

Cli-Fi: Envisioning the Future through Climate Change Fiction

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1 Thematische Beschreibung der Unterrichtseinheit

1.1 Synopse

Das übergeordnete Ziel dieses Projekts ist zu zeigen, wie BNE am Beispiel des konkreten Themas Klimawandel in den Lehrplan des Fachs Englisch aufgenommen werden kann. Da Klimawandel das bestimmende Thema der jüngeren Generation sein wird, ist es wichtig, dass die SuS sich mit dem Thema in verschiedenen Kontexten auseinandersetzen. Im Folgenden wird eine Unterrichtseinheit beschrieben, in der die SuS in ausgewählte zeitgenössische Kurzgeschichten eingeführt werden, die kulturelle und soziale Dimensionen des Klimawandels thematisieren. Dabei lernen die SuS „Cli-Fi“ (*climate fiction*) kennen, die sich in den letzten Jahren als neue eigenständige Gattung etabliert hat, und eignen sich die im Fach Englisch geforderten Kompetenzen an.

1.2 Theoretische Grundlagen

1.2.1 Klimawandel als gesellschaftlich relevantes Thema

Wie bereits erwähnt, ist die Grundidee dieses Projekts, den Klimawandel im Englischunterricht zu thematisieren und den SuS dadurch einen weiteren Zugang zu diesem Thema zu ermöglichen. Es ist keine Übertreibung zu sagen, dass der Klimawandel für uns eine zentrale, wenn nicht sogar *die* zentrale Herausforderung des 21. Jahrhunderts darstellt. Die Daten zeigen, dass wir in den nächsten 30 Jahren auf dem Weg zu einer globalen Erwärmung von 1.5 °C und mehr sind¹ und dass dies gravierende Folgen haben wird, u.a. häufigere extreme Wetterphänomene, Dürren, Überschwemmungen, steigende Meeresspiegel und das Aussterben von Pflanzen- und Tierarten.² Klima-bedingte Veränderungen werden die Gesundheit von Menschen, ihre Lebensgrundlagen, Wasser- und Nahrungsmittelversorgung sowie die wirtschaftliche Entwicklung beeinträchtigen.³ Dabei werden Fragen der sozialen Gerechtigkeit und der ungleichmässigen Verteilung der negativen Auswirkungen globaler Erwärmung in den Vordergrund treten⁴. Weiter werden sich politisch instabile Verhältnisse verschlimmern und zu vermehrten Konflikten führen. Die Notwendigkeit, sich auch in der Schule kritisch mit dieser Thematik zu beschäftigen, liegt auf der Hand.

1.2.2 Klimawandel im Englischunterricht

Dass sich Jugendliche für Klimawandel interessieren, zeigt sich deutlich an ihrem wachsenden sozialen Engagement wie z.B. der Teilnahme an Klimastreiks, sowie an ihrer Begeisterung für Science-Fiction Bücher und Filme (z.B. *The Hunger Games*, *Divergent* und *The Maze Runner*), die durch den Klimawandel verursachte dystopische Welten darstellen. Mit dem Wissen, dass ein komplexes und zum Teil auch beängstigendes Thema wie der Klimawandel durch Geschichten geschickt behandelt werden kann, lässt sich eine Unterrichtseinheit basierend auf Cli-Fi-Kurzgeschichten gut planen.

¹ Intergovernmental Panel on Climate Change (IPCC). 2018. *Global warming of 1.5 °C. An IPCC Special Report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. S. 6
https://www.ipcc.ch/site/assets/uploads/sites/2/201807/SR15_SPM_version_stand_alone_LR.pdf

² IPCC. 2018. 9–10./

³ IPCC. 2018. 11

⁴ IPCC. 2018. 20

Im Sinne der Ausführungen zum Fach Englisch im Lehrplan 17 ist das primäre Ziel der Unterrichtseinheit, die sprachlichen, literarischen und interkulturellen Kompetenzen der SuS zu erweitern. Dies erfolgt durch das Lesen und die kritische Analyse von Texten und die Auseinandersetzung mit den „kulturellen, historischen und sozialen Zusammenhängen des englischen Sprachraums“⁵. In dieser Hinsicht bietet der Englischunterricht viel Raum, um gesellschaftlich relevante Themen wie den Klimawandel zu behandeln. Durch Geschichten entdecken die SuS neue Welten, lernen andere Sichtweisen kennen und können ihre eigenen Standpunkte in die Geschichten einbringen. Speziell der Englischunterricht bietet ausgezeichnete Möglichkeiten, durch Lektüre die Beziehungen zwischen Menschen und ihre Interaktion mit der Umwelt besser zu verstehen. Dadurch werden die SuS ermuntert, auch ihre eigenen Werte zu reflektieren. Das Behandeln des Klimawandels im Englischunterricht ist also eine wichtige Ergänzung zu den naturwissenschaftlichen Fächern.

Dieses Projekt zielt darauf ab, durch geeignete Kurzgeschichten BNE nahtlos in den Lehrplan zu integrieren. Das Behandeln eines komplexen und vielschichtigen Themas wie der Klimawandel fördert viele Schlüsselkompetenzen wie vernetzendes Denken, kritisches Denken, das Verstehen anderer Perspektiven und das Reflektieren eigener Werte und Haltungen. Diese sind auch für das Fach Englisch wichtig.

1.2.3 Der Stellenwert von Cli-Fi in Zeiten des Klimawandels

Die Bezeichnung Cli-fi, der 2008 vom Autor Dan Bloom geprägt wurde, hat sich in den letzten Jahren als eine neue Gattung etabliert. Das Hauptmerkmal von Cli-Fi-Literatur ist, dass es sich im Wesentlichen um menschenverursachten Klimawandel handelt. Die Geschichten können in der Vergangenheit, in der Gegenwart oder in der Zukunft spielen. Sie sind nicht zwingend dystopisch, obwohl viele solcher Werke eher dystopisch als utopisch sind⁶.

Die Kurzgeschichten für diese Unterrichtseinheit stammen aus den Anthologien *Everything Change. An Anthology of Climate Fiction* (2016) und *I'm With the Bears: Short Stories from a Damaged Planet* (2011). *Everything Change* besteht aus Kurzgeschichten, die als Beiträge für einen Klimainitiative-Wettbewerb von eher wenig bekannten Schriftstellern aus aller Welt geschrieben wurden. Der Titel der Anthologie nimmt Bezug auf ein Zitat von Margaret Atwood, die für den Klimawandel die weniger einschränkende Bezeichnung „everything change“ gegenüber „climate change“ bevorzugt. Entsprechend befassen sich die Kurzgeschichten in dieser Sammlung mit den vielfältigen und weitreichenden Auswirkungen eines sich verändernden Planeten. Die SuS lesen Nathaniel Richs „Hermie“, die von einer Begegnung eines Mannes mit einem Einsiedlerkrebs, mit dem er in seiner Kindheit gespielt hat, erzählt. In ihrem Gespräch stellt es sich heraus, dass der Einsiedlerkrebs Hermie infolge des Klimawandels kein Zuhause mehr hat. In der Kurzgeschichte „LOSD and Fount“ von Henrietta Hartl geht es um die letzten beiden Bewohner auf einer Insel, die aufgrund des steigenden Meeresspiegels langsam verschwindet. Die Geschichte wird aus der ungewöhnlichen Perspektive des einen Bewohners, einer künstlichen Intelligenz, erzählt.

