[Video & Board] Games for Learning

Instructional Team:	Dr. Chris Quintana (Instructor), Daniel Pinedo (GSI), Christine McGee (GSI)
Class Location:	Prechter Lab, School of Education (Zoom meetings as needed)
Meeting Times:	Tuesdays or Thursdays, 10:30am-11:50am (depends on your section, discussed further in the separate Course Calendar Summary)
Email:	Best to message the instructional team through our Canvas site

Course Summary

Why are video and board games fun? The answer isn't as obvious as you might think. Good games draw you in, teach you how to succeed, and keep you engaged with a "just right" level of challenge. Most importantly, players learn while playing a well-designed game.

So...can other learning experiences—school, museum learning, hobbies, etc.—be like that?

This class will a close look at games and education. We will consider ways that each can be improved to maximize learning and performance. We will also tackle some larger questions in:

- What do you learn when you play a game? How do you learn when you play a game?
- Why do you play games?
- Do we see aspects of learning theory in games?
- Can we use games or principles from games to create interesting learning experiences?

This course is designed to be a unique and engaging learning experience that has a slightly different course structure than other courses you may have taken. In this course, you can do as many activities and assignments as you would like to build the grade you choose. Final grades are based on the "bundle" of assignments that you complete.

And yes...we will play some games! But we will also do some critical thinking around that game play to help us think about the larger issues around learning and education.

Course Objectives
- Explain what makes a successful game a good learning environment.
- Differentiate among core learning theories and explain how they manifest in different learning designs.
- Describe core motivational theories and how they shape engagement.
- Provide an informed critique of games in different forms for learning.
- Explain how empirical research and evaluation can be used to assess the relationship between games and learning.

Required Texts
- Cline, E. (2011). *Ready Player One*. New York, NY: Random House.
- A video, board, or role-playing game selected by you (and approved by the instructor).
- Other readings will be distributed through the course Canvas site

Finally, please remember that communication is ***key***. Always keep in touch with your instructor and graduate student instructor. If we don't know that you're having a problem, we can't help you! We are always happy to talk about stuff with you...even stuff that isn't related to the course.

Assignment Overview
More details about the different class assignments can be found later in the syllabus. However, the overview of the full menu of assignments is shown here to illustrate the grading policy:
- Class participation
- Reading annotations
- Op-Eds
- Game Selection form
- Learning Game Review paper
- *"Ready Player One"* Reflection assignment
- Game Play Design Critique Poster 1
- Game Play Design Critique Poster 2
- Game Reflection paper
- Individual Project
- Group Game Design Project

Grading Policy
We will be using a more streamlined grading policy this year that will focus on the satisfactory completion of assignments at a level of your choosing for a corresponding course grade. There will be no points awarded, per se, in assignment grading. You will see rubrics that define what constitutes satisfactory completion of each assignment. You will receive instructor feedback on the assignments, and there will also be some limited opportunities to resubmit assignments, if necessary, where you can address that feedback as you aim for the satisfactory completion mark.

This approach will center around three ***grade bundles*** that you can complete to determine your course grade and the use of ***tokens*** that give you some benefits. The bundles include:

A Bundle—To receive a course grade of A, you must satisfactorily complete the following requirements	• Class participation (no more than three absences)
	• Nine weeks of reading annotations
	• Game Selection Form
	• Learning Game Review Paper
	• *"Ready Player One"* Reflection Assignment
	• Two Game Play Design Critique Posters
	• Two Op-Eds
	• Game Reflection Paper
	• An Individual Project *or* Group Game Design Project

B+ Bundle—To receive a course grade of B+, you must satisfactorily complete the following requirements	• Class participation (no more than three absences)
	• Seven weeks of reading annotations
	• Game Selection Form
	• Learning Game Review Paper
	• *"Ready Player One"* Reflection Assignment
	• One Game Play Design Critique Poster
	• One Op-Ed
	• Game Reflection Paper
	• An Individual Project *or* Group Game Design Project

B Bundle—To receive a course grade of B, you must satisfactorily complete the following requirements	• Class participation (no more than three absences)
	• Seven weeks of reading annotations
	• Game Selection Form
	• Learning Game Review Paper
	• *"Ready Player One"* Reflection Assignment
	• One Game Play Design Critique Poster*
	• One Op-Ed*
	• Game Reflection Paper
	• **[Optional]** An Individual Project *or* Group Game Design Project (this would replace both of the starred assignments above)

