Brendan Sheridan
The University of Waikato
Lucy Campbell
The University of Waikato

REVITALISING ENGLISH MEDIUM INSTRUCTION

Using Panopto to Encourage Deeper Learning and Reflection in a Writing Course

Due to teaching limitations during the Covid-19 pandemic, the University of Waikato undergraduate course ENSLA103 shifted to online delivery, using the Learning Management System Moodle for materials and the online video platform Panopto for lectures. In response to declining viewer statistics for videos recorded in Panopto, course instructors endeavoured to enhance interactivity in lectures through embedded comments and integrated quizzes. This chapter explores the strategies employed to boost student engagement and shares observed outcomes, aiming to rejuvenate interest and deepen understanding through interactive video elements.

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Lucy Campbell

Overview

During the Covid-19 pandemic, the undergraduate course *English as an Additional Language: Effective Academic Writing* (ENSLA103), which focuses on effective academic writing for English as an Additional Language students, transitioned to fully online delivery. The course utilized the Moodle Learning Management System to provide lecture materials, notes, quizzes, and tutorial links. *Panopto*, a video software service, played a crucial role in delivering lecture topics, providing detailed explanations, and expanding upon course materials. However, over a two-year period, viewer statistics for Panopto videos decreased, leading to a decline in tutorial preparation, interaction, and completion of assessments and quizzes based around students being able to identify key information. Both Emhardt et al. (2022) and Pia et al. (2019) argue the importance of actively designing course videos for student engagement. Recognizing the need for increased engagement in ENSLA103, the course instructors decided to restructure and embed interactivity into the lecture videos using Panopto. Initially, they introduced comments within the videos, and later incorporated quizzes to encourage student participation and reflection during tutorials. This chapter discusses the course's situation, the strategies implemented to enhance student engagement, and the outcomes observed. By embedding interactive elements into the video lectures, the instructors aimed to revitalize student interest, facilitate a deeper understanding of the topics, and create an interactive learning environment.

Introduction

The Covid-19 pandemic necessitated a shift to online learning, impacting various educational disciplines, including English as an Additional Language (EAL) courses. This article focuses on ENSLA103, a first-year course designed to support EAL students in developing effective academic writing skills. With the course being delivered online via Panopto video software, the challenge of engaging students in the virtual environment and promoting deeper learning and reflection arose. Over a two-year period, from 2020 to 2022, viewer statistics for Panopto videos decreased. This led to a decline in student tutorial preparation, course interaction, as well as completion of assessments and quizzes. This article explores the efforts made to enhance student engagement by embedding interactive questions and quizzes into video lectures and examines the outcomes of these strategies.

Background

English as an Additional Language: Effective Academic Writing (ENSLA103) is a first-year course for English as an Additional Language (EAL) Speakers. It forms one of a suite of five ENSLA courses that support any degree. ENSLA103 is the only first-year course; there are two Level 2 courses (covering effective Listening and Speaking skills), as well as two Level 3 courses designed to prepare students for graduate study, including a course on Research Writing, and another on project work focused on the topic of Global Englishes. ENSLA103 is designed to help EAL students better understand the culture of western academic writing; it covers aspects such as genre-specific writing and associated variations in construction, language, and grammar, referencing techniques, summarizing, paraphrasing, and dealing with numbers and visuals within writing. All ENSLA courses are open to any EAL student (international and domestic), and ENSLA103 is one of those designated as a Disciplinary Foundations course: a course designed to give students a firm grounding in their chosen discipline early in their undergraduate degree. The EAL students taking the courses include students from the People's Republic of China (PRC), India, the Middle East, the Pacific Islands, Indonesia, Japan, Korea, and other Southeast Asian countries. In the past, the numbers in ENSLA103 have been as high as 300 and as low as ten students (from Sudan, the PRC, and the Pacific). The latter is the iteration discussed here. For the past two years, ENSLA103 has been run in an online format as a response to the Covid pandemic. Lectures were therefore delivered through the video software service Panopto, backed up with lecture notes and built-in tasks so that students could contextualise topics; students could also extend topics through other online activities embedded within the Moodle LMS. The students' understanding and knowledge of these topics was further checked and drawn out at online tutorials held via Zoom. This chapter analyses our efforts to make teaching academic writing online more interactive and engaging for students, and stimulate deeper learning and reflection by embedding interactive questions and quizzes into our Panopto video lectures.