Die Kurzgeschichtensammlung *I'm With the Bears* enthält Texte von bekannten Schriftstellern, u.a. von Margaret Atwood, Kim Stanley Robinson und David Mitchell. Dass die Lizenzgebühren vom Verkauf des Buchs an eine Organisation gespendet werden, die für die Reduktion der CO₂-

⁵ LP 17, 41.

⁶ Bekannte Romane sind Kim Stanley Robinsons *New York 2140*, Nathaniel Richs *Odds Against Tomorrow* und Barabara Kingsolvers *Flight Behavior*.

Emissionen kämpft, ist einer der Gründe dafür, dass gerade diese Anthologie für die Unterrichtseinheit ausgewählt wurde. So dient das Buch zugleich als Beispiel, wie es möglich ist, auch durch kleinere Taten etwas zur Verbesserung der Umwelt beizutragen. Aus dieser Sammlung werden die SuS eine Kurzgeschichte von Atwood lesen.

Diese Kurzgeschichten zeigen die Notwendigkeit der Vorstellungskraft, die für die Gestaltung und Verwirklichung einer nachhaltigen Zukunft benötigt wird. Im Rahmen dieser Unterrichtseinheit bekommen die SuS Gelegenheit, miteinander und mit den Texten ins Gespräch zu kommen, anderen ihre eigenen Visionen für die Zukunft mitzuteilen und die Zukunft zusammen zu gestalten. Dieser Prozess der Reflektion und des kritischen Denkens dient dazu, dem Gefühl der Verzweiflung und der Überwältigung etwas entgegenzusetzen, dem die SuS durch die Medienflut mit ihren Debatten über den Klimawandel ausgesetzt sind. Durch den reflektierenden Umgang mit den Kurzgeschichten sehen die SuS auch die Hoffnung in den Geschichten und können so dazu motiviert werden, ihre Rolle als *agents of change* wahrzunehmen.

2 Zielsetzungen

2.1 BNE-Zielsetzung

Bei der Planung eines BNE-bezogenen Projekts sollte man sich über den Zweck einer BNE im Klaren sein, denn das Verständnis von BNE bestimmt die Umsetzung. Meine Ansicht dazu ist, dass BNE die Entwicklung einer spezifischen Weltanschauung fördert, die eine bewusste Auseinandersetzung mit ethischen und sozialen Aspekten unseres Daseins und mit Werten erfordert, die eine nachhaltige Entwicklung ermöglichen. Wichtiger noch ist der Grundgedanke, dass durch Themen, die in einer BNE aufgegriffen werden, die Möglichkeit zum kritischen, reflektierten Denken über eigene Werte sowie bestehende Machtverhältnisse entsteht. Dadurch gelingt es uns, zu einer neuen, von der Nachhaltigkeit geprägten, Weltanschauung zu kommen, die uns in die Lage versetzt, eigenständig und mit Selbstwirksamkeit nach Lösungen zu suchen und Änderung zu bewirken.

Die Art und Weise, wie wir die Welt wahrnehmen, beeinflusst die Vorstellung von unserer Rolle in ihr. Geschichten bieten uns eine Möglichkeit, dieses Zusammenspiel näher zu betrachten und mit den gewonnenen Erkenntnissen bewusster umzugehen oder gar einen Paradigmenwechsel zu erleben. Wenn es um Klimawandel geht, reicht es also nicht, uns nur oder hauptsächlich mit wissenschaftlichen Erkenntnissen zu beschäftigen. Vielmehr braucht es ein Verständnis dafür, welche normativen Werten und Weltanschauungen zu den Konsequenzen des Klimawandels geführt haben und wie wir diese Verhaltensweisen ändern können, um eine nachhaltige Welt zu ermöglichen.

Angesichts dieser Überlegungen ist Bildung (Ziel 4 der UNO-Nachhaltigkeitsziele) ein zentrales Anliegen dieser Unterrichtseinheit. Durch die kritische Auseinandersetzung mit narrativen Texten werden die SuS aufgefordert, sich die Welt neu vorzustellen und sie anhand ihrer Visionen auch neu zu gestalten. Dabei erkennen sie „nachhaltige Lebensweisen“ und entwickeln eine „Wertschätzung kultureller Vielfalt und des Beitrags der Kultur zu nachhaltiger Entwicklung.“⁷ Zusammen mit diesem Ziel werden Ziel 10 „Weniger Ungleichheiten“, Ziel 13 „Massnahmen zum Klimaschutz“ und Ziel 14 „Leben unter Wasser“ in der Unterrichtseinheit einbezogen.

⁷ <https://www.eda.admin.ch/agenda2030/de/home/agenda-2030/die-17-ziele-fuer-eine-nachhaltige-entwicklung/ziel-4-inklusive-gleichberechtigte-und-hochwertige-bildung.html>

2.2 Fachliche Zielsetzung

Die folgende Tabelle gibt eine grobe Übersicht über die Hauptthemen der Lektionen sowie über die entsprechenden BNE- und fachlichen Zielsetzungen und Kompetenzen.