C+ Bundle—To receive a course grade of C+, you must satisfactorily complete the following requirements	• Class participation (no more than three absences)
	• Five weeks of reading annotations
	• Game Selection Form
	• Learning Game Review Paper
	• Game Reflection Paper

Along with the grade bundles, you will also have the option to use a number of *tokens* in the class. Each of you will receive **5 tokens** at the beginning of the semester. You can spend one token to:

| Receive a 24-hour extension on an assignment due date | You must notify the instructional team that you wish to do this at any time before the assignment due date or within the "24-hours late" window, but you can only have one 24-hour extension per assignment.

If you do submit your assignment late within the 24-hour window, the instructional team will not grade your assignment until you notify them that you are spending a token for the extension.

Assignments submitted after the "24 hours late" window will not be graded, nor can they be excused with a token. |
|---|---|

Receive one week to revise a graded assignment for resubmission	You have one week from the time a grade *is released* to notify the instructional team that you are spending a token for the re-submission. No assignment will be re-graded after this one-week period. You may discuss any grade with the instructional team, but you must wait at least 24 hours after the assignment is returned to you to make any re-submission. In order to be eligible for re-grading, an assignment must be completed when originally submitted and be a reasonable attempt to meet the requirements as stated in the assignment rubric. Incomplete or shoddy work may not be resubmitted. Resubmission must be accompanied by a cover sheet specifying all changes made in order to redress the problems noted in the original evaluation.
Excuse a class absence	You must notify the instructional team within 24 hours of the missed class that you wish to spend tokens to excuse the absence. **Note:** While one token is usually spent per class absence, *two tokens* will be required to cover each absence in the weeks for Topic 9 and Topic 12 of the course.

Course Policies

Course Changes
This can be a dynamic course and the syllabus may change at any time. The instructor will notify the class of changes when they occur, both in class and through Canvas. These may include additions or changes to the readings or assignments. Please pay close attention to class announcements to learn about any updates or changes!

Course Enrollment
Under no circumstances will "double registrations" be tolerated. Although students sometimes register for multiple overlapping courses prior to the start of the term as they consider their options, these conflicts must be resolved by the end of the first week.

Late Work
Assignments that is not submitted by their deadline are considered late and will require spending a token to be graded and considered for "satisfactory" status (see Tokens above).

Incomplete Assignments
Incomplete assignments should not be submitted as a means of sending in a "placeholder" to later resubmit the assignment by spending a token. As stated above, a reasonable attempt must be made to meet the requirements for "meets expectations" for the entire assignment. The instructor reserves the right not to grade incomplete assignments.

Policy on Original Work
Unless otherwise specified, all submitted work must be your own, original work. Any excerpts from the work of others must be clearly identified as a quotation, and a citation must be provided. It is also required that you produce original work for each assignment that you submit in this course. In other words, you should not reuse your own content from other assignments, either from other courses or from this course. The exception to this is the Game Selection Paper and Game Design Critiques which can all build towards your final Game Reflection Paper.

You may obtain copy editing assistance and you may discuss your ideas with others, but all substantive writing and ideas must be your own or be explicitly attributed to another. An exception is group work, which is assumed to be a collaboration by all group members.

See both the University policy on Academic Integrity and the LSA Office of the Assistant Dean (Student Academic Affairs) Standards of Academic Integrity for definitions of plagiarism, and associated consequences. Any violation of standards for academic integrity will result in severe penalties, which might range from failing an assignment to failing the course.

Accommodations for Students with Disabilities
If you need an accommodation for a disability, please let your instructor know at your earliest convenience. Some aspects of this course, such as the lecture format, in-class activities, and assignments may be modified to facilitate your participation and progress. As soon as you make us aware of your needs, we can work with the Office of Services for Students with Disabilities (SSD) to help determine appropriate accommodations. SSD (734–763–3000; http://ssd.umich.edu/ typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. We will treat any information you provide as private and confidential.

Information about Mental Health and Well-Being
The University of Michigan is committed to advancing the mental health and wellbeing of its students, while acknowledging that a variety of issues, such as strained relationships, increased anxiety, alcohol/drug problems, and depression, directly impacts students' academic performance.

