Fifty Alternatives to Lecture

Researched by J. Prusch and [originally written](https://web.archive.org/web/20131023211021/https:/edocs.uis.edu/boakl1/www/FiftyAlternativesToLecture.html) by A.M. Pickett (c. 1996)

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Developing online coursework offers an opportunity to redefine instructional goals and ensure class content aligns with student outcomes. Consider taking a [backward design](https://en.wikipedia.org/wiki/Backward_design) approach:

* Identify [desired results that are specific and measurable](https://citl.indiana.edu/teaching-resources/course-design/developing-learning-outcomes/index.html) (e.g., students will be able to incorporate critical theory while discussing contemporary events).
* Decide what evidence ([assessment](https://www.csu.edu.au/division/learning-and-teaching/home/assessment-and-moderation/assessment-resources-and-information/assessment-types-and-methods)) is needed to meet your desired outcomes (e.g., students will write an opinion article for their student newspaper on a current issue with three relevant references to critical theory).
* Design and implement activities that will facilitate these results (see ideas below).

While almost every in-person activity can be adapted to the virtual classroom, consider the different affordances available on the web and use them to your advantage. A few examples include incorporating collaborative writing (e.g., using Google Docs or Office 365 apps), recording class sessions for later playback, inviting guest speakers from far away, and embedding multimedia.

Below are fifty ideas for non-lecture learning experiences. However, instructors must set up all supporting and explanatory documentation necessary for students to fully understand what they are to do, when, where in the course website they are to do it, what is expected, and how they will be evaluated. Course websites must be designed and set up in advance to accommodate, explain, model, and evaluate each activity. For help implementing any of these ideas in your course, contact your IT Helpdesk, instructional design partner, or school librarians.

1. Guest speaker

Instructors can bring additional expertise into the “classroom” in the form of virtual guest speakers. Consider asking students to prepare – and submit – personalized questions beforehand (and sending these to your guest for their own preparation). The instructor can set up a synchronous video chat or invite the speaker into a discussion forum for an asynchronous “[Ask Me Anything”](https://www.theatlantic.com/technology/archive/2014/01/ama-how-a-weird-internet-thing-became-a-mainstream-delight/282860/) experience. Alternatively, guest speakers can evaluate or critique student work. For example, students can write a lesson plan on the guest speaker’s area of expertise.

1. Conduct an interview

A formal interview consists of a series of well-chosen questions (and often a set of tasks or problems) which are designed to elicit a portrait of a student's understanding about a concept. Interviews can be conducted offline (in-person) and recorded (using audio or video apps), online synchronously (through video chat) or online asynchronously (as a series of email- or discussion board-based questions). Assignments and activities can include preparing questions, holding the interview, transcribing text, analyzing content, and sharing findings (as a research paper, poster, and/or a presentation).

1. Class-created annotated bibliography or Open Educational Resource

Students can create a glossary of resources for any discipline. Using a collaborative document (e.g., Google Doc, Office 365), ask students to contribute a certain number of shared references to the class. The instructor can evaluate the student on the quantity and quality of submissions as well as require students to include a summary and evaluation of each resource. If using a spreadsheet (e.g., Google Sheets), you can create columns for citation, link to resource, summary, evaluation, student/creator name (to keep track of submissions), and other notes for each resource.

1. Debate

Informal debates encourage students to think critically about an issue and facilitate interactive class discussions. You can implement a debate on a discussion forum by assigning half of your students to each side of a controversial issue. A pro/con discussion often work best. Consider clarifying your objective – perhaps convincing the class (audience) rather than displaying skill in attacking the opponent. Students can develop longer initial posts and respond to two or more students on the opposite side of an issue. ***Flip it/reverse it*** by asking students to take one stance in their initial post and then argue against their original opinion in their response posts. Ensure you have a detailed rubric and/or set of instructions for both original and response posts, including specified due dates that allow enough time for thoughtful replies.

1. Student-led discussion

Design peer-led, small group, or whole class discussions of concepts driven by text (or multimedia) sources. Students can help one another build abstract understandings from the facts, data, and details provided by a variety of resources. Variations include students assuming the role of the instructor by assigning required texts, creating guiding questions, and facilitating the discussion (either through video chat or through a forum).