Lektion	Thema	Fachliche Ziele & Kompetenzen	BNE-Ziele und Kompetenzen
1	Thinking about climate change – Part I: Prior knowledge and preconceptions What is our relationship with the natural world?	Students use appropriate vocabulary to talk and write about their views of the natural world and climate change	Students reflect on their relationship with the natural world and recognize normative views about nature. (SDG 4 & 13)
2 & 3	Thinking about climate change – Part II: The science behind climate change: key terms; ecological and social impacts; policies and solutions	Students use relevant vocabulary to explain the science behind climate change. Students independently conduct research on specific climate change-related topics. Students gain digital literacy.	Students understand the science behind climate change and its ecological and social impacts. (SDG 4 & 13)
4	Introduction to <i>cli-fi</i> – “Hermie” Climate change impact on marine ecosystems: case study	Students can define and describe the genre of <i>cli-fi</i> .	Students understand fiction as a powerful way to frame climate change discourse. (SDG 4, 13, & 14)
5	“Hermie” – Feeling for others The power of storytelling: emotions, values, and imagination	Students use their creative writing skills to intervene in climate fiction.	Students examine and assess normative values and their role in climate (in)action. Students understand how specific ecosystems are affected by climate change. (SDG 4 & 14)
6	Climate change: rising sea levels and climate refugees The politics of climate change: case studies	Students practice their speaking skills through debating the politically charged topic of climate refugees.	Students understand systems thinking and can apply it to climate change topics. (SDG 10 & 13)
7	“LOSD and Fount” – campaigning for coastal communities Campaigning for climate action	Students practice writing skills and perspective taking while role-playing campaigning.	Students can adopt other perspectives and develop empathy for climate refugees. (SDG 4 & 13)

Lektion	Thema	Fachliche Ziele & Kompetenzen	BNE-Ziele und Kompetenzen
8	Envisioning Change – Part 1 Intergenerational equity	Students learn about actual creative projects addressing climate change and how these projects reflect the interdependent nature of generations.	Students adopt and practice future-oriented positive thinking. (SDG 4)
9	Envisioning the future – Part 2: “Time Capsule Found on a Dead Planet” Rhetorical analysis for climate action	Students engage with digital media to produce their own texts on climate change.	Students adopt and practice future-oriented positive thinking. (SDG 4)
10 & 11	Illuminating the future	Students collaborate to plan and execute an exhibition.	Students can motivate themselves and others to organize an event to raise climate change awareness. (SDG 4 & 13)

3 Form der Unterrichtseinheit

3.1 Rahmenbedingungen

Diese Unterrichtseinheit umfasst 11 Lektionen, die zum Teil als Doppellektionen verteilt über ca. 7 bis 8 Wochen durchgeführt werden. Sie eignet sich für SuS der Gym 3 & 4, welche über sehr gute Englischkenntnisse verfügen, und insbesondere für bilingual oder immersiv unterrichtete Klassen.

3.2 Methodisches Vorgehen

Zum Einstieg in die jeweiligen Themen:

- Brainstorming zu Begriffen und Ideen
- Warm-Up-Aktivitäten basierend auf Inputs von Hausaufgaben

Zur Erarbeitung der Themen und Texte:

- Gruppendiskussionen anhand von vorbereiteten Leitfragen
- Gruppenrecherchen- und -präsentationen
- Gruppenpuzzle
- Debatten
- Gallery Walk (Marktplatz)

Zur Ergebnissicherung:

- schriftliche Reflexionsarbeiten
- Digitale Produkte
- Peer-Reviews
- Ausstellung

4 Didaktische Prinzipien

4.1 Kritisches Denken

Damit BNE nicht auf der Ebene der blossen Faktenvermittlung verbleibt, müssen entsprechende geeignete didaktische Mittel eingesetzt werden, um die BNE-Ziele zu erreichen. Zudem ist auch wichtig, dass die SuS einen persönlichen Zugang zum Thema finden. Die Kernidee dieser Unterrichtseinheit ist, einen solchen Zugang durch die Auseinandersetzung mit fiktiven Erzählungen zu ermöglichen.

Deshalb stützt sich diese Unterrichtseinheit auf die innovative Methode der „textual intervention“⁸. Bei dieser Methode geht es um eine Aufgabenstellung, die den SuS viel Raum für Kreativität, kritisches Denken und Engagement eröffnet. Demnach interagieren die Lernenden mit den Kurzgeschichten, indem sie eine Umgestaltung oder eine Umschreibung vornehmen und die daraus folgenden Auswirkungen für die Bedeutung des Originaltexts untersuchen. Die SuS werden immer wieder aufgefordert, ihre Reaktionen zu den Texten durch schriftliche Arbeiten zu reflektieren und sich den anderen Perspektiven, die in den Geschichten vorkommen oder von den anderen SuS vertreten werden, bewusst zu werden. Durch diesen persönlichen wie gemeinsamen Austausch mit den Texten gewinnen die SuS unerwartete und überraschende Einsichten.

4.2 Zukunftsorientierung

Zukunftsorientierung wird sowohl durch die Strategie der „textual intervention“ als auch durch die Begegnungen mit Projekten, die sich mit Massnahmen zur Bekämpfung des Klimawandels befassen, ermöglicht. Die in dieser Unterrichtseinheit vorgestellten Projekte dienen als konkrete Beispiele für die SuS, um zu zeigen, wie es möglich ist, auf kreative Art ein komplexes, schwieriges Thema wie Klimahandel so zu behandeln, dass es andere inspiriert und motiviert, sich stärker zu engagieren. Auch die selbständige Erarbeitung eines Projekts, das die eigene Vision der Zukunft darstellt, und dessen Ausstellung in der Schule dient der Stärkung der Zukunftsorientierung und dem Fördern der Selbstwirksamkeit.

4.3 Systemdenken

Bei einem so komplexen Thema wie Klimawandel ist die Fähigkeit wichtig, dessen Komplexität als Ganzes zu wahrzunehmen, und ebenso die vielen miteinander verbundenen Teile des Systems. Die ausgewählten Kurzgeschichten zeigen, dass der Klimawandel ein globales Problem mit verschiedener Ausprägung lokaler Dimensionen ist. In den Texten werden die SuS mit verschiedenen Perspektiven, Erfahrungen und Werten konfrontiert. Diese sollen sie analysieren und verstehen und dabei selber eine eigene Meinung entwickeln.

⁸ Pope, Rob. (1995). *Textual Intervention: Critical and Creative Strategies for Literary Studies*. London: Routledge.

5 (Er)Kenntnisse, Fähigkeiten und Erfahrungen aus der Perspektive der SuS

Um eine nachhaltige Welt zu gestalten, muss man zuerst in der Lage sein, sich diese auch vorzustellen. Das ist die wichtigste Erkenntnis, die die SuS bis zum Schluss der Unterrichtseinheit gewinnen sollen. Sie sollen vor allem das Gefühl der Selbstwirksamkeit durch ihre Teilnahme am Diskurs über den Klimawandel erleben und davon überzeugt sein, dass selbst ein vermutlich kleiner Akt der Phantasie zu grossen Veränderungen beitragen kann. Dies werden sie durch die schriftlichen Reflexionsarbeiten und durch die Ausstellung, die sie gemeinsam planen und durchführen, erleben. Die Fähigkeit, literarische Werke kritisch zu analysieren, sei es durch die Analyse von rhetorischen Mitteln oder durch die vertiefte Auseinandersetzung mit den Figuren und ihren Motivationen, werden sie auch in anderen Kontexten einsetzen können. Auch die Fähigkeit, sich selbständig in ein Thema einzuarbeiten und anderen das Gelernte zu präsentieren, werden die SuS erwerben. Durch die vielen Gruppenarbeiten lernen sie, was es bedeutet, an einer demokratischen Gesellschaft teilzunehmen, in der gegensätzliche Ideen in einem gemeinsamen Forum besprochen und erarbeitet werden. Die dabei entstehenden Schwierigkeiten sollten als natürlicher Teil eines demokratischen Prozesses betrachtet werden.