If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, services are available. For help, contact Counseling and Psychological Services (CAPS) at (734) 764–8312 during and after hours, on weekends and holidays or through its counselors physically located in schools on both North and Central Campus. You may also consult University Health Service (UHS) at (732) 764–8320, or for alcohol or drug concerns, see this resource.

For a more comprehensive listing of the broad range of mental health services available on campus, please visit https://www.uhs.umich.edu/aodresources.

Gender Pronouns

All people have the right to be addressed in a way that aligns with their personal identity. In this course, we will share the name we preferred to be called, and if we choose, share the pronouns we wish to be addressed by. Also of note: there is an option to indicate your personal pronouns in Wolverine Access using the Gender Identity tab under Student Business.

General Comments on Assignments and Course Requirements

The assignment rubrics in Canvas will cover the details about what constitutes a satisfactory assignment for credit towards your game bundle. But there are some general comments and advice that apply to all your assignments in class that you should keep in mind.

Organization

All your written assignments should be well-organized and clearly presented. You can be creative with your paper titles, but they also should (preferably) incorporate the name of the game you may be writing about (more on that below in the assignment overviews) and clearly convey the content of your paper. You should use organizational elements in your paper, including an introduction and other headings that help you organize your paper in ways that help the reader.

Auxiliary Material

When describing a game, you should provide a good, clear overview of the game you are writing about. Do not take it for granted that your reader (include the instructional team!) will know the game you are discussing or the ideas that you are putting forth. If it helps clarify your paper, feel free to include representations of the game aspects you reference in your text, through the use of images (e.g., screenshots) or even videos in some of our digital assignments. If you do use images and figures, do remember to describe the image using a caption.

Style

Your assignments should use good style with prose that is well-written, clear, and easy to follow. Your paper should be free of major grammatical errors and typos. And while we all get burned now and then by autocorrect, you should also do your best to find and correct spelling errors. Overall, *be attentive to your writing*. Professionalism is important, and grammar, style, organization, and clarity do count.

Justifications

For all assignments, you should primarily and heavily draw heavily on readings from the entire course in justifying and supporting points you make, arguments you are forming, research rationale, design choices, etc. However, this does not mean you cannot draw on readings from outside the course, as long as they are substantive and relevant. There are instances in some assignments when you can offer your opinion, but for larger assignments, you should back up your claims with information from our readings, outside sources, etc.

Reference Format

You should use a format for references, citations, and headings that is used in academic settings and that you are familiar with. In education and the social sciences, American Psychological

Association (APA) format is the primary style that is used, so that would be our preferred choice. However, we realize that you may be coming from other units on campus and are working in fields have their own styles. If you use other formats, such as MLA, Harvard, ACM, etc., that is acceptable for your assignments. However, you should be consistent in your format choice, and formatting inconsistencies in your paper will need to be corrected.

Assignments Overview

This section provides an overview of the different assignment types for class. Please note that more details about assignment requirements, formats, and rubrics can be seen in Canvas.

Class Attendance and Participation

Note: Satisfactory class participation for all grade bundles involves
- No more than three absences
- Submitting substantive responses to all exit cards for classes you attend
- Being mindful in class, i.e., don't be doing email working on other assignments, looking at social networks, etc.

Class Participation

The goal of this course is to foster a learning community through shared experiences, stimulating group discussions, and engagement with common resources and materials. To be most productive, all members of the learning community (students and instructional team) should work at the edge of their understanding, interacting closely with one another in order to make progress on understanding course topics, themes, and concepts. The realization of this vision requires that you fully commit to the class and participate.

To earn full credit for class attendance and active participation, you are expected to be on time and fully present in class, and to actively engage in class activities. The instructors will track both your attendance and participation using digital **_knowledge check cards_** (Google form), which will include some short questions and reflections about the lectures you are viewing before class. We may also distribute digital **_exit cards_** (Google form) for you to complete after class that contains a couple of questions that relate to the topic for the day.