Literature review

E-learning, also known as electronic learning, is the utilization of information and computer technologies to design and deliver educational experiences. It involves the use of electronic media, such as the internet, CDs, mobile phones, or television, to facilitate distance learning and teaching (Coman et al. 2020). The perceived usefulness and ease of use with e-learning play significant roles in students' attitudes and educators' adaption to blended learning, which was especially important with adapting to the Covid-19 pandemic (Coman et al. 2020; Cutri, Mena & Whiting 2020; Simonova, Faltynkova & Kostolanyova 2023; Janbani & Osmani 2023).

E-learning offers flexibility by eliminating spatial and temporal constraints, enabling access to a wide range of information, and promoting collaborative learning. However, issues like internet access costs, technical problems, and inadequate infrastructure can hinder effective engagement, particularly in underdeveloped regions (Coman et al. 2020; Simonova,

Faltynkova & Kostolanyova 2023). As many of the students were based internationally, this was a particular factor in ENSLA103.

The rapid shift to online education meant educators had to quickly adapt to online teaching and more heavily utilize e-learning tools like Learning Management System (LMS) and web conferencing software (Ng, Ching, & Law 2023; Simonova, Faltynkova & Kostolanyova 2023). LMS software offers several advantages, such as user-friendliness, effective time management, easy course and faculty management, report generation, and timely reminders for users (Alhaider & Nisa 2023; Coman et al. 2020). Students and teachers spent increased hours in front of screens for managing learning processes on LMS platforms and attending virtual classes, leading to reports of stress, anxiety, and sleep disturbances. Despite challenges, the adoption of LMS and e-learning platforms has proved beneficial in facilitating education delivery (Romero-Rodríguez et al. 2023; Weng, Ng & Chiu 2023; Simonova, Faltynkova & Kostolanyova. 2023).

ENSLA103 used Zoom video-conferencing for tutorials, but had the lecture content delivered via recorded videos, providing a blend for students studying online. Videos are considered powerful tools for educational purposes, and video-based learning (VBL) has been found to enhance learning outcomes, improve engagement, and facilitate teachers' professional development (Scagnoli, Choo & Tian 2019; Weng, Ng & Chiu 2023). Coman et al. (2020) identified seven crucial aspects in developing educational and instructional videos including managing and developing internet infrastructure to avoid interruptions, using friendly tools to aid student understanding, providing reliable and diverse electronic resources, building online communities to reduce isolation, employing effective techniques like debates and experiential learning, offering services to keep students and teachers updated on policies, and promoting collaboration between institutions. Video-conferencing in particular played a vital role for students, substituting face-to-face interactions and allowing teachers to assign team projects and use collaborative teaching tools (Coman et al. 2020; Janbari & Osmani 2023).

A significant challenge noted in the literature, however, is learners' ability to identify key information during recorded video content. To improve information selection, cues for attention guidance, like the use of pointing gestures, can be added to learning materials (Emhardt et al. 2022; Pia et al. 2019). However, expert verbalization may not always be sufficient to guide learners' attention, especially if domain experts use abstract terms or lack specificity (Emhardt et al. 2022; Pia et al. 2019).

VBL adds teaching presence, social presence, and cognitive presence to online courses, connecting learners with instructors and facilitating reflection and feedback (Scagnoli, Choo & Tian 2019). The effectiveness of VBL in achieving learning outcomes may vary based on students' prior knowledge and how effectively it is integrated with other course materials, as well as video content and length (Scagnoli, Choo & Tian 2019; Weng, Ng & Chiu 2023).

The move to internet-based learning environments has also been accompanied by a growing interest in understanding student engagement and its impact on learning outcomes. Engagement is a multidimensional construct, and cognitive engagement represents a student's level of investment in learning, including cognitive strategies for comprehension and understanding (Trenholm et al. 2019). Cognitive engagement is influenced by various factors, including motivation, self-regulation, and the quality of engagement with course content (Trenholm et al. 2019; Simonova, Faltynkova & Kostolanyova 2023).