Lesson 1: Thinking about climate change – Part I: Prior knowledge and preconceptions

Learning goals

- Students use appropriate vocabulary to reflect on their relationship with the natural world and on how it informs their view of climate change

Lesson overview

- Think-Pair-Share Warm-up
 - The lesson begins with a short writing assignment in which students individually reflect on their relationship with the natural world. Aspects that can be addressed include elements of nature (plants, animals, seasons, places, events) as well as how our interactions with the natural world shape who we are and how we respond to the crisis of climate change (Handout 1).
 - Students work in pairs to share (compare and contrast) their views of nature.
 - The teacher leads a class discussion on common themes that may have emerged in this exercise. Questions pertaining to vocabulary will be clarified and a list of relevant words will be generated.
- Brainstorming
 - Using the online tool AnswerGarden, students will be prompted to brainstorm words, concepts, and images elicited by the phrase *climate change*.
- Group discussions
 - Students work in small groups to discuss the results of the brainstorming session. Guiding questions are provided on a handout. Students begin to formulate questions, identify areas of interest, and consider their current levels of activism and/or agency in relation to climate change. (Handout 2)
 - Results will be displayed on posters.
- Students present their ideas to the class. The teacher clarifies key terms and concepts as needed.

Materials

- Handouts
- Poster and writing utensils
- Laptop & projector
- Vocabulary list (digital document)

Assessment

- Formative assessment based on journal entries and observation of group and class discussions.

Homework

- View video “Climate Change 101 with Bill Nye”⁹ in preparation for the next lesson and complete the exercises on Handout 3.

Rationale

- Students begin their exploration of climate change by reflecting on their relationship with the natural world. Simply recalling memorable events or interactions with nature will prompt students to reflect on the significance of those events and how they can be used to construct a specific worldview. Sharing these stories provides a relevant entry point into the unit.

⁹ <https://video.nationalgeographic.com/video/news/101-videos/00000151-5a9a-dd5e-a751-7fdea1660000>

- The brainstorming exercise activates students' prior knowledge and offers them an opportunity to critically reflect on how their views of the natural world informs how they think about climate change. The activities and questions are designed to reveal and address preconceptions. This meta-cognitive strategy is a principal aspect of education for sustainability. Students are not only made aware of the limits or gaps in their knowledge, but are also given the tools to take an active role in constructing new and meaningful knowledge to help guide them on their path to developing a sustainability worldview.
- The results of the activities can be used to determine which topics/questions interest the students. An attempt will be made to incorporate these topics into subsequent lessons.
- Vocabulary can be introduced and explained in context.

Lessons 2 & 3: Thinking about climate change – Part II: The science

Learning goals

- Students understand the causes of climate change and its impacts on human and natural systems and can use relevant vocabulary to discuss specific aspects of climate change.
- Students reflect on how the representation of climate change through different media shapes our understanding of the issues.

Lesson overview

- Warm-up: In this exercise students work in groups to discuss their responses to the video assignment from Lesson 1.
- Jigsaw activity: Students are divided into groups of four. Each group selects a topic to research from the list on Handout 4. Within the groups, each individual will be the lead expert on a specific issue/topic. The groups will conduct research on their topics and create a multimedia factsheet using the web tool Glogster. The factsheets will appear as virtual posters with embedded audio, video, images, and text.
- Each group's factsheet will be posted on the class website and all students will be required to view the other groups' factsheets and submit a short feedback.

Materials

- Laptops and/or tablets
- Handouts

Assessment

- Group posters and peer reviews will be evaluated by the teacher.

Homework

- Students write a new journal entry responding to the assignment. Entries must include responses to other groups' virtual posters and address the questions on Handout 5.
- Students supplement the digital vocabulary list with words from their group projects.

Rationale

- The pedagogical approach underlying this double lesson is based on the principles of inquiry and collaboration to allow students to take control of their learning. Rather than directly teaching facts about climate change, students are given an opportunity to construct their own knowledge using critical thinking and digital literacy skills. In order to select information to present on their posters, students need to gather, organize, and evaluate relevant information. They must also be able to distinguish between climate change issues that are still controversial and those that have been established as fact by the scientific community. Finally, as leaders of their own projects, students will be better able to tap into the knowledge base and level of their peers and present information accordingly.
- The jigsaw strategy used in this lesson means that students benefit both from teaching their peers and learning from them. Each member of the group will act as an expert on a specific topic and support the other group members in researching their topics. Peer reviews of the virtual posters (factsheets) ensure that every student engages with all the information gathered and presented.
- The multimedia nature of the group project should motivate students to spend time exploring and learning about the topics. At the same time, students also learn critical media literacy skills by thinking about how to convey scientific information in a manner that recognizes both the potentials and limitations of digital media. The skills required in this lesson – using Glogster, doing Internet research, citing sources, using creative commons

licensed material – will already have been addressed in previous lessons. This lesson provides an opportunity for students to practice using these skills.

- The concepts learned in these lessons will lay the foundation for reading and analyzing short stories with climate change themes.

Lessons 4: Introduction to *cli-fi* – “Hermie”¹⁰

Learning goals

- Students are familiar with the characteristics and themes of the genre of cli-fi.
- Students analyze the formal and thematic features of “Hermie” and relate these to views about the natural world and climate change.

Lesson overview

- Warm-up game: The class will be divided into two teams, each of which chooses its own climate change-related team name. (The teacher will provide examples as needed: The Glaciers, The Coasters, The Carbon Busters, etc.) The teams will be given 3 minutes to brainstorm as many examples (books, films, poems, etc.) of what they think would qualify as cli-fi. After time is up, the groups compare their lists. Two points are awarded for each unique title listed by a group. Titles listed by both groups receive one point. Titles vetoed by either the groups or the teacher receive zero points. The groups can veto titles they feel do not qualify as cli-fi.
- The teacher comments on and, if necessary, supplements the list generated by the class. A definition of cli-fi and a brief historical account of its emergence is provided. This part of the lesson will be accompanied by a PowerPoint presentation. Using the list of examples, students will be encouraged to identify themes addressed by cli-fi.
- The short story “Hermie” is introduced and copies of the story are distributed to the class.
- Silent reading: Students read the short story “Hermie”.
- In small groups, students answer the discussion questions provided on Handout 6.
- Class discussion: Students share their views with the class and pose questions to each other and the teacher.