1. Field trips

This strategy can increase student motivation and highlight the application of course materials to the real world. It is an excellent opportunity to facilitate learning outside of the classroom in an interesting and purposeful way. Field notes, reports, inventories, and treasure hunt lists can be developed (either by the instructor or by students themselves) and used. Students can then return to the course to report on their experiences via discussion board or video chat. Variation: Students can also videotape or photograph the field trip and turn it into the instructor. See related: **Direct an Observation**.

1. Student summaries

Ask students to summarize readings into a single sentence, bullet points, or paragraph. For example, you can challenge students to answer the questions, “Who does what to whom, when, where, how, and why?” (represented by the letters WDWWWWHW) about a given topic followed by synthesizing those answers into a simple informative summary sentence. This can be used as a pop quiz or moderated discussion forum (locked or moderated so other students cannot see each other’s submissions before they post their own).

1. Pop a quiz

Quizzes can be used as “curve busters” or opportunities for students to earn extra points and improve their grades. Pop quizzes are unannounced and can be inserted at any time into your online course. Quizzes can be timed and set to only display during a certain time period. Make sure to create an explanatory document which alerts students that a pop quiz might occur at any time and your expectations. Consider students’ outside time commitments and have disability accommodations ready (such as extended time allowances).

1. Direct an observation

Student observations may include writing field notes with detailed accounts of an event, objects, or people observed. They run the gamut of disciplines from artistic to scientific observations. The observation can be conducted as an offline activity with results reported or submitted online (See related: **Field Trip**). Alternatively, students can observe online behaviors, such as posts to public social networks. Course assignments and activities can be designed to prepare observation instruments, perform a short literature review, submit notes or memos, and present findings.

1. News articles

Topical news stories are a great source of teaching material. Relevant news stories can be used to connect course content to current events and relate learning to student interests. Students could post news article links to a forum, discuss their relevance, and make specific connections to readings. Alternatively, students could pick a news story, trend, or issue and post assignments related to their topic. For example, a student could become an expert in the economics of South Africa by reviewing an assigned list of periodicals for a certain period of time, completing a series of assignments designed to probe the topic, leading a discussion, and writing a white paper to synthesize their findings.

1. Brainstorm

This is a technique for generating new ideas and promoting creative thinking. It can also be useful to help develop ideas for projects and encourage shy or reluctant students or solve problems. Brainstorming can be conducted online on a forum or through video chat with specific outcomes detailed (e.g., a list or mind map). See related: **Chalkboard/whiteboard**.

1. Build consensus

Students can begin to build a consensus by looking for key themes of a given topic and posting their position to a forum. Next, students read each other’s messages, look for an ideal framework, and post a message supporting more than one position. Alternatively, students can post a message supporting more than one position. Finally, there is a debrief, discussion, and final evaluation.

A specific example of this technique is the [Jigsaw method](https://www.cultofpedagogy.com/jigsaw-teaching-strategy/). It is a useful for encouraging cooperation. In a Jigsaw activity, students are first arranged in “expert” groups, with each small group responsible for solving part of a problem or learning about a specific topic. Students are then rearranged in “Jigsaw” groups (with one person from each of the expert groups) and are expected to find an overall solution or share their findings more generally. At the end of the activity, each group reports their overall solution or findings to the other groups. This can be organized as an online activity using video chat, emails, or discussion forums. Careful planning, explanation, and course document set up is necessary to have this flow well and in a timely way. Tip: As an online activity, the best results occur when the instructor assigns members to groups and assigns roles within the groups in advance, rather than letting student self-select into groups, and work out roles (and assessment of each role) ahead of time.

1. Buzz groups

Students are divided into sub-groups of 3-6 people time to discuss an assigned topic or to solve a problem. A representative is sometimes selected from each sub-group to report the findings to the entire group. It allows for total participation by group members through small clusters of participants, followed by discussion of the entire group. It is used as a technique to get participation from every individual in the group. This can be done through break-out groups in video chat or in sub-forums.