International students studying in English were particularly impacted by the transition to online learning during the Covid-19 pandemic. The lack of real-life interaction, and language barriers such as foreign language anxiety (FLA), have caused challenges. FLA has been found to hinder emotional and cognitive engagement, leading to challenges in the learning process (Simonova, Faltynkova & Kostolanyova 2023; O'Reilly & García-Castro 2022; Tian & Lu 2022).

Various factors can influence student engagement in online learning. Interaction and social presence through synchronous teaching are crucial for developing a sense of belonging and fostering meaningful interactions (O'Reilly & García-Castro 2022). Additionally, language support and interactive use of videos can enhance student engagement (O'Reilly & García-Castro 2022; Scagnoli, Choo & Tian 2019).

Methodological application

The delivery of lecture topics was through Panopto, backed up with lecture notes and built-in tasks so that students were able to contextualise topics. The topic content was then extended through Moodle quizzes, Quizlets, and H5P activities. Lastly, the students' understanding and knowledge of topics was checked and further extended in the online Zoom tutorials.

The lectures presented online using Panopto were an integral part of this course. They not only delivered topics, but as with most lectures there was extra content embedded in them from the lecturer's perspective, such as advice on how students should approach topics and how the topics relate to the writing assessments that are built into the course. Students can sometimes find engagement with videos difficult, including knowing what information to focus on and what the lecturer might be referring to on screen. 'To overcome this challenge, teachers might try to verbally guide learners' attention to the relevant video elements. However, there may be several reasons why expert verbalisations remain insufficient to guide

learners' attention' (Emhardt et al. 2022: 847). One method of guiding learners' attention was to keep key points visible for a sufficient length of time, which meant illustrating points with examples that are not displayed. Pia et al. note 'As information is presented on the slides and then disappears, it is crucial for students to effectively visually search for what is relevant to the topic' (2019: 345). This is why we made sure to keep visual information static for several minutes while delivering content and providing verbal examples applying different writing techniques like paraphrasing. Another method used to guide the students' focus through the Panopto videos was to use the cursor to draw attention to key points in the material displayed in the lectures. 'The instructor might use pointing gestures to guide students' visual attention to the learning content that they are referring to' (Pia et al. 2019: 345). While there has been some debate over how effective using cursors to direct viewers can be in learner outcomes (Emhardt et al. 2022), in the absence of physically gesturing to content in the video, the use of the cursor was considered an acceptable substitute.

Furthermore, it was important for us that the videos did not appear too forced or artificial, and instead replicated the experience of a lecture. As noted in Scagnoli, Choo and Tian (2019: 401), 'Interaction with videos adds teaching presence and social presence to the courses … which increases engagement through the connection they feel with the instructor shown as a real person in class'. Therefore, within these videos, we tried to be as natural as possible in our delivery, including jokes, asides and other nuances found in face-to-face lectures, so the recorded lectures were important on many different levels. We also tried to keep the length of the videos under 10 minutes to reduce the cognitive load and allow learners to process the topic information more easily.

However, we were aware that the lectures and materials were not as stimulating at they could be. An assessment of Panopto viewer statistics for the first few weeks of the course supported this line of reasoning, as we could see that they were dropping. According to Scagnoli, Choo, and Tian (2019: 405) this could potentially be due to common student perceptions of video learning materials: 'Undergraduate students perceived VL as complementary, but not absolutely necessary for learning'. We were also cognisant of potential obstacles when teaching over the internet. As Lin, Wu, and Lee note, 'Although online learning environments have advantages for learning, they need extra support to help students concentrate on learning' (2022: 156). Online learning poses challenges for students who may not have any previous experience of a level of independent learning with expectations of unsupervised work like take home essays and self-directed study towards lecture content (Ng, Ching & Law 2023; Alhaider & Nisa 2023; Bao 2020; Trenholm et al. 2019). Furthermore, there are the challenges specific to online learning from other countries. Our overseas-based students faced many of the challenges that the Covid-19 pandemic presented for students in online learning, particularly regarding technical difficulties, internet connectivity issues, and inadequate digital infrastructure. Accessing information online requires reliable internet connections and appropriate computing devices. Some areas or households can have unfavourable study conditions: in particular a lack of internet infrastructure can hinder students' full engagement in online learning (Alhaider & Nisa 2023; Bao 2020). Maintaining effective communication between instructors and students can be challenging, through the combination of unreliable internet connections and different time zones, in addition to students opting to turn off their cameras to overcome internet connectivity issues. These difficulties can compromise students' learning outcomes (Simonova, Faltynkova & Kostolanyova 2023; Morrison, Naro-Maciel & Bonney 2021; Tian and Lu 2022; Wilczewski, Gorbaniuk & Giuri 2021; Weng, Ng & Chiu 2023; Alhaider & Nisa 2023). Additionally, there could have been a lack of rapport between the lecturers and students, not only because of distance between teachers and learners, but also because the students themselves were not in a shared location either, as they were spread across multiple countries. Simonova, Faltynkova and Kostolanyova (2023), for example, noticed that first-year students (such as the ones that studied ENSLA103) are also likely to be the most frustrated by online learning. Together these factors could lead to lessening enjoyment of the course and the topics covered. Therefore, we tried as much as possible to include many ways of engaging with topics and materials.