Materials

- PowerPoint presentation
- Copies of short story
- Handout 6

Assessment

- Formative assessment of students’ responses to questions on the handout.

Homework

- Re-read the story and take notes on climate-related themes.
- Research: Do a quick Internet search on hermit crabs and their habitat.

Rationale

- The seemingly small act of choosing a team name is intended to prime students to start thinking about what aspect of climate change is important to them. The brainstorming game should also help students become aware of their knowledge of cli-fi, even if they are not familiar with the term itself.
- The short story “Hermie” can be read in its entirety during class rather than being assigned as homework prior to this lesson. Students can read and immediately respond to the story through group discussions. They are required to use the literary terms they have already learned (characterization, narrative perspective, etc.) in previous lessons.
- Students reflect on the portrayal of nature and human interactions with nature, refer to climate change concepts they have learned about through their group research, and think

¹⁰ Rich, Nathaniel. (2011) “Hermie.” In: *I’m with the Bears: Short Stories from a Damaged Planet*. (Ed. Mark Martin). London: Verso. 91-99.

about how these concepts are presented in the story. They also consider how different narrative techniques affect how stories are told and how we respond to them.

- The homework assignment provides an opportunity to independently learn about a specific species and its habitat.

Lessons 5: “Hermie” – Feeling for others

Learning goals

- Students understand the science behind human-induced climate change and its impacts on a specific ecosystem.
- Students reflect on how normative values about how we should relate to others affects our relationship to the natural world and how we choose to act (or not to act) in the face of climate change.

Lesson overview

- Warm-up: Drawing on students’ inputs from their homework assignment as well as from their virtual posters, the teacher compiles a list of climate-related themes in “Hermie”. The list is displayed using the visualizer. Anticipated key phrases and words include the following: pollution and contamination of the oceans, urbanization and destruction of ecosystems, endangered species, extreme weather, coastal degradation. Students share and discuss textual evidence relating to these themes as well as the results of their individual research on hermit crabs and their habitats.
- The teacher introduces and explains the concept of systems thinking.
- Group work: In small groups, students discuss their answers to questions on Handout 7.
- Reflection: Students reflect on what the story means to them and if Hermie’s story changes their views on climate change. (Handout 8)
- The homework assignment for this lesson involves a textual intervention in which students imagine an alternative ending to the story. The premise of this intervention is the question: what if the coastal scientist is changed by his encounter with Hermie? Students’ stories will be posted on the class website. (Handout 9)

Materials

- Visualizer
- Handouts 7, 8, & 9

Assessment

- Formative assessment through observation of group discussions, responses to discussion questions, and journal entries.
- The textual intervention assignment will be graded.

Homework

- Textual intervention: Students write an alternative ending to the story.

Rationale

- This lesson aims to engage students in passionate conversations about climate change. By using fiction to address climate change topics, students can begin to appreciate that climate change is not an issue reserved solely for science class, but a complex and global problem with very real and very specific human and social dimensions. Students may be able to see their own emotions (fear, guilt, helplessness) reflected in the characters in the story without feeling completely overwhelmed. By intervening imaginatively in the text, students are able to exercise agency and be a part of the discourse on climate change.
- The concept of systems thinking provides students with a powerful critical thinking tool and triggers their natural curiosity about why things are the way they are and leading them to examine the roots of a problem. They learn the importance of taking a wider perspective on climate change topics and on the value of acknowledging the different stakeholders and their perspectives.

Lessons 6: Climate change: rising sea levels and climate refugees

Learning goals

- Students understand the link between climate change and migration by learning about coastal communities affected by rising sea levels and extreme weather.
- Students gain the language to speak about social justice and inequities related to climate change events.

Lesson overview

- Warm-up – The topic is introduced using the following prompts: What is a refugee? What is a refugee? What are some driving forces of migration? Students discuss these questions in pairs then share their ideas with the class.
- Students are divided into groups. Each group is assigned a media article describing communities around the world that have been affected by climate change-related disasters. After reading and discussing the articles, each group will prepare and deliver a 3 – 5 minute presentation summarizing the main ideas of the articles and identifying the major issues and problems.
- Debate – The terms “climate refugee,” “threat multiplier,” and “wicked problems” are introduced. Students discuss the consequences of climate change (food & water shortages, spread of diseases, financial burden of rebuilding and/or relocating), the challenges faced by these communities, and the difficulty in finding solutions for “wicked problems.” The class is divided into two groups to debate opposing viewpoints of the following statement: People displaced by climate-caused threats or disasters should be recognized as refugees and be given assistance and protection. One group will argue in favor of recognizing as refugees people forced to leave their homes due to rising sea levels or extreme weather events. The other group will argue that refugees often are forced to leave their homes due to multiple, non-climate-related factors, and that the label “climate refugee” is inaccurate.
- Post-debate discussion and reflection – The teacher leads the class in summarizing the issues raised during the debate. Students reflect on the topic by answering questions on Handout 10.

Materials

- Media articles

Assessment

- Formative assessment of group discussions, debate, and reflection.

Homework

- Students reflect on the topic by answering questions on Handout 10.

Rationale

- The topic of climate refugees is not only controversial (as students will realize from the articles they read) but also difficult to grasp. The concept of systems thinking introduced in the previous lesson should aid students to see the complexity of the issue. Because of the controversial nature of the topic, a moderated debate is an appropriate pedagogical tool that will allow students to hear different perspectives and reach a decision as to where they stand on the issue. The debate also gives students an opportunity to hone their speaking skills using relevant vocabulary. The ability to use language effectively, especially in a debate setting, can be an empowering experience for students.

Lesson 7 – “LOSD and Fount”¹¹ – Campaigning for coastal communities

Learning goals

- Students show empathy towards the plight faced by vulnerable populations by imaginatively campaigning on their behalf.

Lesson overview

- Warm-up – The teacher introduces the title of the short story. In pairs, students anticipate the theme of the story based on the word play in the title (LOSD and Fount / Lost and Found).
- Students read the short story “LOSD and Fount.”
- In groups, students discuss and answer the questions on Handout 11.
- As a class, students share their thoughts and questions about the short story as well as what climate change issues they see in their own lives and communities. They might refer to their experience with longer periods of heat waves during the summer or shorter ski seasons due to milder winters.
- The homework assignment for this lesson involves the creation of postcards for climate action (Handout 12). Students use what they have learned about rising sea levels and coastal communities to write postcards informing the world about the plight of these communities. Each student selects one community and writes a postcard that describes some of the main concerns and challenges faced by an individual in the community. The postcards will be posted to the class website.

