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Chapter 9

University students' perceptions of an online national education program in Hong Kong: A mixed-method study

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An e-learning module including a 3-hour online lecture plus 7-hour self-study materials was developed to provide education on law-abidance leadership and national security law (NSL) education among senior-year intake who enter the university in year 3 of a 4-year undergraduate program. The present chapter reported evaluation findings derived from a mixed-method study incorporating quantitative and qualitative evaluation data to outline students' perceptions of the online program. A total of 839 students completed the 19-item subjective outcome evaluation and 28 students participated in the focus group interviews. Quantitative results revealed that students generally held positive views toward the online NSL education program, such as favorable feedback toward the program attributes, benefits of the program in terms of promoting law-abidance awareness and leadership, and self-paced learning mode. Qualitative results also demonstrated students' overall positive learning experiences and their appreciation for the value of and need for education on law abidance and NSL, despite some challenges and difficulties (e.g., language barriers) encountered in learning. Most importantly, students did not perceive the NSL education as brainwashing. These findings are in line with previous positive evaluation results, providing additional support for the meaningful use of online learning in NSL education and its effectiveness.

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Introduction

The Hong Kong National Security Law (NSL) is enacted to prevent and punish acts of secession, subversion, terrorist activities, and collusion with other countries or external forces that endanger national security. The implementation of the NSL has had immediate and positive impacts on the political situation and governance of the Hong Kong Special Administrative Region (HKSAR). It has enhanced the government's ability, determination, and responsibility to safeguard Hong Kong's stability and the country's security, significantly improving its capacity for law enforcement (1).

The importance and urgency of cultivating NSL education among university students can be understood by analyzing the effects of two significant social events/movements that occurred in Hong Kong over the last decade: the "Occupy Central Movement" in 2014 and the 2019 "Anti-Extradition Law Amendment Bill Movement" (or the "Social Event"). Initially, these movements were nonviolent, but they eventually escalated into acts of violence, vandalism, and sieges, which had detrimental consequences on people's studies, work, and overall well-being. Notably, university students actively participated in the protests, and violent clashes between demonstrators and police even occurred within education

institutions. This demonstrates students' lack of legal awareness and appreciation for the importance of adhering to the law, leaving them more susceptible to external influences and irrational arguments (2). Therefore, it is necessary to step up legal education for university students and foster legal awareness, particularly regarding NSL. Indeed, Researchers have identified various advantages of legal education among university students. For instance, legal education can promote intellectual, emotional, social, and behavioral well-being of young people (3,4). In particular, NSL education can enhance undergraduate students' understanding and awareness of the importance of national security and the NSL, equipping them to assume leadership roles that embody societal responsibility in the future (2,5-10).

To meet the above-mentioned requirements and promote law-abiding behavior among university students, the Hong Kong Polytechnic University (PolyU) has introduced NSL education in terms of a 3-hour face-to-face lecture plus a 7-hour self-study since the 2021/2022 academic year. The course covers fundamental concepts such as "law and law-abiding behavior", "law-abiding leadership", and "national security", as well as historical background on modern Chinese history, including "the history of Hong Kong", "the Constitution", and "the Basic Law". Additionally, the course delves into the Hong Kong National Security Law, covering topics such as the "four major offenses" and "the issues and myths surrounding NSL". As a graduation requirement, this NSL education is incorporated into a leadership subject in general education. In the 2022/2023 academic year, an e-learning module of NSL education was further developed by mirroring the content in face-to-face NSL education. Students who are not required to take the leadership subject, such as senior-year intake and articulation degree program students, are required to complete the online NSL education. Upon completion of the online course materials, students are required to pass a multiple-choice question test by correctly answering at least 16 out of 20 questions to fulfill the graduation requirement.

Online learning offers the advantage of ensuring students' anonymity, as it eliminates the social constraints associated with face-to-face interaction (11). This anonymity allows students to actively engage in the course without fear of negative consequences. Moreover, the online environment provides students with the opportunity to discuss sensitive issues without the pressure of providing an immediate response (12). In addition to anonymity, the literature also highlights other benefits of online learning, including its convenient availability, adaptability, and cost-effectiveness (13-15).

Despite its advantages, online learning may present certain drawbacks, such as a potential lack of motivation, engagement, interaction, self-regulation, and learning disposition among students (16-18). In particular, the lack of active participation in online courses has raised concerns among researchers, as active engagement is essential for meaningful learning. Educators suggest that active learning does not happen naturally in the classroom. Rather, it is more likely to occur when instructors create an optimal and safe educational environment (19). Thus, the online learning mode may not fully promote active learning due to the absence of instructors' in-person guidance and interaction.