As noted above, we had become increasingly aware over the previous two years that perhaps the lectures and materials were not as stimulating at they could be. A re-check of the statistics backed up this belief, as although some videos had been looked at more than once, they were not looked at in their entirety. Furthermore, some students were simply looking at the beginning of the video and not revisiting it, or some were dipping in and out. The data indicated that there was a significant lack of engagement with the Panopto lectures. This was noted in the literature: video learning can be negatively impacted by studying from home. We began to think about what was happening in tutorials (where there was active engagement) and noted that students were not prepared for tutorial tasks and conversations. This necessitated re-teaching and reviewing content already delivered. We also noted something similar with engagement with online quizzes: the students were either trying to complete them multiple times or simply not able to complete them correctly. The effect carried over to the short writing tasks we were setting, in which we could see unevenness in the students' understanding of the main points in their regular short assignment tasks.

To improve student engagement, we strategised how the lectures could be made more appealing. The idea was to construct lectures that better reflected the experience of a face-to-face situation, where lecturers can raise questions or include quizzes to keep students engaged rather than simply delivering content. The LMS, Moodle, was not a limitation

in this regard, as it is well-known for its flexibility and ability to encourage users to collaborate (Coman et al. 2020). We considered the use of YouTube videos with online reflections, as we had found that YouTube was able to offer many ways to engage with the audience. Unfortunately, the internet security protections in the PRC, dubbed the Great Fire Wall of China (Griffiths 2019) precluded this strategy. Therefore, we chose Panopto, the video capture system used at the University of Waikato for recording lectures. We chose this system because we were familiar with it, it is supported in Moodle, it is standard for the university enabling plenty of technical support, and it is usable within the PRC.

Within Panopto, we trialled two options: embedding questions and embedding quizzes. The initial embedded comment/question was tied to text appearing in the Panopto video. Verbal repetition of the question was chosen to make engagement easier and more relatable. However, there was some possibility for user error with this method. In the first video created for students, an embedded question was verbally indicated but did not appear in the comments section of Panopto where required. So, while it was possible to give directions verbally, on the second attempt we moved to a clearly timestamped comment/question to which students could respond. The lectures chosen for these tasks covered how to write introductions. The questions in the comment section directly reflected the questions that are typically asked to students in this course's in-person lectures from previous years, such as 'Look carefully at the instruction words of the Essay title. 1. How many are there?' Some of these questions were open-ended and intended to garner a response, for example '2. What are [the instructions of the Essay title] asking you to do?' In addition, an image was displayed on the course Moodle page which directed students to the section of the Panopto recording where they were to make a comment on the lecture.

The act of making comments to the videos provided some engagement, but we felt it lacked authentic interaction, especially given the location of the comment section in the Panopto video window (in the bottom left corner of the screen rather than the front). However, partway through the trimester we introduced a new strategy: quizzes embedded into videos with content that facilitated asking basic comprehension questions, such as with quotations and when to paraphrase. The quizzes embedded in Panopto videos were more interactive as they involved the video pausing until the questions were answered, while the questions appeared in the video itself, rather than in an adjacent box. Even so, this method could not simply be applied to any of the Panopto video lectures. Instead, the quiz we used had to transition well to the course material to fit the type of questions being asked, which led to us choosing the Indirect Quotations and Paraphrasing lecture. The quiz entailed multiple choice questions such as 'If summarising someone's words, which perspective do you think people use?' and 'Would your paraphrasing or summary be written in a formal tone or informal tone?' These types of questions were used because the lecture focused on specific actions, rather than being simply descriptive. Compared to asking for comments, where students were asked 'why' something was done, the quizzes required a more closed question design, which better suited a simple comprehension/preparation question.