Learning through Reading and Writing

Reading Annotations

These should help you engage with the weekly readings in a dynamic and interactive manner to help you prepare for using the content of the readings in class discussions and other assignments throughout the semester. Each week you will have the opportunity to annotate the weekly readings using the **_Hypothes.is_** annotation tool. You can access these readings and Hypothes.is through Canvas. Hypothes.is is a social annotation tool, which allows you to select text from the readings and add comments to or ask questions about those selected excerpts. You can also

respond to the annotations of others and build on the ideas and insights of your peers. You are encouraged to use annotations to "build bridges" to other readings and ideas that are explored in the course. You are also encouraged to pose questions for us to pursue as a group. The instructor hopes that use of the social annotation tool will allow everyone to participate in a discussion about the weekly readings in ways that would be less feasible in a face-to-face setting. Please review the course schedule page for each week for instructions pertaining to use of Hypothes.is (e.g., specific tags to use that week).

Weekly cadence for reading annotations.
- You should read the articles and chapters for each week and create at least five annotations in Hypothes.is. You choose whether to annotate one reading or multiple readings. Just ensure that you contribute at least five annotations in total.
- Reading annotations for a given week are due each week by Sunday evening (Eastern time) so that we can see your comments in time for class. Please see the rubric in Canvas for more details about annotations.

For the purposes of this assignment, you can annotate readings in four ways:
- Comment or question about text you select
- Respond to or build on to an annotation by your peers
- Build bridges to other readings or ideas that are explored in class
- Pose question(s) for us to consider as a class

Op-Eds
Note: One Op-Ed is an option for the B grade bundle, and required for the B+ bundle. Two Op-Eds are required for the A grade bundle.

Each week, you have the opportunity to submit one ***Op-Ed***. We will be using Canvas Discussions to publish your op-eds, and therefore your writing will be viewable by the whole class. This makes the assignment more meaningful and should encourage you to do your best work. Furthermore, if you write a "publishable" piece, you are encouraged to submit your op-ed to a news outlet for an additional bonus, if accepted and published.

Op-Ed stands for *opposite the editorial*. An op-ed is an opinion piece contribute by a writer who is not a member of the newspaper's editorial board. The purpose of an Op-Ed is to influence public opinion by presenting a *convincing and well-researched argument* about a topic of public interest. Unlike other essay formats, Op-Eds do not present a "balanced" view that shows both sides of an issue. Instead, the Op-Ed should focus on one idea and express an opinion that is supported by facts. In most newspapers, Op-Eds are limited to about 700-1200 words.

Op-Eds should:
- Start with a memorable title
- Focus on a timely issue or topic that relates to themes from this course
- Use the first paragraph to grab the reader by taking a clear stance or position on the chosen issue or topic

- Support the argument with evidence from reputable sources (e.g., expert quotes,
- surveys, statistics, studies, examples)
- Use clear, concise language, and avoid jargon, clichés, and overly academic wording
- Use the last paragraph to leave a lasting impression
- Include a two-line biography of the author

Op-Eds can also:
- Take a position that is contrary to prevailing opinion
- Include stories, anecdotes, and personal experiences
- Offer a recommendation or solution to an issue or problem
- Be serious, light-hearted, or provocative

We will use the Op-Ed format in this class because it mirrors a real-world type of activity, that has the potential to be shared with a wide audience through publishing. You can use the following guiding questions to help you write your Op-Ed:
- Why should readers care?
- Why should readers care right now?
- This assignment format that does not specify a citation formatting. Instead you should reference sources as follows: "Educational games researcher Susan Gerard's work with students suggests..."

Bonus: If you are successful in publishing one of your Op-Eds from this class in a reputable news outlet (e.g., HuffPost), you will receive a bonus of *3 additional tokens* to use in class. The instructor reserves the right to determine if the news outlet is reputable or not.

Examples: [New York Times Opinion pieces](#)

Resources
- [Submitting an Op-Ed essay to the New York Times](#)
- [Pitching a HuffPost opinion piece](#)
- [How to Pitch to Us (The Chronicle of Higher Education)](#)

Weekly cadence: Each week's Op-Ed opportunity will be available from Monday at 12 am Eastern until Saturday at 11:59 pm Eastern.

Note: Op-eds *cannot* be resubmitted like other assignments (although you can revise and resubmit to another news outlet). The Canvas Discussion Board where you can submit Op-Eds opens September 12 and closes November 28.