Considering that the benefits and challenges of online learning collectively influence students' attitudes, motivation, and learning achievement, it is important to understand students' learning experiences in the online NSL education program. In addition, given the politically sensitive nature of the topic, it is essential to investigate students' perceptions and responses to the program, as these factors significantly influence their motivation and involvement in the program (9). Previous feedback from senior-year students who completed the online learning course in the 2022/2023 has generally been positive. Most students expressed appreciation for the course, noting that it enhanced their legal awareness, improved their understanding of national security, and dispelled misconceptions surrounding the NSL

(8). Furthermore, students were also satisfied with the self-directed and flexible nature of the online learning mode, as it proved to be efficient and adaptable to their needs (8,9).

While previous research has examined students' experiences with self-paced e-learning programs, there remains a need for replication as well as a more comprehensive exploration of their perceptions and learning experiences. Replication studies are crucial for enhancing the reliability and validity of the previous findings, and this can be achieved by utilizing diverse data sources and methodologies. The use of qualitative and quantitative methods from different samples also ensures data completeness and facilitates the identification of potential similarities and differences. Furthermore, employing multiple methods to investigate the same phenomenon is an effective way for triangulation (20). Previous studies evaluating the effectiveness of the online program focused solely on qualitative data from focus group interviews or quantitative data from post-lecture evaluation forms (8, 9). However, these approaches may not provide a thorough understanding of students' perceptions. Therefore, a mixed-method design that incorporates different types of data should be considered to better comprehend students' learning experiences (21). The qualitative and quantitative components of this investigation complement each other, allowing for a comprehensive analysis and expansion of the evidence base (22). Previous studies have demonstrated the effectiveness of mixed-method designs in evaluating undergraduate students' learning perceptions and outcomes (23,24).

Building upon existing findings in terms of students' evaluation of the NSL programs, this study attempted to investigate the perceptions of senior-year students regarding the online NSL program using a mixed-method design. Specifically, the study examined students' quantitative evaluations of the online module regarding various aspects, such as program qualities and self-paced learning mode. It is expected that most students would hold positive perceptions (Hypothesis 1). In addition, focus group interviews would be employed to further understand students' subjective experiences and feelings that may help explain the quantitative findings.

Our study

This study was reviewed and approved by the Institutional Review Board at the authors' university (reference number: HSEARS20230903001).

After completing the e-learning module and passing the assessment test, senior-year students were directed to an anonymous and voluntary quantitative evaluation form (i.e., subjective outcome evaluation). By the end of the 2023/2024 academic year, a total of 839 students ($M_{age} = 21.27$, $SD_{age} = 3.22$; 58.28% males) out of 1,725 students had participated in this survey, indicating a response rate of 48.64%.

In addition, the same group of students were also invited via email to participate in focus group interviews. A total of 28 students voluntarily joined the interviews, including 10 males (35.71%) and 18 females (64.29%). Participants were divided into nine groups, with each group consisting of 2 to 7 participants. The interviews were conducted online by an assistant professor with the assistance of a well-trained research assistant. With participants' consent, all interviews were audio-recorded. The duration of each interview ranged from 1 to 1.5 hours. As an expression of gratitude for their time and efforts, participants received a HK\$150 supermarket coupon per hour after the completion of the focus group.

Instruments

The present study employed a subjective evaluation form consisting of 19 items that concentrated on various aspects of the e-learning program. These aspects included the perception of program attributes, appreciation of law-abidance leadership, evaluation of self-paced online learning mode, and overall evaluation. Each item was measured using a 6-point

Likert scale (“1= *strongly disagree*; 6 = *strongly agree*”). This evaluation form has demonstrated good psychometric properties in previous research (9).

In addition, a semi-structured interview method was used in the focus groups to elicit students’ thoughts and perspectives on the content, mode of presentation, assessment, and outcomes of the online NSL education program. Specifically, students were asked to share their views on the learning materials (i.e., 3-hour e-learning lectures and 7-hour self-study notes), the content, the assessment, and the self-paced online mode. Additionally, their opinions on the benefits, difficulties, impressive points, and necessity of this e-learning program were sought. The questions included in the semi-structured interview guide can be found in table 1.

Table 1

Data analysis

The quantitative data were analyzed using SPSS Statistics 28. Descriptive analyses, including means, standard deviations, and response rates for positive items, were performed to provide an overview of students’ evaluations of the online NSL education program. Bivariate correlations were then conducted to examine the associations among the four domains.