1. Case histories

[Case teaching](https://teachingcommons.stanford.edu/resources/learning/learning-activities/case-method-teaching) presents authentic, concrete problems for students to analyze. Teaching cases have long been a cornerstone of professional training in schools of business, law, and medicine. It provides models of how to think professionally about problems. Online case studies or histories can be set up as activities for individual or small group work. See related: **Simulations** and **Role-playing.**

1. Chain story, poem, article

The instructor starts with an introductory prompt, e.g., “One morning, Ben got up and went to work.” Students are invited to continue by adding their own content. Each person adds to the previous person’s response, ending on a cliff-hanger phrase such as, “but suddenly...” or “but when he opened the door, he saw...” This works for poems, articles, dialogue, creative writing, vocabulary, or imaginary case studies. It can be set up as a discussion with the class as a whole or in small groups. Every time a person logs in to the forum, they add to the story.

1. Chain math or science problem

A teacher or student poses a multi-staged problem which one student after another offers one step in its solution. Consider doing this in small groups. Jeopardy-style variation: students are given a list of solutions and asked to create the problem to which it is the answer. The instructor can provide guidance on what type of problem the solution answers (e.g., a quadratic equation). Each person is responsible for adding a step to the solution or problem. This can be done on a forum or through a collaborative document (e.g., Google Doc, Office 365) – just be sure to have students mark their specific additions (through color coding, adding a comment, or leaving their initials).

1. Charts or infographics

Visuals can be created using various software programs (Excel, Google Sheets, Canva). Students can create visuals either as standalone documents or as supportive materials to another presentation or paper.

1. Chalkboard/whiteboard

Teachers or students can use annotations to outline, summarize, and highlight concepts and information. Most video chat software includes whiteboards or other note-related capabilities. Invite students to fill-in-the-blanks, correct sentences, or do other mark-up activities.

1. Conduct a survey

Devise a survey instrument to use inside or outside class. For example, a professor-created survey could examine student attitudes or perceptions of their online course experience for a mid-semester class evaluation. Alternatively, polls can be used in a particular course-related topic to test retention. Students can also work in small groups to design instruments that they then implement and return to the group or class and report on their results.

1. Demonstration

An instructor or student can demonstrate a concept, procedure, or technique. You can record a short video and post online in a forum or through video chat. Alternatively, students can create slides with audio (e.g., voice-over PowerPoints). This works well with application goals, such as showcasing techniques, producing code, or more general troubleshooting.

1. Discussion

Lively online discussion fosters democratic participation and enhances learning if set up and facilitated well. The instructor and a group of students can consider a topic, issue, theory, or problem and exchange information, experiences, ideas, opinions, reactions, and conclusions with one another. Teaching by online discussion can be an extremely effective means of helping students apply abstract ideas, think critically about what they are learning, and how to use and evaluate online and other resources to support their positions. However, expectations for posts need to be extremely clear (e.g., length, what to include, number of responses and what replies should include). Additional help with discussions is available through the [Discussion Doctor infographic](https://lauramarch.com/portfolio-item/discussion-doctor/).

Variation: **Student-led online discussions**. Ask students to create open-ended and provocative discussion prompts and respond to their peers. They can also provide peer-evaluations of posts. Again, instructors need to make sure students understand what is expected and how they will be evaluated. Students must be clear on how to take a position and support it. See related: **Questions and answers**.

1. Film/video

Instead of relying solely on text sources, use videos to build background for particular topics or motivate student reaction and analysis. Films, videos, podcasts, and other free multimedia be found online through YouTube, Khan Academy, LinkedIn Learning, Netflix, Amazon Prime, Hulu and other services. Often, school libraries can stream video from their collection into your online course space. Alternatively, you can ask students to create their own video tutorials. After all, the best way to learn is to teach.

1. Group activity

There is a nearly endless list of group and collaborative activities you can do in the online classroom. The **group discussion**, for example, provides an opportunity for pooling of ideas, experience, and knowledge. Be sure to create clear evaluation guidelines for each role in a group.