"Ready Player One" Reflection Assignment
Due Date: March 18

We will discuss aspects of *Ready Player One* with some in-class activities in Topic 9 as we examine issues around schooling within virtual reality environments and motivation within

gaming environments. However, we will also circle back to *Ready Player One* in Topic 11 with this short reflection assignment that allow us to explore aspects of the book that allow us to interrogate issues of identity and gender. These issues are important to investigate as we think about "the people who play games" with the goal of ensuring that gaming environments are inclusive and welcoming to all.

In this assignment, you will respond to some reflection questions that we will develop, and you can address those questions in a short paper. You should **aim for a page length of 2-3 pages** in length, double spaced. Any figures and references you may use would not be included in page count.

Learning through Playing a Game

Game Selection Form (Google form)
Note: This is a required assignment for all grade bundles.
Due Date: January 21

For your first major assignment, you will choose a game that you will play over the course of the semester. It can be a videogame, boardgame, or role-playing game (RPG).
- If you want to choose a videogame, it should be a Mac, PC, console, or mobile game (e.g., iOS/Android, DS, Wii or Switch, Xbox, Playstation, etc.).
- If you want to select a boardgame or RPG, it should be a complex, contemporary game, (i.e., the kind you might see at hobby board game store). For the boardgame option, you could select a traditional analog boardgame, or use a digital boardgame site (e.g., Tabletopia, Tabletop Simulator, Board Game Arena, etc.)

In either case, you should ***not*** pick an explicitly "educational" game. We want you to learn a complex game over the course of the semester, and then reflect back on how you learned the game. So the game you choose should have some complexity (i.e., more than we see in many educational games).

You are encouraged to choose a game that you think will be satisfying and motivating, but it must be a game that is new to you. In other words, if you're already a *World of Warcraft* player, please don't select *WoW* for this assignment; you need to choose a new game or a different genre of game altogether. If you play sports games (e.g., *Madden*), you can't just pick a different edition of *Madden* or another sports game. If you are an athlete, you cannot play a game related to your sport (e.g., soccer players cannot play *FIFA*). If you are a board game player and are familiar with worker placement games, you should think about another type of game. Think also about whether you suspect that the game will hold your interest for the entire semester.

To prepare for your Game Selection Form, you should:
- Do a little research to determine if a game that you are interested in playing would be well-suited for the entire semester.

- Ideally, it might help to consult a couple online or print sources (e.g., gamer magazines, online reviews, or enthusiast websites) to inform your understanding of why this is a good game choice for you.
- Aim for a page length of 2-3 pages, double spaced. Any figures and references are not included in page count.

Just in case your choice is not a good fit for the class, hold off on any game purchases until you get feedback on this assignment! We will do our best to give you timely feedback on your game choice.

If you are looking for some game ideas, feel free to look at any online sources that can provide video game reviews or other video game news sites. Some video game possibilities include Destructoid, GamesRadar+, Metacritic, Gamespot. For boardgames, you could look at BoardGameGeek, The Dice Tower, The Opinionated Gamers, etc.—these are deep sites where you can browse highly rated games or search for specific games to give you more information. Or…feel free to talk to your instructor. And do not assume that you have to spend big money to get a game—you can certainly borrow games, and in the analog space, we might have ideas for low cost RPGs, print-and-play board games, and even the digital board game sites mentioned earlier.

Learning Game Review Paper
Note: You have two opportunities to do this assignment, but you should only select one. This assignment is part of all grade bundles.

Due Dates:
- Opportunity #1: February 11
- Opportunity #2: March 11

This class explores games that teach, but we don't have time to explore all of them. So we invite you to explore, play, and write a review of a game that is explicitly designed for education. You should **aim for a page length of 3-5 pages**, double spaced. Any figures and references are not included in page count

Before beginning this assignment, please complete an Approval Form (on Canvas) to get your game approved by the instructor in advance. This is to make sure that you have chosen an appropriate game, and that you have a good focus for your paper.

Where can you find these games? In terms of video games, you can start by looking at places like:
- https://www.brainpop.com/games/
- http://www.funbrain.com/

In terms of board games, there isn't necessarily a central board game repository to look at, but if you're interested in reviewing board games that can have more of an educational focus, please talk to your instructor for some possibilities.

Game Play Design Critique Posters
Note: One poster is an option for the B and B+ grade bundles. Two posters are a requirement for the A grade bundle.