The qualitative data was analyzed using the thematic analysis method. Thematic analysis is a commonly used approach in qualitative research for analyzing interview narratives (3). The recordings of interviews were transcribed into textual data for formal analyses. Two experienced research assistants analyzed the texts individually following the procedures of thematic analysis suggested by Braun and Clarke (25): a) getting acquainted with the data, b) identifying themes, c) evaluating themes, d) describing and labeling themes, and e) coding positivity of responses under each theme. When coding the positiveness, responses were categorized as “positive”, “negative”, or “neutral”. For instance, students’ responses to the e-learning lectures, such as “clear” and “flexible” that admit the advantages of the lectures would be coded as “positive”. In contrast, responses such as “too complicated” that reflect their dissatisfaction would be coded as “negative”. Responses that contained both positive and negative elements or could not be categorized as either were coded as “neutral”. The inter-rater reliability in the present study was 95%, indicating good reliability in qualitative data analysis. A consensus on coding was obtained after further discussions and resolving disagreements between the two research assistants. A well-trained postdoctoral fellow performed a final checking of the emerging themes and coding, confirming nine relevant themes.

Findings

Table 2 illustrates students’ perceptions of the course from various perspectives. As anticipated, students (84.98%) generally had positive views of the course. First, they expressed satisfaction with the design of the learning mode. A significant proportion of students (88.44% and 82.24%) agreed that the self-directed and online learning modes were efficient and flexible, respectively.

Second, the results indicated that most students held positive views regarding law abidance after completing the course. Specifically, 89.75% and 89.51% of the students perceived that the course enhanced their understanding of law abidance as an essential indicator of societal stability and the “concepts of national security”, respectively. In addition, 90.35% agreed that the course provided clear explanations of “the offenses and penalties surrounding the Hong Kong National Security Law”, 88.08% agreed that the course helped them “understand the importance of implementing the Hong Kong National Security Law”, and 87.01% felt that “some myths related to the law” were dispelled during the course.

Notably, 92.37% and 91.06% of the students expressed a willingness to “serve as a law-abiding citizen” with “socially responsible behavior”, respectively, aligning with the course objectives.

Finally, the present study demonstrated that students had generally favorable perceptions of the course attributes. Specifically, around 81.64% of the students found the curriculum design satisfactory, and 81.29% assumed that “the course offered ample opportunities for reflection”. Moreover, a majority of students believed that the course was beneficial for their “critical thinking” (80.81%), “personal development” (80.45%), “problem-solving ability” (77.59%), as well as their “understanding of the importance of attributes to be successful leaders, such as critical thinking, moral competence, and law-abiding” (79.38%). In sum, the quantitative results based on students’ responses to various aspects of online NSL education were generally positive, supporting Hypothesis 1.

Table 2

Table 3 displays the results of the correlation analyses conducted among the variables. The overall evaluation of the course was positively correlated with the perception of course attributes ($r = .85, p < .001$), the appreciation of law abidance leadership ($r = .84, p < .001$), and the evaluation of self-paced learning mode ($r = .84, p < .001$). Moreover, the evaluation of self-paced learning mode showed positive correlations with the perception of course attributes ($r = .78, p < .001$) and the appreciation of law abidance leadership ($r = .84, p < .001$). In addition, the findings revealed a significant positive relationship between the perception of course attributes and the appreciation of law abidance leadership ($r = .84, p < .001$).

Table 3

Views on the 3-hour e-learning module

Students generally expressed positive feedback regarding the 3-hour online lecture videos on national education. Table 4 shows some example narratives of their views. In general, students believed that the course helped them gain a better understanding of Chinese history and the National Security Law. Most students agreed that the course offered flexibility since “the content was divided into different videos, allowing individuals to freely choose specific topics of interest to watch”. On the other hand, despite “not having a time limit for completion”, some students did not watch the video carefully due to its length and complexity.

Table 4

Views on the 7-hour self-study

Example narratives on students’ views regarding the 7-hour self-study are shown in Table 5. Students expressed satisfaction with the self-learning mode as “reading text may align better with personal learning habits, allowing them to progress at their own pace”. As for the content of the self-study notes, students appreciated them as they helped them “gain a better understanding of their grasp of knowledge through reference materials and multiple-choice tests”. However, some students expressed dissatisfaction, describing the content as “lengthy and dull” and expressed “difficulty understanding it as it was presented in English”. In particular, some students emphasized their preference for Chinese self-study material, finding them easier to comprehend. They noted that the English notes caused them “to lose interest in

research”. However, given that the medium of instruction in the researchers’ university is English, addressing this issue poses a challenge.

Table 5

The most impressive content

In this study, our aim was to better understand the aspects of lectures and notes that impressed students and explore how these aspects could be improved to enhance students’ learning experience. Through analyzing the responses of students (several examples are presented in table 6), we found that students were particularly impressed by the cases related to the NSL as they “stimulated their interest and provided useful concepts for judging various behaviors”. Students also found the notes impressive because they were “meticulously and clearly presented using tables to summarize information and cases, making them easy to understand”. However, some students showed disinterest in national education, stating that “they simply wanted to complete the program as quickly as possible, regardless of the content”. By understanding the aspects of the lectures and notes that most impressed students, future course content and structure may be revised and enhanced to better meet students’ requirements.

