships. However, the amount that these three topics combined were mentioned is less than half of the times that students mentioned that their teachers did not bring up sexuality, gender, and safe sex practices.

The domain that included what participants would have liked to happen in their health class or what they would recommend for future classes produced some clear trends. The topics indicated that students would have liked to learn about were LGBTQ+ inclusive sex education at 36%, pronouns, different sexualities, and various gender identities at 14% each, and LGBTQ+ resources and how being LGBTQ+ affects someone developmentally and daily at 11% each. However, mentioned as many times as LGBTQ+ inclusive sex education was that there wasn't necessarily a certain topic that respondents would have liked to learn about that they didn't, but rather that they wish that LGBTQ+ people and things had been mentioned throughout class where relevant (such as in the unit on relationships) and normalized. One student, speaking about how they felt ostracized and unsure about themselves because of the lack of legal mandate to teach about the LGBTQ+ community, expressed the sentiment as "If we're not exposed to it in basic education then it can't be important, right?"

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Discussion

From Table 1, one can see that students responded mostly with ones and zeros. Because the response scale was based on how much the participant feels like they know, this indicates that, overall, the respondents felt like they were lacking LGBTQ+ related knowledge in the health areas where there is LGBTQ+ relevant information. Table 2 supports this idea, for, as seen in the table, the large majority of respondents were not taught about topics crucial to an LGBTQ+ inclusive health education curriculum such as the difference between gender and sex and how to respect and support those who identify differently than you.

One can also see a trend of LGBTQ+ topics not being taught in health education courses in the results from the qualitative research. From the amount of times exclusivity was mentioned almost doubling the mention of inclusivity, to the almost one third of qualitative respondents who mentioned bringing in outside sources to teach LGBTQ+ topics, it is clear that, although some LGBTQ+ topics are being taught in some instances (because there were numerous mentions of inclusivity), they are not being taught in a widespread manner in Vermont.

In Tables 3 and 4, one can see that the two most chosen categories in both are ‘Emotional Development’ and ‘Safe Sex Practices/ Disease Prevention/Sexual Responsibility’. This concurs with the sentiment expressed during the qualitative research: students want to learn more about how being LGBTQ+ can affect your emotional development and want to have a more inclusive sex education experience. In addition, ‘Utilizing Health/Support Services’ was the fourth most chosen answer in Table 3 and the third most chosen answer in Table 4. This was another need present in the interviews and comments- students want to know places that they can learn more

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about themselves (or others) and their identities as well as places where they can be professionally assisted in figuring out and materializing that identity.

Through the qualitative data, the researcher found that what many students want to improve their health education experience is for the LGBTQ+ community to be normalized, both meaning that they want it to be normalized by being taught about it but also by having it be presented in a way that does not alienate it from other topics in health class. Teachers were seen to have the largest role in this lack of normalization and it was expressed that they are an avenue through which students would like to see more inclusivity.

Implications, Limitations, and Future Research

Now that the state of LGBTQ+ health education and the needs of students have been established, there are multiple things that can be done to address these them, but one seems the most direct and effective solution: educate health teachers on LGBTQ+ health matters. If the teachers are educated in these matters, they can then teach the class about them and answer any questions that students have, simultaneously addressing the issues of untaught content and normalization. This would require the teachers to put in the effort to be trained and, in some cases, would also require the money to be trained. The money would not necessarily be needed, however, because there are places like Outright Vermont which do trainings for free. The implications of the study are that the current health education laws and system in Vermont are flawed. Another way to address this issue would be to reevaluate the Vermont health education law and adjust it to meet all students' needs, which would also take much time and money.

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There are multiple limitations to this research that need to be addressed. To start, the sample size is limited. The method of distributing the surveys made sense for the researcher in the context of this project, however future researchers would be recommended to produce widespread distribution when conducting a survey such as this. Also, the sample of people who took the survey and were interviewed was a subset of the student population of people who have taken or are taking health education courses because the survey was distributed via GSAs. Future researchers would be recommended to distribute a survey similar to this through schools rather than through one club in a school. Another limitation is the retrospectivity of the survey combined with its participants. Some participants, for example, were seniors reflecting on a class they took first semester year, so their results were probably not as accurate as those collected from sophomores who had done the same. Future researchers would be recommended to survey only those who had taken a health education class recently enough where they remembered the specifics of it.

Future research should be done to further the understanding of this topic. Although the researcher has established the current state of health education in Vermont and the needs of Vermont high schoolers in regards to the LGBTQ+-inclusivity of their health education, there are many aspects of the situation that have not been examined such as how realistic addressing these needs is, how LGBTQ+ inclusive health teachers view their curriculum to be and how inclusive those curricula truly are, the best way for these needs to be addressed, and the in depth effects of these needs not being met.

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