Materials

- Copies of short story
- Handout 11, 12

Assessment

- Formative assessment of responses to discussion questions and postcards.

Homework

- Postcards for climate action.

Rationale

- This short story offers an unusual perspective on the effects of climate changes. Told from the viewpoint of an artificial intelligence (AI) that collects scientific data on climate change, the AI could also be understood as a symbol of those who either do not have the means to leave their homes or do not want to do so. Similarly, Fount might symbolize those who might choose to leave their homes but face significant, perhaps insurmountable, challenges. Fount’s repeated attempts to build a boat speaks to the material difficulties faced by vulnerable communities. As such, the story evokes feelings of empathy for displaced people and offers a critique of the inequities in the impacts of climate change.
- The story aids in bridging the gap between the perception of climate change as something that happens in other places – which is often the perception created by media representations of climate change disasters – and the reality of climate change in our own communities. The postcard writing assignment asks students to adopt the perspective of people (or other elements of the natural world) in climate change-affected areas. To do so, students need to do additional research in order to personalize their postcards. This process of research and perspective taking allows students to make connections between knowledge about climate change and the values and actions necessary to combat it.

¹¹ Hartl, Henrietta. “LOSD and Fount.” (2016). In: *Everything Change: An Anthology of Climate Fiction*. Ed. Manjana Milkoreit, Meredith Martinez, and Joey Eschrich. Arizona State University. p. 148–154.

Lesson 8: Envisioning Change – Part 1: Imagining climate action

Learning goals

- Students understand the value of thinking about the future and of engaging in creative visions of future worlds.
- Students understand the concept of intergenerational equity by learning about two projects that consider the impact of climate change on future generations

Lesson overview

- Drawing upon their experience in this unit on climate change fiction, students engage in a brainstorming session for the following prompts. Students write down words and phrases on colored pieces of paper and post these on the magnetic board in the classroom. The results are discussed as a class.
 - What role does art (and specifically fiction) play in society?
 - Has a work of art ever changed your views on something or caused you to actively advocate for change?
- The teacher introduces two actual projects, the Future Library project (<https://www.futurelibrary.no/>) and FutureCoast (<http://futurecoast.org/>), as examples of ways to creatively and actively participate in the discourse on climate change. (See “Rationale” for description of websites.)
- Gallery walk – 4 computer stations are set up in the classroom. At each of 3 stations, students can listen to and discuss one recording from FutureCoast. At the 4th station, students explore the Future Library project website and discuss the question of what knowledge or information should be preserved for the future. Students can talk about the kinds of stories that need to be told and why they might be important for future generations. Students should write down their thoughts and observations at each station for other students to comment on and supplement with new observations.
- Individually, students write a journal entry reflecting on what they have learned or found interesting about these projects. (Handout 13)

Materials

- Laptops / Tablets
- Handouts
- Colored slips of paper

Assessment

- Journal entries and active participation during gallery walk.

Rationale

- This lesson is designed to show students that the topic of climate change is as much about science as it is about cultural and social aspects. At the beginning of the unit students conducted research to understand the science behind climate change. Now they are being asked to think about how that scientific knowledge can be presented in a more personable way. The two projects selected for study in this lesson seek to make climate change a personal issue by telling stories rather than providing data. FutureCoast is a storytelling game in which the impact of climate change is explored through fictional voicemails from the future. The website includes voice recordings from various time periods experiencing varying degrees of climate change, which, due to a technical glitch in the messaging system from the future, are sent to our present time. Players can participate in the game by collecting voicemails through geocaching and using them to construct narratives of possible futures or by recording their own voice messages. The game shows students how climate change fiction can encourage dialogue through collaborative storytelling. The premise of the

Future Library project is the idea that a forest planted in Norway in 2014 will be transformed into 100 manuscripts, each of which will be solicited from writers worldwide. These manuscripts will be placed in a specially built room in a library in Oslo and will not be revealed to the world until 2114. The project itself is a vision of a future world in which artwork will be considered vital and knowledge can be transmitted to the next generation. The idea of art in and through nature that this project embodies is a useful concept to discuss with students as they navigate their own personal visions of the future.

- Thinking about the future and envisioning the changes allows students to consider how the present can impact the future. This can lead to insights about how current actions, decisions and choices can lead to future possibilities and how our ability to change our actions in the present can affect future outcomes.
- Talking about climate change through fiction offers access to the long view of climate change, thereby closing the temporal gap that makes climate change seem like a problem in the distant future rather than in the here and now.

Lesson 9: Envisioning the future – Part 2: Time capsules for climate action

Learning goals

- Students develop a positive future orientation and exercise agency through the creative process of envisioning a sustainable future and increasing their own and the public's awareness of climate change.
- Students use relevant literary terminology to analyze and produce text.
- Students use digital media to explore their understanding of texts as well as the ways in which different media can enhance or alter the way meaning is constructed through fiction.

Lesson overview

- Students read Margaret Atwood's short story "Time Capsule Found on the Dead Planet." In groups, students are assigned one part of Atwood's text corresponding to stages 1 through 5 of the story to analyze and present to the class. Instructions are provided on Handout 14. One part of the questions deal with the structure, formal elements of the text, and rhetorical devices employed by Atwood. A second part considers the portrayal of nature and the interaction of humans with the natural world. The teacher will review the necessary literary terminology with the class.
- Each group presents their discussion and analysis of their assigned texts. As a class, students comment on each group's input and piece together a coherent narrative of the story that reveals their collective understanding of it.
- Individual projects: Following the structure of Atwood's short story, students write flash fiction corresponding to a particular future world. They may choose to imagine a near or distant future, but all visions should serve as a counter-narrative to Atwood's bleak story. Each student's contribution will then be transformed using PowerPoint into an illuminated text – a slideshow with moving text, images, and sound – and posted on an online platform for students to view and comment on. Each product must also be accompanied by a short reflection explaining the motivation and meaning behind the text.

Materials

- Short story
- Laptops / Tablets

Assessment

- "Illuminated text" product with accompanying journal entry.

Homework

- Students view each other's projects and provide feedback.

Rationale

- Atwood's story serves as an example of "flash fiction" – an extremely short story – that provides one possible future outcome of a world ravaged by climate change. The story raises questions about what society values and how these values in turn affect views about the natural world. The discussion questions circle back to the first lesson in this unit in which students reflected on their relationship with nature and how that informs their understanding of climate change. Now students are asked to think about how the knowledge and values they have gained throughout the unit might spur them to action or, at the very least, inspire them to envision a radically different future from the one described by Atwood.
- To complete this exercise students will need to use correct literary terminology and understand how fiction can be a powerful tool to address climate change issues. Using

digital media to explore Atwood's text as well as to create their own texts helps sharpen media literacy and critical thinking skills.