Table 6

Effectiveness of the e-learning module and self-study materials

Regarding the benefits of the e-learning module and self-study, students believed that the self-learning mode “allowed them to be more proactive in their learning, as opposed to being forced to attend offline classes”. Table 7 demonstrates several examples of students’ narratives on each aspect. In general, the modules improved students’ understanding of law-abiding leadership, the history of modern China, the concept of national security, and the NSL. Specifically, students not only “gained knowledge of recent events and culture”, but also “understood the connection between history and current laws” and were able to “apply this knowledge”.

Moreover, the program provided them with a clearer understanding of national security, “progressing from having only limited knowledge to compliance with relevant laws”. The contents of the NSL allowed students “to gain a better understanding of the implementation and penalties through concrete examples” and “reminded them to be more mindful of their actions to avoid violating the law”. In addition, the program dispelled misconceptions about the NSL, addressing “the misunderstanding that it could be subjected to subjective conviction”. Through the online program, students came to the understanding that “despite having freedom, it should not take precedence over safety, and we should know which actions should be avoided”.

Table 7

Difficulties encountered in completing the whole learning module

Table 8 presents the difficulties reported by students. Two primary challenges were identified: the language of instruction and the difficulty of the examination. Language barriers were frequently mentioned, with students stating that “the notes had Chinese translations, but the videos and exams were primarily in English, which made it easy for students to become confused”. Some students reported resorting to “searching the internet for answers to unfamiliar terminology”. However, it is important to note that university regulations require the delivery of learning materials in English. The difficulty of the exam will be further discussed in the next section, along with students’ opinions on the multiple-choice

assessment. Briefly speaking, students shared that meeting the required score to pass the exam was challenging. These findings inform the development of future courses that better cater to students' needs by shedding light on the difficulties they confront in self-study and online learning.

Table 8

Perceptions of the multiple-choice assessment

Table 9 presents students' diverse views on the assessment, which consisted of 20 multiple-choice questions, with multiple attempts allowed for the students. Students expressed varying opinions, with many stating that "the questions covered a wide range of behavioral criteria" and that "the difficulty level was appropriate". Students appreciated that the assessment process was valuable for "deepening their understanding of the topics and allowing them to reinforce their knowledge". They found it beneficial that "each test had different questions, which provided insights into various aspects" and reported that "they learned through reviewing their notes and continuously retaking the tests".

Despite the positive feedback, some students held negative opinions about the assessments. Some found it challenging to pass the exam, as they needed to achieve a minimum score to complete the program. They felt that the questions were too difficult or that the content covered in the assessment differed from what they had focused on during their self-study. They stated that "the questions are not related to notes and cannot be found in the notes or on the internet.", and they mentioned that to be honest, "they take exams for the sake of passing exams, relying on the internet and guessing answers by chance". For them, the exam is "a waste of time, and poorly memorized". Additionally, the questions were selected randomly from a questions pool, "failing to assess students' mastery of the content in a comprehensive manner". They further noted that "the knowledge learned after taking the 20-question test may also be quite partial". Thus, they expressed a preference for other assessment formats, such as essay questions or open-ended assignments, which can fully evaluate students' understanding of the subject matter. Moreover, they suggested that "the contents of the examination can be categorized by type".

Table 9

Perceptions of self-paced online mode

As shown in Table 10, the current self-paced online mode has garnered significant praise for its "convenience" and "flexibility. Students have shown a preference for this mode, considering it an effective way to acquire knowledge on law-related issues. They have expressed appreciation for the arrangement that allows them to have a "flexible schedule and plan", which helps "enhance their motivation and interest in learning". Notably, the online lectures had no time limits for each section, allowing them to "learn at their own pace" and cater to their backgrounds and needs. However, some students have raised concerns about the effectiveness of the self-learning mode compared to the traditional face-to-face mode. They have emphasized that the success of this mode "depends on students' self-discipline and self-regulation". Moreover, as it "lacks direct interaction with teachers and classmates, students are required to independently organize and comprehend concepts, which can pose challenges".

Table 10

The necessity of enhancing a comprehensive understanding of NSL

Students widely recognized the significance of being well-informed about national security, the National Security Law, modern Chinese history, and pivotal instances of national humiliation (Table 11). They acknowledged that university students should undoubtedly possess a clear understanding of NSL-related knowledge as it enables them to “avoid breaking the law” and prevent them from becoming a victim of “blind conformity and manipulation”. Besides, students believed that “delving deeper into the realms of local culture fosters a stronger sense of cultural awareness and belonging”.

Alternatively, a minority of students held the viewpoint that while a basic understanding of NSL-related knowledge is necessary, delving into intricate details - particularly in areas like modern Chinese history - is unnecessary. They argued that such knowledge is irrelevant to their future career and daily lives. They expressed concerns that it would only “add to their academic workload”, and “be easily forgotten after learning”, with “limited impact on their personal career development”.