Having either a comment discussion or a quiz depending on the topic of the week would be ideal, although this would require some advance planning that was not possible in this specific situation, since the trimester was already well underway. However, as discussed below, the implementation of these methods did not have the expected effect and was therefore halted as it became impractical to keep investing the set-up time into adding the questions and quizzes.

Outcomes

The overall effect of these interventions was mixed. As teachers, this method of drawing greater levels of student engagement was novel, trialling what was for us a new means of supporting interaction from the students in an online environment. The trial also proved that the method of clarification questions/quizzes could be done in Panopto. We were able to see from a technological perspective that Panopto was flexible enough to handle what we wanted. Based on the findings from the literature that interactive use of videos can enhance student engagement (O'Reilly & García-Castro 2022; Scagnoli, Choo & Tian 2019), we truly believed that using Panopto in this way could promote deeper learning and reflection.

However, from the students we saw no change. Even though the viewer statistics on Panopto were more positive around the lectures where questions were embedded, none of the students attempted the embedded quiz through the streaming link, even though, according to the logs, the video itself was downloaded. There could be multiple reasons for downloading rather than streaming engagement, one of which could be limited access to the internet, particularly for students based overseas, which was noted as a frequent issue in the literature (Simonova, Faltynkova & Kostolanyova 2023; Tian & Lu 2022; Weng, Ng & Chiu 2023; Alhaider & Nisa 2023). Regardless of the cause behind the student activity, examining the Panopto statistics indicates that these efforts to improve student engagement were unsuccessful.

However, at the end of the course, students were asked to provide some evaluations on how they believe the course was run. Within these general evaluation questions, we also included questions about the embedded tasks within Panopto. These questions were Likert-style statements that invited students to indicate their degree of agreement or disagreement with the following statements: 'I found lecture

videos in Panopto easy to access' and 'The engagement tasks in Panopto were easy to understand'. The response distribution for 'I found lecture videos in Panopto easy to access' was Strongly Agree: 85.71% and Disagree: 14.29%. Meanwhile the response rate for 'The engagement tasks in Panopto were easy to understand' were Strongly Agree: 57.14%, Agree: 28.57%, and Disagree: 14.29%. This indicates that, overall, the students had a positive perception of the Panopto videos, and the comments/quizzes embedded within them, despite there being no evidence of the tasks being completed. With the unclear outcomes of these attempts in mind, it is possible that the methods for student engagement through Panopto videos were limited by the comparatively small number of students enrolled in the course and that, in a larger course, there would be a stronger up-take.

Conclusion

In future, the main point of learning for us as educators will be remembering to introduce and integrate these kinds of practices earlier. ENSLA103 was one-third of the way through the teaching period when these methods were being implemented as a response to lack of engagement, rather than as an attempt to engage students from the beginning. For first-year students, particularly first-year international students, a significant transition is required to become accustomed to classes. The students need to be familiarised with these methods of using and interacting with Panopto at an earlier point in the course. We should potentially have been more mindful of findings in the literature that much of the effectiveness of VBL can depend on students' prior knowledge and that length of videos can be an important factor (Scagnoli, Choo & Tian 2019; Weng, Ng & Chiu 2023). The welcome video at the start of the course might be the best method for doing this; in this way students can be coached on how to interact with the videos early in the course. Meanwhile, shortening the videos and potentially splitting them into multiple smaller videos could address both student attention and internet connectivity. By applying these changes better engagement outcomes can hopefully be achieved.