Due Dates:
- Opportunity #1: February 25
- Opportunity #2: March 25

This assignment will be created in the style of an academic poster and will use a Google slide template (on Canvas). The benefit of the posters is that they can be used as the foundation for your final Game Reflection Paper—think of it as a way to start thinking about and drafting material that you will use for that paper.

The Game Play Design Critiques give you an opportunity to
- Reflect on what you are learning from the game you selected for the semester
- Identify aspects of the game that are contributing to your learning
- Connect these aspects to discussions, readings, and ideas we raise in class.

This assignment is meant to be flexible and allows you to choose various aspects of your game play to focus on in each poster. Critiques can take on a variety of forms, such as:
- A close reading of a particular moment in the game
- A broader (but focused) discussion of a particular game rule, narrative structure, character model, social phenomenon, etc.

For example, you could choose to:
- Present the World of Warcraft community's reactions and dealings with Gold farmers
- Describe the way that a game's tutorial level elegantly teaches players the game's "design grammar"
- Highlight elements of a game that are meant to promote "learning" and suggest ways you might evaluate that learning

Game Play Reflection Paper
Note: This is a required assignment for all grade bundles.
Due Date: April 15

This paper is a summation of your experiences with your selected game throughout the entire semester. The paper will be a complete analysis of your game play, with a focus on what you learned—and how you learned it—in the course of game play. The paper should address your experiences both within the game, and possibly around the game (e.g., experiences with fan communities).

If you've done a good job on your Game Play Design Critique(s), then you've already done most of the hard work! Now all you have to do is write a paper to synthesize your previous work,

integrate new work, and tie the whole experience together. You should **aim for a page length of 10-15 pages** in length, double spaced. Figures and references are not included in page count.

Deep Explorations

Individual Projects
Note: This assignment is an option for the B grade bundle. This **or** the Group Game Design Project are a requirement for the A and B+ grade bundles.

Due Date: April 1 (No foolin')

This project gives you the freedom to deeply explore a topic related to games and learning, and to connect your observations and insights to course themes (including motivation and learning theories). If there was an issue or topic raised in class that you would like to probe more deeply, this is your opportunity to do that. If there is a topic related to games and learning that we have not explored in class, this could be a chance for you to investigate that topic.

Before beginning this assignment, please complete an Approval Form (on Canvas) to have your Individual Project topic approved by the instructor in advance. This is to make sure that you have chosen an appropriate topic, and that you have a good focus for your project.

Unlike the Op-Ed assignment, here you should present multiple sides of an issue or topic in your introduction. However, once you have provided an introduction to the issue at hand, you are required to take a stance and make an argument about this issue or topic, which you must support with references to course readings, and perhaps other scholarly references. Your project should make an argument about games and learning, and that argument should be well-supported. Your final product should be a work of scholarship in its own right, in that it draws from and cites class readings, and perhaps references that you identify on your own or from the library.

Your project may take the form of a paper, or you can feel free to be creative (but scholarly) in other media. You could do a short film (or a script), a podcast, a comic, an infographic, etc. In terms of scope, if you write a more traditional academic paper, it should be at least 15 pages, double-spaced.

You can locate assignment exemplars within the Example Assignments folder, within the Files section of the course Canvas site.

Group Game Design Project
Note: This is an option for the B grade bundle. This **or** the Individual Project are a requirement for the A and B+ grade bundles.

Due Date: The last class meeting for your group (Team Sonic: April 12, Team Kirby: April 14)

In this project, you will work together with a group of your classmates on the design of a game that has well-defined learning objectives of the type that would be useful in K–12 education. You are not responsible for the actual development or prototyping of the game, though if you wish to do some development, you can certainly do that.

Note: Before beginning this assignment, please complete an Approval Form (on Canvas) to have your Group Game Design Project topic and group approved by the instructor in advance. This is to make sure that you have chosen an appropriate topic, and that you have a good focus for your project. Please have one group member submit the form; they should indicate who the group members are for this assignment.

You are responsible for forming your own group. A group must have 3-4 students (this will be strictly enforced). All group projects and teams must be approved by the instructor. This will be a group project, and you will be graded as a group. We will provide some group process support to help you structure this task.

In addition to submitting a written paper, you will also prepare a group presentation (with an accompanying poster) that will be shared at the end of the semester. Part of your grade will be a reflection of the quality of this presentation.