Table 11.

Is the NSL education program “brainwashing”?

Students strongly disagreed with labeling the course as a form of “brainwashing”. They contended that the program does not impose any strong ideological stance, but rather objectively describes, introduces, and analyzes historical events and cases. Furthermore, they posited that “university students possess independent thinking skills and are capable of maintaining their own perspectives, which will not be easily swayed by a mere 6 to 7 hours of instruction”. On the contrary, they asserted that the education program “allowed for a deeper understanding of history and events”. They firmly believed that the program’s primary objective is to enhance students’ comprehension of legal and historical knowledge, far removed from any notion of brainwashing.

Discussion

The present study aimed to evaluate an online NSL education program using a mixed methods approach. Senior-year students participated in the evaluation by sharing their views on the program in a quantitative evaluation form and focus group interviews. The study included the collection of both quantitative and qualitative data which can enable a comprehensive evaluation of the program.

In general, the students showed a positive impression of the program. Firstly, they presented favorable opinions regarding the e-learning mode. While a small number of students felt it challenging to complete the program due to the lack of interaction with teachers and classmates, the majority acknowledged the effectiveness and flexibility of the e-learning mode. These findings align with previous research on the NSL program and other e-learning programs. Prior research on the NSL program using both HyFlex and online modes has indicated that students are in favor of the flexibility and convenience of e-learning (8,9,26,27). Furthermore, previous studies have shown that learners are satisfied with self-paced online learning as it allows them to have control over the material, learning pace, sequence, media, and time, providing them with the opportunity to customize their learning experiences to achieve their specific objectives as they see fit (28). In addition, this e-learning mode contributes to improved learning experiences by providing a less intimidating atmosphere for acquiring law-related information and skills, thereby increasing students’ comfort with the course content.

Secondly, the learning materials provided (i.e., videos, notes, cases) are comprehensive and presented clearly, incorporating visuals such as pictures and tables to enhance students’ understanding. Although some students found the materials to be overly

complicated and lengthy, the majority perceived them as informative and useful. These materials were instrumental in facilitating students' understanding of national security, including the history of modern China, the concepts of national security, the NSL, and law-abiding leadership. The content related to national security and the NSL, particularly the cases pertaining to the NSL, left a lasting impression on most students and contributed to their overall satisfaction with the program. These findings are consistent with previous research indicating that learning content influences e-learner satisfaction (29).

Thirdly, the NSL program benefited university students by promoting law-abiding leadership. The comprehensive content not only improves students' appreciation of national security but also evokes their awareness of the importance of adhering to the law and their sense of national identity. This, in turn, contributes to their personal development by boosting critical thinking, moral competence, and problem-solving ability. In essence, the course plays a valuable role in equipping students with the necessary skills and values to become ethical and effective social leaders in society. These results were consistent with prior research by Shek and colleagues (2, 3), emphasizing the importance of the NSL program in cultivating law-abiding leadership among university students.

The present research contributes to the expanding body of literature about online learning in higher education, with a particular focus on the study of politically sensitive topics such as national security (1,8,27). In addition to supporting previous findings on the NSL program (2,3,9,10,26), our study extends the understanding of students' perceptions by using a mixed-method approach. By combining qualitative and quantitative data, our study provides a more comprehensive insight into students' perceptions, attitudes, and learning experiences, as opposed to previous research that relied on a single type of data. As a replication study, this approach is undeniably considered a useful triangulation strategy to investigate the same phenomenon (20), as it assures data completeness and identifies potential parallels and discrepancies, thereby enhancing the reliability and validity of prior findings.

Practically, this study provides valuable information that can be used to improve the NSL program by addressing the difficulties encountered by students. The most commonly mentioned difficulty is the one on the language barrier. Since all concepts are presented in English, students who are unfamiliar with the language may experience confusion and a loss of interest in learning. Furthermore, some students found the exams challenging, with certain questions being regarded as excessively detailed and specific. Based on these findings, suggestions have been gathered to facilitate students' learning.

Despite the theoretical and practical contributions of this study, it is important to acknowledge several limitations that may impact the interpretation of the current findings. Firstly, it should be noted that the participants may not be representative of the whole senior-year student population. Although the response rate of the study (48.64%) exceeds the recommended threshold response rate (i.e., 35%) when the sample size is larger than 50 (30), it is still lower than the response rate observed in our earlier research on the program delivered via face-to-face and HyFlex (2,26). To gain a thorough understanding of students' perceptions of the NSL program, future studies are encouraged to recruit a larger number of participants to complete the quantitative evaluation and participate in focus group interviews. Secondly, it is important to consider the potential influence of group pressure when utilizing the focus group method. Compared to individual interviews, participants in focus group interviews are more likely to feel compelled to perform or conform in front of others, which could affect the authenticity of their responses (31). Thus, future studies should incorporate individual interviews to supplement the data collected from focus group interviews and enhance the validity of the findings. Thirdly, the long-term effects of the NSL program are still unexplored. In the present study, participants were surveyed and interviewed right after