1. Games

Use games to teach everything from art to zoology and are only limited by the imagination. Online or offline games can be used. Students can work individually or in small groups. Consider asking students to create their own games on a topic as well.

1. Journaling

Journal entries provide students an opportunity to make observations and reflect on their learning or development of a skill. This can be periodically turned in to the instructor or submitted to the instructor on more regular intervals. Journaling can also be done in pairs or small groups with peer review intervals.

1. Laboratory

Ask students to apply what they have learned. Labs can be set up as online experiments using simulation websites or software, or as in-person activities (with students conducting an experiment and then reporting their findings). Send out lab packets either with all materials required (or listed out with links for purchase). This can include anything from seeds to sprout to a dead cat for dissection. Set-up for this activity is rigorous and essential.

1. Learning teams

This method encourages participation from students in the learning process, provides shared support among students, and promotes individual preparation prior to class. Use sub-forums, collaborative documents, or breakout rooms in video chats to facilitate team-based activities. Learning teams work as support networks and can define their goals (e.g., creating a project of their choosing, evaluating each other’s work, writing group notes). Variation: **Study Groups**.

1. Maps

Concept maps or diagrams can be to explain concepts and can be student- or instructor-generated. Consider asking students to create flow charts or mind maps using slide software (e.g., PowerPoint or Google Slides) and evaluate their peers’ creations.

1. Memorization

There are many memory techniques students can devise, learn about, and practice as online or offline activities. In a course requiring memorization, the self-test is a useful study tool to help students self-assess. Alternatively, you can use a program like [Quizlet](https://quizlet.com/features/flashcards) to create and/or distribute virtual flashcards.

1. Models

Teaching and learning models add dimension to the learning environment even when they are abstract. In an online classroom, models can be used as examples to clarify what is expected from the student in terms of behavior, responses, quality of work, and more.

1. Object lesson

Ask students to select an object as a visual aid to serve as a discussion prompt for a related topic. An object can be physical (a spork, a family heirloom) or virtual (a meme, a webpage layout). Students should describe the object, how it is identified, its function, who uses it and how, and other reflections. This can also be used to describe scientific concepts.

1. Panels

Create an online panel discussion and a virtual conference using video chat software. Arrange students into small groups, given each a different topic, and set a hard time limit. Consider asking students to come up with a specified number of questions they must ask others during a Q&A time at the end of each panel. Variations: [Petch Kutcha](https://www.wired.com/2007/08/st-pechakucha/) and **Symposium**.

1. Paradox

This activity helps students move beyond the either/or binary toward both/and thinking. Present a paradox to individual students, small groups, or to the class in general (such how to foster autonomy and interdependence or deciding between quality, cost, and time). Paradoxes can be effective discussion forum starters, written assignment prompts, or small group activities. See related: **Puzzles**.

1. Peer Observation or Review

Student peer review is often used to increase the amount of feedback students receive on their writing and speaking assignments, but it can be applied to a variety of activities. Peer observations are different from peer review, as formative information to help a student improve, change, and grow as a writer is offered instead of ranking or final evaluation. Many online course sites allow anonymous peer review through assignment submission areas. Alternatively, this could take place on a discussion forum by asking each student to attach a draft to an original post and using replies to post their reviews.

1. Visual studies

Create and/or analyze images or other visual content. Instructors can publish pictures, diagrams, infographics online and/or ask students to annotate, analyze, document, or describe an image. Students can create their own virtual exhibitions, complete with a “museum catalogue” detailing their choices and analysis. Variation: students can take photographs, source images, or develop other multimedia.

1. Problem solving

Students solve given or self-generated problems individually or in groups. These can be submitted through an assignment area or on forums.

1. Projects

Projects be done individually, in pairs or groups, and be student- or teacher-designed. Activities can be completed online or offline with results reported back when completed. Examples include designing a historical monument, creating a guide for genetic testing, or developing a game. Learn more about [Project Based Learning by the NEA](http://www.nea.org/tools/16963.htm).