- The time capsule project allows students to intervene creatively in what is usually a very science-based discourse on climate change action by introducing a personal, social, and cultural dimension. Envisioning a positive future necessarily entails thinking about what needs to change or be done in the present. Thus, it is an important step in helping students become more solution-oriented.

Lessons 10 & 11: Illuminating the future

Learning goals

- Students reflect on their products (illuminated texts) and understand how each of their visions contributes to a greater vision of climate action.
- Students collaborate to plan and arrange a public exhibition of their final products.

Lesson overview

- In this double lesson, students begin by reflecting on their individual products and the feedback they have received from their peers. As a class, they begin to organize and arrange the texts in a format that reveals a specific narrative or vision that they as a group share. Alternatively, they could arrange the texts by theme or by time periods imagined in each project. Guiding questions are provided on Handout 15.

Materials

- Room with necessary infrastructure; laptops/computers/screens; headsets

Assessment

- Formative assessment for active participation in the planning and execution of the exhibition.

Rationale

- The final products will be displayed in the form of an exhibition open to the public. Students and their families will be notified about the dates and times of the exhibition. The exhibition room will be set up for the students, but the students themselves will be responsible for arranging the specific set-up of the computers and any other material they need. This final project gives students an opportunity to showcase their work and at the same time to help raise awareness of climate change. The feedback and impressions they collect will serve as an important form of affirmation for the value of their work. By sharing their visions with a wider public, students gain a sense of agency and a feeling of not being completely powerless in the face of big questions about climate change.
- The project requires a great deal of collaboration and discussion. While arriving at a common vision or organizing principle for the exhibition might prove difficult, students will experience what it means to work together to reach a common goal, practice their critical thinking skills, and participate in a value-oriented way.

Handout 1 – Questions for journal entry

1. Describe your relationship with the natural world. You can write about elements of nature that are particularly important to you such as plants, seasons, animals, specific places, or events.
2. Think about how your interactions with the natural world have shaped or influenced who you are, and how they may inform your views on climate change.
3. What responsibilities, if any, do you have toward nature?

Handout 3 – Response to Video “Climate Change 101 with Bill Nye”

Write a new journal entry in which you respond to the video. Did it affect you emotionally? Did you find the facts presented surprising? Convincing? Interesting? Puzzling?

Look up unfamiliar vocabulary and add it to the vocabulary list.

Handout 4 – Jigsaw activity: Research topics

Group 1: Definitions

- the Anthropocene; the Anthroposphere
- the 5 Earth systems: atmosphere (gas), hydrosphere (water), geosphere (land), cryosphere (ice), biosphere (life)
- global warming
- climate vs. weather
- the greenhouse effect
- climate drivers

Group 2: Anthropogenic climate drivers

- greenhouse gas emissions (agricultural practices, fossil fuels, deforestation, etc.)
- sulfate aerosols
- carbon footprint
- ecological footprint

Group 3: Natural climate drivers

- volcanic eruptions
- solar variation
- orbital shift
- albedo

Group 4: Social impacts of climate change

- climate migrants/refugees
- food insecurity
- water shortage
- health issues (proliferation of diseases, rising temperatures)
- increase in poverty and inequality

Group 5: Ecological effects of climate change

- rising sea levels
- glacial melt
- desertification and ocean acidification
- loss of biodiversity & species extinction
- loss of ecosystems
- extreme weather events

Group 6: Proposed solutions and policies

- The Paris Agreement
- renewable energy, mobility, better and efficient infrastructure
- personal lifestyle changes (less consumption, more recycling, veganism/vegetarianism)
- carbon pricing, geoengineering
- conservation, restoration

Handout 6 – Discussion questions, Part 1: “Hermie”

1. What is the story about? (Explain in 3 sentences or less.)

2. Provide a characterization (appearance, personality traits, profession, motivation, thoughts, feelings) of the narrator and Hermie. Cite evidence from the text relying on direct and indirect characterization.
 - a) the narrator

 - b) Hermie

3. What narrative perspective does the author use in this story? How does this affect your understanding of the story? Your feelings towards the characters?

4. Describe the different places (some real, some imagined) in the story. The following are pointers to help you identify them.
 - a) Where is the narrator when the story starts? Where does the narrator live?

 - b) What place holds a special significance for the narrator?

 - c) Hermie and the narrator reminisce about the past. Describe the natural world in this vision.

 - d) Where is Hermie’s home?

5. Describe the relationship between the narrator and Hermie. Compare and contrast their views of nature. Are they similar to or different from your view? (Refer to your journal entry on your relationship with the natural world.)

Handout 7 – Discussion questions, Part 2: “Hermie”

6. Refer to your notes from question 4 (Handout 6) to answer the following:
 - a) Explain the irony in the narrator’s occupation (marine biologist) and his response to Hermie’s story.

 - b) How do the following pairs of images reflect different views and values of nature?
 - i. calm blue ocean / Hermie’s home now

 - ii. the clean bathroom / Hermie’s appearance

 - iii. the rational, scientist narrator / the talking crab; imaginary childhood pet

 - iv. the narrator’s childhood at the beach / the narrator’s daughter’s possible future

7. What various human impacts on coastal environments is Hermie referring to in the following statement?: “The whole key is disappearing. Everywhere there is sticky water, sharp unnatural pebbles, and invisible seaweed that tastes awful.” (p. 95–96). Present your answer in the form of a diagram that exposes the hidden connections between different systems (economic, ecological, social, personal).

8. Does the narrator really see/talk to Hermie? Is there an alternative explanation for what transpires in the bathroom? Why does the narrator stop seeing/playing with Hermie as a child? What does that tell us about society’s values?

9. What does the narrator value most and how is this revealed in his interactions with Hermie? To answer this question, consider the following aspects: the narrator’s emotional reaction to Hermie; his job; his desire for success & recognition; his attitude to uncomfortable topics/questions.

Handout 8: Reflection on “Hermie”

What is your interpretation of the ending? Do you agree with or approve of how the narrator responded to Hermie’s plight? Why or why not? After reading this story, how would you describe your position on climate change? Do you feel optimistic and motivated? Helpless and confused? Angry but determined? Look at your diagram from question 7 on Handout 7 and reflect on what you have learned from this exercise.

Handout 9: Textual intervention – Writing alternative stories

Read the following passage from the ending of “Hermie” and provide an alternative ending to the story that takes into account the changes introduced below. You can write the ending as a story or you can simply describe what happens in your version of the story. Regardless of which option you select, you must provide a half-page analysis of (a) how your version of the story helps you understand aspects of the base text (“Hermie”) in a new way and (b) why you made the changes you did.