completing the program, providing insights into its immediate or short-term effects. Though students admitted that the NSL program improved their abilities and leadership in law abidance, it is unknown whether these effects can be sustained over an extended period. To gain a deeper understanding of the effectiveness of the program, future research should include follow-up assessments of students' law-abiding leadership abilities. Lastly, it is important to acknowledge that this study focused solely on one university in Hong Kong. As all Hong Kong universities are responsible for providing national security education to enrich public knowledge of the NSL and increase awareness of law abidance in accordance with the NSL, future discussion should consider the circumstances in other higher education institutes in Hong Kong.

Overall, the study's findings supported the expectation that the e-learning program on NSL education can improve university students' legal awareness and cultivate their sense of social responsibility as citizens and leaders. Despite the aforementioned limitations, this study offers valuable insights into the effectiveness of online NSL education.

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Table 1. The semi-structured interview guide for the current focus group interview

| No | Question |
|----|---|
| 1 | Taken as a whole, what are your experiences with the 3-hour e-learning module on National Education? Please share your experience. |
| 2 | Taken as a whole, what are your experiences with the 7-hour self-study on National Education? Please share your experience. |
| 3 | Do you think the e-learning module and self-study benefit your learning and development (free responses first)? Prompt: does it help to improve your understanding of... a. Law-abiding leadership b. A brief history of modern China c. The concept of national security d. Hong Kong National Security Law e. Myths and facts surrounding the NSL |
| 4 | Can you recall the most impressive content (e.g., video clips, notes)? Why were they impressive? |
| 5 | Have you encountered any difficulties in completing this e-learning course and self-study? If yes, what are they? How did you overcome these difficulties? Can you provide some examples? |
| 6 | What are your views on the assessment involving 20 multiple-choice questions? Is it too easy or too difficult? Can it consolidate your knowledge about the topics covered in this e-learning module and the lecture notes? |
| 7 | What are your experiences in this self-paced online module? Can it enable you to learn effectively at your own pace? Any suggestions for improvement regarding the self-paced online mode? |
| 8 | Do you think university students should have a clear understanding of the concept of national security, the National Security Law, modern Chinese history, and major humiliation historical events? Please share your thoughts. |
| 9 | There is a view stating National Security Law education to be brainwashing in nature. Based on your experience of this e-learning module, reading of the lecture notes, video clips, and assessment, do you believe you have been “brainwashed”? |
| 10 | Overall speaking, are you satisfied with this e-learning module and self-study requirement? If the full mark is 10, ranging from 1 to 10, how much will you give? |
| 11 | To benefit your learning and strengthen your understanding of specific topics, do you have any suggestions to improve the e-learning module (e.g., video clips, lecture notes, assessment, etc.)? |
| 12 | What else would you like to share? |

Table 2. Descriptive results of students' perceptions of the course

| Items | N | Mean | SD | Positive response rate (%) |
|---|-----|------|------|----------------------------|
| Perception of program attributes | | | | |
| 1. The design of this course was very good. | 836 | 4.36 | 1.42 | 81.64 |
| 2. There were many opportunities for reflection in this course. | 836 | 4.35 | 1.41 | 81.29 |
| 3. This course is helpful to my personal development. | 833 | 4.30 | 1.46 | 80.45 |
| 4. This course has improved my problem-solving ability. | 834 | 4.25 | 1.46 | 77.59 |
| 5. This course has improved my understanding of the importance of attributes of successful leaders (e.g., critical thinking, moral competence, law abidance, etc.). | 838 | 4.28 | 1.43 | 79.38 |
| 6. This course has improved my critical thinking. | 834 | 4.32 | 1.42 | 80.81 |
| Appreciation of law-abidance leadership | | | | |
| 7. This course has helped me understand the importance of law abidance in leadership. | 837 | 4.49 | 1.37 | 85.10 |
| 8. I understand that law abidance is important for the stability of a society. | 835 | 4.71 | 1.27 | 89.51 |
| 9. This course has helped me understand the concepts of national security. | 832 | 4.72 | 1.27 | 89.75 |
| 10. This course has helped me understand the offenses and penalties surrounding the Hong Kong National Security Law. | 833 | 4.76 | 1.24 | 90.35 |
| 11. This course has helped me understand the importance of implementing the Hong Kong National Security Law. | 837 | 4.63 | 1.31 | 88.08 |
| 12. This course has helped me clarify some myths related to Hong Kong National Security Law. | 830 | 4.61 | 1.32 | 87.01 |
| 13. I will try my best to serve as a law-abiding citizen. | 838 | 4.92 | 1.23 | 92.37 |
| 14. I will try my best to serve as a socially responsible leader. | 835 | 4.80 | 1.25 | 91.06 |
| Evaluation of self-paced online learning mode | | | | |
| 15. The self-paced online learning course enabled me to learn more efficiently about this course. | 835 | 4.65 | 1.32 | 88.44 |
| 16. The self-paced online learning course allows me to learn the course materials according to my own situation. | 831 | 4.70 | 1.31 | 82.24 |
| 17. Overall speaking, I like the self-paced online learning experience. | 833 | 4.67 | 1.34 | 88.32 |
| 18. Generally speaking, there is sufficient support provided to help students pass assessments, such as sending reminder emails and organizing tutorial sessions. | 834 | 4.59 | 1.34 | 87.37 |
| Overall evaluation | | | | |
| 19. Overall speaking, I have a very positive evaluation of this course. | 834 | 4.52 | 1.39 | 84.98 |