1. Puzzles

These cover all disciplines and may be verbal (written), mathematical, conceptual, or concrete. Puzzles can be effective discussion starters, written assignments, or small group activities. Many [examples of logic puzzles](https://parade.com/970343/parade/logic-puzzles/) are available for inspiration. See related: **Paradox** and **Games**.

1. Self-tests or reflections

Questions may be short essay, multi-part, matching, multiple choice, short answer, true/false, etc. See related: **Pop quiz** and **Journaling**.

1. Questions and answers

A variation on the [Socratic method](https://en.wikipedia.org/wiki/Socratic_method). This can be done with the entire class, in pairs, or groups and using video chat or forums. Student and teacher may reverse roles. See related: **Discussion**.

1. Report

An online report may occur in a variety of formats and may be delivered individually or as a group effort, to the entire class or to small groups, or to the instructor directly. The instructor must set up the location in the course website for reports and clearly document, how, when, and where reports are expected. Consider making an authentic report in the form of a professional white paper, journal article, or conference presentation.

1. Review

Reviews can various objects such as a book, article, performance, film, game, or even a lesson plan. Consider asking students to write their text as something could be posted to review website. Variation: **Peer Review**.

1. Role playing

Students can dramatize or act out a situation. This can be used as the basis of developing clearer insights into the feelings of people and/or environments. Online, a role play needs assigned roles and scenarios to set up the situation or incident (either originating from the instructor or chosen by students). A role play must be carefully planned and executed in an online course for it to work. See related: **Simulation** and **Skits**.

1. Skits

Skit writing can easily be incorporated into an online classroom – including science and math courses – to make concepts and ideas come alive. A skit can also be filmed and turned into the instructor for review and evaluation. Storyboards or early video drafts can also be posted to the class for peer review. See **Role playing** and **Skits**.

## 45. Simulations

Simulations create a rich environment where students actively become a part of a real-world system and function according to predetermined roles. Ask students to participate in a relevant activity done by professionals in your field. This might include simulating a U.N. Council Meeting, choosing which articles to be included in a journal, curating an exhibition, or developing a lesson plan. Defining and assigning roles, activity set-up, detailed explanations, and clear assessment must be provided ahead of time for this to work. See related: **Role Play**. Multimedia simulations can also be added to an online course to illustrate, explain, deconstruct a process, function, system, etc. Simulations may be embedded within a course website or through another online system. They can be used as part of a presentation, a component of test or quiz, or an introduction to a new topic.

## 46. Storytelling

This powerful teaching strategy can be used for coursework in any discipline and works particularly well for describing the historical background of a topic. Student can even create their own stories or children’s books on a specific topic. Variation: **Skits**.

## 47. Study groups

Students can be assigned to pairs or small groups to help each other out in the course for the entire duration of the course. Alternatively, study groups can rotate over time or with each change in topic. Ensure specific guidance is provided for evaluating study group work if you will be incorporating it as a graded activity. Variation: **Learning Teams**.

## 48. Symposium

An ancient Greek instructional technique, symposiums are discussions in which a main topic is broken into various phases. Each phase is presented in a brief and concise speech by a student who becomes an expert on a particular phase. Online, students can perfect their phase individually or in small groups through text-based discussion and assignments facilitated by the instructor and then present their finalized “speech” to the entire class through video chat.

## 49. Take a poll

This is a quick technique that can be used to take the pulse of the class, highlight differences of opinion or interpretation, and surface personal assumptions. Instructors can use instant feedback apps (e.g., [Poll Everywhere](https://www.polleverywhere.com/)), inside slides, or as quizzes within their course websites. Polls can also be used to take “attendance.” See related: **Survey**.

## 50. Testimonies

Personal testimonies bring life into any learning environment, such as an [introductory trust-building icebreaker](https://www.edweek.org/tm/articles/2018/08/15/first-day-school-sharing-stories-builds-trust.html?cmp=soc-tw-shr). Self-disclosure may also be easier for some students online due to the illusion of anonymity in a virtual course. Above all, ground rules need to be set up to establish expectations for confidentiality, online courteous behavior, and respect for each other.