“I was back on Turtle Beach, holding my red plastic pail, my feet breaded with the fine yellow sand, the rush of the tide powerful in my ears, the sun hot on my face.” ***I knew then what I had to do. Hermie was gone, but the future could still be saved.***

Handout 10: Post-debate reflection

1. What are the different ways that climate change can lead to migration? Consider short-term or local changes (such as weather patterns) as well as long-term, global changes (rising temperatures).
2. How does climate change negatively impact other dimensions of human life (economic opportunities, political stability, livelihoods)?
3. Are we morally obligated to assist climate refugees? Who should be held accountable (Governments? Nations? Individuals?)
4. Consider the multiple stakeholders and multiple interests that emerge in discussing the topic of climate refugees. There are no clear and simple solutions to such a problem. What small-scale or innovative solutions did you read about? What solutions would you propose?

Handout 11 – Discussion questions “LOSD and Fount”

1. Who are the characters in the story? Why are they on the island?
2. What do you think LOSD means when he says, “The island has become very small” (p. 150)?
3. What do you learn from Fount (and from LOSD) about the reasons people choose to ignore the real effects of climate change?
4. What do you learn about the unequal distribution of climate change impacts? How have different parts of the island, and the people who were once on it, been affected by rising sea levels?
5. What is significant (or symbolic) about Fount’s repeated attempts to build the boat?
6. What is your interpretation of LOSD’s actions? What does LOSD symbolize? What does Fount symbolize?

Handout 12 – Postcard for climate action

Select a coastal community that is currently experiencing the effects of climate change. After doing additional research on your chosen community, assume the role of an inhabitant of this coastal region and write a postcard to the world describing your personal experience of climate change-related disasters. Alternatively, you could speak from a more unusual perspective such as a plant, an animal, or the very land on which the community lives. Your perspective could be an account of how rising sea levels have disrupted your daily life, destroyed property and infrastructure, or changed your vision for the future. Your postcard should be accompanied by an image (a photo or illustration).

Handout 13: Reflections on FutureCoast and the Future Library project

Write a journal entry reflecting on what you have learned about the role of art/fiction from either one or both of these projects. Where is the value in telling stories about a future world affected by climate change? How does the issue of intergenerational equity factor into this? What messages of hope do you see in these projects? What new perspectives do you have on climate change as a result of listening to some of these stories?

Handout 14 – Discussion questions: “Time Capsule Found on the Dead Planet”

For each stage depicted in the story, explain the role and value of the natural world to the people. How does their view of nature define their relationships to each other? To their world? Extrapolate from the concrete examples provided in the passages to come up with your own visions of what these societies are like. Below are additional questions to consider.

Part 1: Structure and language (rhetorical devices)

Do a close reading of your assigned text. Consider its effect on you: are you emotionally moved? Convinced? Indifferent? Spurred to action? Hopeful? Now consider Atwood’s use of language and how it contributes to this effect. If applicable, refer to the following concepts in your analysis: ethos, pathos, logos; metaphor; simile; personification; anaphora; antithesis.

Part 2: Textual analysis

Stage 1: Consider the relationship between people and their gods and how this relationship defines how people interact with the natural world.

Stage 2: What role does money play at this stage? What role does the natural world play?

Stage 3: How has money become a god? What has happened to nature?

Stage 4: Why do you think Atwood uses the metaphor of a “desert” to describe the world at this stage? Does this desert-world become a new god? Is there any hope for the future?

Stage 5: Is the message in the cylinder a hopeful one? Is the natural world lost forever?

Handout 15 – Guiding questions for “Illuminating the Future” exhibition

Your task in this double lesson is to plan and organize an exhibition in which your illuminated texts will be presented to the public. You will be provided with a room containing the necessary infrastructure (computers and headsets). The exhibition will run for an entire week, but the texts will be available for viewing during set times of 1 to 2 hours in order to use energy sparingly.

As a class, determine the order of the viewing process: Which illuminated text will introduce the exhibition? Which will conclude the event? What narrative will the texts tell together? Your selection will affect how visitors will be directed to move through the room, from one computer to another, and how they will understand your visions. Use the questions below to help plan this event.

1. Begin by reflecting on your illuminated text. What message does it convey? How would you characterize your vision of the future?
2. How does your text engage with themes presented in the other illuminated texts? Do you see parallels and/or similarities? Contrasts? Consider various aspects of the texts such as themes, time periods, perspectives, etc. to determine how to organize them into a coherent narrative.
3. As a class, discuss your answers to question 2 and agree on the organizing principle of the exhibition. Arrange the texts in the order in which they will appear at the exhibition.
4. If you want to hear viewers' impressions of the event, come up with a way to elicit their comments. Will they leave notes on slips of paper provided at each computer station? On a whiteboard which you can place strategically in the room? Record an audio message on a computer that you will set up for that purpose?
5. Design a flyer to advertise your event.

Appendix A: Media Articles

Articles on coastal communities affected by climate change

Isle de Jean Charles, Louisiana

<https://www.nytimes.com/2016/05/03/us/resettling-the-first-american-climate-refugees.html>

<https://www.theguardian.com/environment/2016/mar/15/louisiana-isle-de-jean-charles-island-sea-level-resettlement>

Newtok, Alaska

<https://thinkprogress.org/newtok-alaska-gets-relocation-funding-35b4434242a6/>

<https://www.theguardian.com/environment/interactive/2013/may/13/newtok-alaska-climate-change-refugees>

Kiribati

<https://www.theguardian.com/world/2017/may/14/our-country-will-vanish-pacific-islanders-bring-desperate-message-to-australia>

<https://www.theguardian.com/world/2017/oct/23/waiting-for-the-tide-to-turn-kiribatis-fight-for-survival>

<https://www.nytimes.com/2016/07/03/world/asia/climate-change-kiribati.html>

Fairbourne, Wales

<https://www.commondreams.org/news/2019/05/27/residents-welsh-village-set-become-uks-first-climate-refugees-soon-2042>

Dhaka

<https://www.theguardian.com/cities/2015/dec/01/dhaka-city-climate-refugees-reality>

Appendix B: Short Stories

Atwood, M. (2011). "Time Capsule Found on the Dead Planet." In: M. Martin (Ed.). *I'm with the Bears: Short Stories from a Damaged Planet*. New York: Verso. p. 191-193.

Hartl, Henrietta. (2016) "LOSD and Fount." In: *Everything Change: An Anthology of Climate Fiction*. Ed. Manjana Milkoreit, Meredith Martinez, and Joey Eschrich. Arizona State University. p. 148-154.

Rich, N. (2011). "Hermie." In M. Martin (Ed.). *I'm with the Bears: Short Stories from a Damaged Planet*. New York: Verso. p. 91-99.