Note. All items were rated on a 6-point Likert scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, 6 = Strongly Agree. Responses of 4–6 are considered positive.

Table 3. Correlations among variables in the course evaluation questionnaire

| Variables | Mean | SD | 1 | 2 | 3 |
|--|------|------|--------|--------|--------|
| 1. Perception of program attributes | 4.31 | 1.34 | | | |
| 2. Appreciation of law abidance leadership | 4.71 | 1.16 | .84*** | | |
| 3. Evaluation of self-paced learning mode | 4.66 | 1.23 | .78*** | .84*** | |
| 4. Overall evaluation | 4.52 | 1.39 | .85*** | .84*** | .84*** |

Note. *** $p < .001$.

Table 4. Examples of narratives of views on the 3-hour e-learning lectures

| Rating | Student Responses |
|----------|---|
| Positive | <ul style="list-style-type: none"> • Online learning is flexible, not having a time limit for completion. • The content was divided into different videos, allowing individuals to freely choose specific topics of interest to watch. • Learn more about the history of the Republic of China and modern wars that I didn't know much about or had any contact with before. • Understand the legislation and national security law. • Provides rich and clear teaching content, using tables to list events, and the text includes Traditional Chinese, Simplified Chinese, and English. • Pictures can aid understanding. |
| Negative | <ul style="list-style-type: none"> • I don't know how to read it, it's too long. I will try the test first and then come back to find the answer if I fail. • It is too complicated. I've learned it before in General Studies, but it's easy to get confused due to the lack of exposure. • The English words are very similar and everyone finds it difficult to do it. |

Table 5. Examples of narratives of views on the 7-hour self-study notes

| Rating | Student Responses |
|----------|---|
| Positive | <ul style="list-style-type: none">• You can arrange your study time flexibly, so the progress is relatively easy.• Compared to watching videos, reading text may align better with personal learning habits, allowing them to progress at their own pace.• Gain a better understanding of their grasp of knowledge through reference materials and multiple-choice tests.• Not too difficult and can be completed as a whole or by dividing into several parts.• The content is useful for testing. |
| Negative | <ul style="list-style-type: none">• The contents are lengthy and dull, so I quickly skim.• It is difficult to understand it as it was presented in English, making me lose interest in research. |

Table 6. Examples of narratives of students' most impressive content

| Student Responses |
|--|
| <ul style="list-style-type: none">• The cases can stimulate interest and provide useful concepts for judging various behaviors.• The notes are meticulously and clearly presented, using tables to summarize information and cases, making them easy to understand.• Knowledge of culture, economics and history, recognizing that China's development is on the rise.• Some of the terms mentioned in the courses.• This is the only course about NSL, I simply wanted to complete the program as quickly as possible, no matter what the contents include. |

Table 7. Examples of narratives of the benefits of e-learning module and self-study

| Subthemes | Student Responses |
|-------------------------------------|---|
| Law-abiding Leadership | <ul style="list-style-type: none">• Helpful in progressing from an initial vague understanding to a clear definition.• Deepen understanding and understand the importance of obeying the law through videos, cases, etc.• It helps reflect so as to avoid committing those crimes again and increases awareness of legal compliance. |
| A Brief History of Modern China | <ul style="list-style-type: none">• I had little contact with them before, but now I gained knowledge of recent events and culture.• I have studied these contents before and can recall them and understood the connection between history and current laws and were able to apply this knowledge. |
| The Concept of National Security | <ul style="list-style-type: none">• Progressing from limited knowledge to compliance with relevant laws.• Helpful. I wouldn't have gone out of my way to understand it before.• Online learning provides a flexible way to learn more deeply.• Increased my awareness of current events, and the relevant cases can also reinforce what is seen on TV, making concepts clearer.• Understand that the law is based on the country, and certain actions may have an impact on national security, not just on themselves or Hong Kong.• The course completes the "one country, two systems". |
| Hong Kong National Security Law | <ul style="list-style-type: none">• Gain a better understanding of the implementation and penalties through concrete examples.• Reminded me to be more mindful of my actions to avoid violating the law.• Be able to understand the reasons behind the laws. Before this, I would not have taken the initiative to understand them. |
| Myths and Facts surrounding the NSL | <ul style="list-style-type: none">• Initially I had some concerns about the national security law, thinking that it could be subject to subjective conviction. By gaining a deeper understanding of the NSL, I do not feel worried about that anymore and know that the division of the country is not good and should not happen.• Understand that other countries also have national security laws, despite having freedom, it should not take precedence over safety, and we should know which actions should be avoided.• Although Hong Kong's situation is special, I understand the need for a national security law. |