References

Alhaider, S.M. and Nisa, S.U. 2023. Advantages and Challenges of eLearning Before and After the COVID-19 Pandemic: Faculty and Student Perceptions in Saudi Education. *Theory and Practice in Language Studies*, 13(4): 891-900. doi.org/10.17507/tpls.1304.10

Bao, W. 2020. COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior & Emerging Technology*, 2: 113-115. doi.org/10.1002/hbe2.191

Coman, C., Tîru, L.G., Mesesan-Schmitz, L., Stanciu, C. and Bularca, M.C. 2020. Online teaching and learning in higher education during the Coronavirus Pandemic: Students' perspective. *Sustainability*, 12(24): 10367. doi.org/10.3390/su122410367

Cutri, R.M., Mena, J. and Whiting, E.F. 2020. Faculty readiness for online crisis teaching: Transitioning to online teaching during the COVID-19 pandemic. *European Journal of Teacher Education*, 43(4): 523-541. doi.org/10.1080/02619768.2020.1815702

Emhardt, S. N., Jarodzka, H., Brand-Gruwel, S., Drumm, C., Niehorster, D.C., and van Gog, T. 2022. What is my teacher talking about? Effects of displaying the teacher's gaze and mouse cursor cues in video lectures on students' learning. *Journal of Cognitive Psychology*, 34(7): 846–864. doi.org/10.1080/20445911.2022.2080831

Griffiths, J. 2019. *The great firewall of China: How to build and control an alternate version of the internet*. London: Zed Books Limited.

Janbani, Z., and Osmani, F. 2023. Performance of two educational approaches in increasing knowledge of high-school students about COVID-19 during the first wave of pandemic. *Evaluation and Program Planning*, 100: 102327. doi.org/10.1016/j.evalprogplan.2023.102327

Lin, C-H., Wu, W-H., and Lee, T-N. 2022. Using an online learning platform to show students' achievements and attention in the video lecture and online practice learning environments. *Educational Technology & Society*, 25(1):155-165. doi.org/10.30191/ETS.202201_25(1).0012

Morrison, E.S., Naro-Maciel, E., and Bonney, K.M. 2021. Innovation in a time of crisis: Adapting active learning approaches for remote biology courses. *Journal of Microbiology & Biology Education*, 22(2). doi.org/10.1128/JMBE.V22I1.2341

O'Reilly, J., and García-Castro, V. 2022. Exploring the relationship between foreign language anxiety and students' online engagement at UK universities during the covid-19 pandemic. *Language Learning in Higher Education*, 12(2): 409-427. doi.org/10.1515/cercles-2022-2054

Pia, Z., Zhangb, Y., Zhub, F., Xub, K., Yangb, J. and Weiping, H. 2019. Instructors' pointing gestures improve learning regardless of their use of directed gaze in video lectures. *Computers & Education*, 128: 345-352. doi.org/10.1016/j.compedu.2018.10.006

Romero-Rodríguez, J-M., Hinojo-Lucena, F-J., Kopecký, K., and García-González, A. 2023. Digital fatigue in university students as a consequence of online learning during the Covid-19 pandemic. *Educación* XX1, 26(2): 165-183. doi.org/10.5944/educxx1.34530

Scagnoli, I., Choo, J., and Tian, J. 2019. Students' insights on the use of video lectures in online classes. *British Journal of Educational Technology*, 50(1): 399–414. doi.org/10.1111/bjet.12572

Simonova, I., Faltynkova, L., and Kostolanyova, K. 2023. New blended learning enriched after the COVID-19 experience? Students' opinions. *Sustainability*, 15(6): 5093. doi.org/10.3390/su15065093

Tian, M., and Lu, G. 2022. Online learning satisfaction and its associated factors among international students in China. *Frontiers in Psychology*, 13: 916449-916449. doi.org/10.3389/fpsyg.2022.916449

Trenholm, S., Hajek, B., Robinson, C.L., Chinnappan, M., Albrecht, A., and Ashman, H. 2019. Investigating undergraduate mathematics learners' cognitive engagement with recorded lecture videos. *International Journal of Mathematical Education in Science and Technology*, 50(1): 3-24. doi.org/10.1080/0020739X.2018.1458339

Weng, X., Ng, O-L., and Chiu, T.K.F. 2023. Competency development of pre-service teachers during video-based learning: A systematic literature review and meta-analysis. *Computers and Education*, 199: 104790. doi.org/10.1016/j.compedu.2023.104790

Wilczewski M., Gorbaniuk, O. and Giuri, P. 2021. The Psychological and Academic Effects of Studying from the Home and Host Country During the COVID-19 Pandemic. *Frontiers in Psychology*, 12: 644096. doi.org/10.3389/fpsyg.2021.644096

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