Table 8. Examples of narratives of difficulties students encountered

Student Responses

- The notes had Chinese translations, but the videos and exams were primarily in English, which made it easy for students to become confused.
 - Browse through the notes before starting to answer the questions. Look for the notes while answering the questions and learn by constantly re-doing them.
 - Some questions are asked in very detailed and specific terms, such as historical events involving a specific year.
 - Google will be used to find relevant information. However, some questions are situational questions and the answers cannot be obtained directly through Internet searches.
 - The notes are very informative, but it takes time to find the answers.
 - The notes had Chinese translations, but the exam was primarily in English, I had to search the internet for answers to unfamiliar terminology.
 - The exam does not provide explanations for the answers.
 - The exam is moderate to difficult and requires multiple attempts.
-

Table 9. Examples of narratives of perspectives on the 20 multiple-choice questions

| Rating | Student Responses |
|----------|--|
| Positive | <ul style="list-style-type: none">• Each test had different questions, which provided insights into various aspects.• Quizzes can deepen understanding of topics and consolidate knowledge.• The questions covered a wide range of behavioral criteria, it's a bit difficult but can be completed.• The difficulty level was appropriate, some questions require thinking or referring to notes.• For college students, a passing standard of 16 points is reasonable. |
| Negative | <ul style="list-style-type: none">• The scope is too large to remember the details in a short period of time, the knowledge learned after taking the 20-question test may also be quite partial.• I take exams for the sake of passing exams, relying on the internet and guessing answers by chance. It is a waste of time, and poorly memorized.• The questions were selected randomly from a questions pool, failing to assess students' mastery of the content in a comprehensive manner.• The questions are not related to notes and cannot be found in the notes or on the internet.• There is ambiguity in answers. |
| Neutral | <ul style="list-style-type: none">• National Security Law content may be useful, but historical content, such as years, etc., may be forgotten after taking the test.• Questions about years, data, and professional terms are more difficult.• Questions about events or convictions will be easier after you master the concepts.• The contents of the examination can be categorized by type in the future. |

Table 10. Examples of narratives of perspectives on the self-paced online mode

| Rating | Student Responses |
|----------|--|
| Positive | <ul style="list-style-type: none">• Prefer independent online learning since the flexible schedule and plan.• Independent learning method is less stressful and can enhance motivation and interest in learning.• Different students have different individual backgrounds and needs. This independent online learning course allows students to learn at their own pace. |
| Negative | <ul style="list-style-type: none">• The effectiveness of independent online learning compared with face-to-face teaching depends on students' self-discipline ability.• Lacks direct interaction with teachers and classmates, students are required to independently organize and comprehend concepts, which can pose challenges.• Long periods of online learning will reduce learning motivation. |

Table 11. Examples of narratives of students' understanding of concepts related to NSL

| Rating | Student Responses |
|----------|--|
| Positive | <ul style="list-style-type: none">• It is necessary, with basic knowledge you can avoid breaking the law.• Knowledge is needed because lack of knowledge may lead to myths or concerns about threats to free speech.• Delving deeper into the realms of local culture fosters a stronger sense of cultural awareness and belonging.• Understanding this knowledge enhances people's self-confidence and sense of self-identity, and provides a comprehensive understanding of history.• Understanding this knowledge can prevent blind conformity and manipulation.• Can understand the reasons and background of current events. |
| Negative | <ul style="list-style-type: none">• No need, no interest, no need to specially set up to test students because it can be easily forgotten after learning.• A basic understanding of law is necessary, but detailed knowledge of history is not necessary for work or daily life as it would add the academic workload.• If you are not majoring in fields such as public policy, having a clear understanding of these may have limited impact on personal career development. |
| Neutral | <ul style="list-style-type: none">• This depends on the main purpose of the individual. If the mind is not there, forceful promotion will be ineffective. This is also a problem faced by national education.• It is better to learn in a step-by-step manner, for example, start with a general knowledge course and learn slowly.• It may not be appropriate to spend five weeks discussing China's political structure, history and concepts in depth. |