Chasing Ice

Feedback Report

March 20, 2013

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Mix Description

Engineering Instructor Naoko Ellis contacted Natalie Baloy at UBC Mix to ask for assistance planning a film screening of the documentary *Chasing Ice*. Naoko Ellis teaches *CHBE 573: Environmental Engineering and Sustainability*. She had seen the film and thought her students and other students at UBC would benefit from watching it. Naoko also contacted Eric Mazzi, who teaches *CEEN 550: Energy Efficiency and Conservation* and *CEEN 596: Projects and Report* this term, and George Hoberg.

UBC Mix arranged to match funding from Eric's department to pay for the film's public screening permissions and licensing rights. A doodle poll was shared with students in Naoko and Eric's classes to identify what date and time to screen the film.

Date/Time

Wednesday, March 20th, 2:00-4:00pm

Location

WOOD 1

Mix Partners

At Naoko's request, Natalie searched the course catalogue for potential partner courses to invite students from other disciplines to participate. Instructors from geography/geology and Film Studies were most responsive. The following instructors invited their students:

- Christopher Gallagher, FIPR 233: Video Production I
- Julia Christensen, GEOG 497: The Arctic
- Michele Koppes, GEOB 408: Snow and Ice Processes

Christopher Gallagher elected to bring his whole class as their course time overlapped and he felt it would be a beneficial learning opportunity for them.

Promotion

Natalie booked a classroom through Classroom Services, and set up an Eventbrite page to monitor student participation. In total, 61 students registered on Eventbrite.

Eventbrite link: http://ubcchasingice.eventbrite.com/

Eventbrite text:

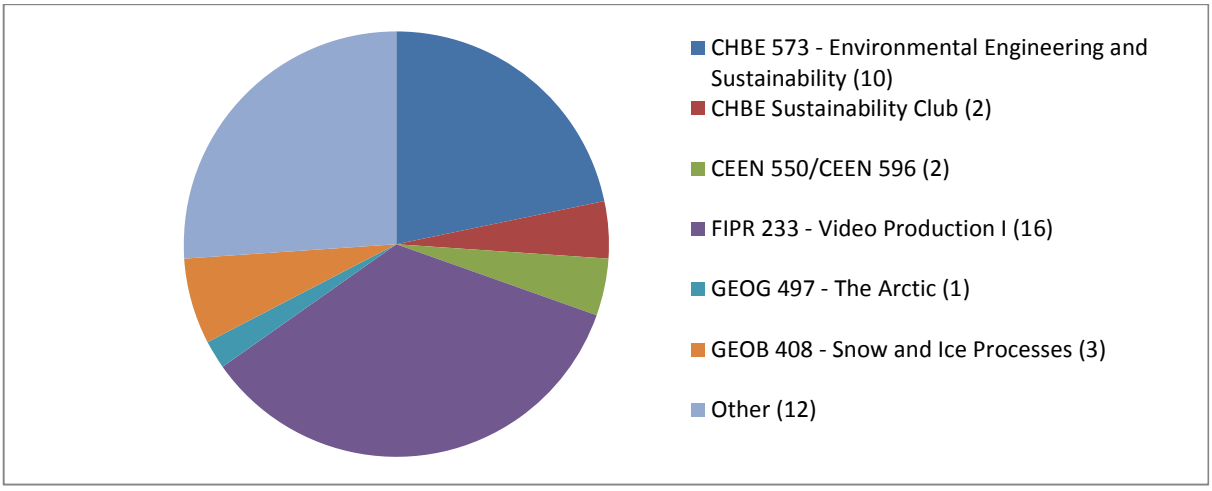
You're invited to join us for an upcoming film screening and interdisciplinary student discussion. This event is hosted by UBC Mix, Dr. Naoko Ellis and her students in CHBE 573: Environmental Engineering and Sustainability, and Dr. Eric Mazzi and his students in Clean Energy Engineering. On Wednesday, March 20th, from 2-4pm, we will be screening *Chasing Ice*, an award-winning documentary on National Geographic photographer James Balog' journey across the Arctic to film time-lapsed images of glaciers, melting, and a changing landscape. Following the film screening, students will engage in an interdisciplinary discussion related to the production of the film and its themes.

Post-Event Discussion

Naoko inquired about the possibility of creating a discussion space for students to continue to engage with discussion topics after the film. Natalie created a UBC blog for this purpose (http://blogs.ubc.ca/chasingice/). So far very few students are using the blog, possibly because of difficulties accessing it.

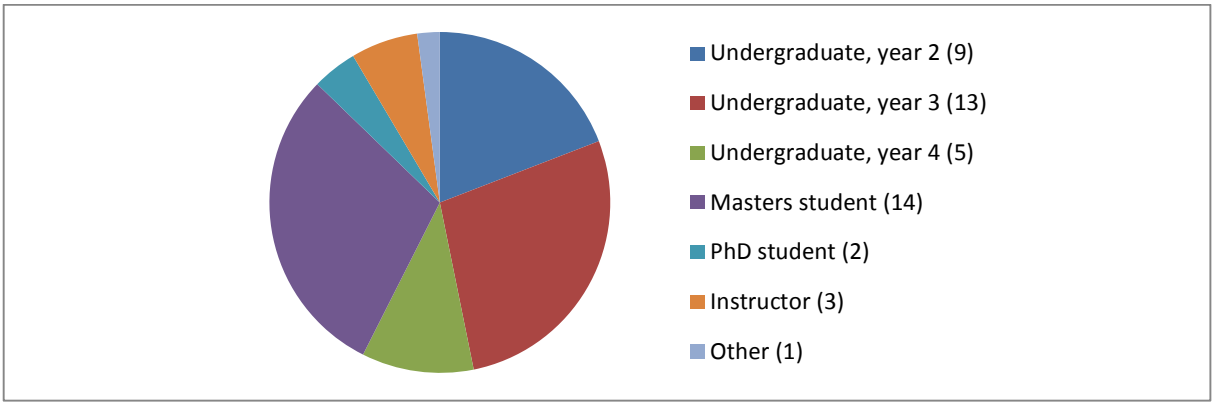
Mix Feedback: Respondent Profile (47 respondents)

Which course are you involved in that participated in this Mix?



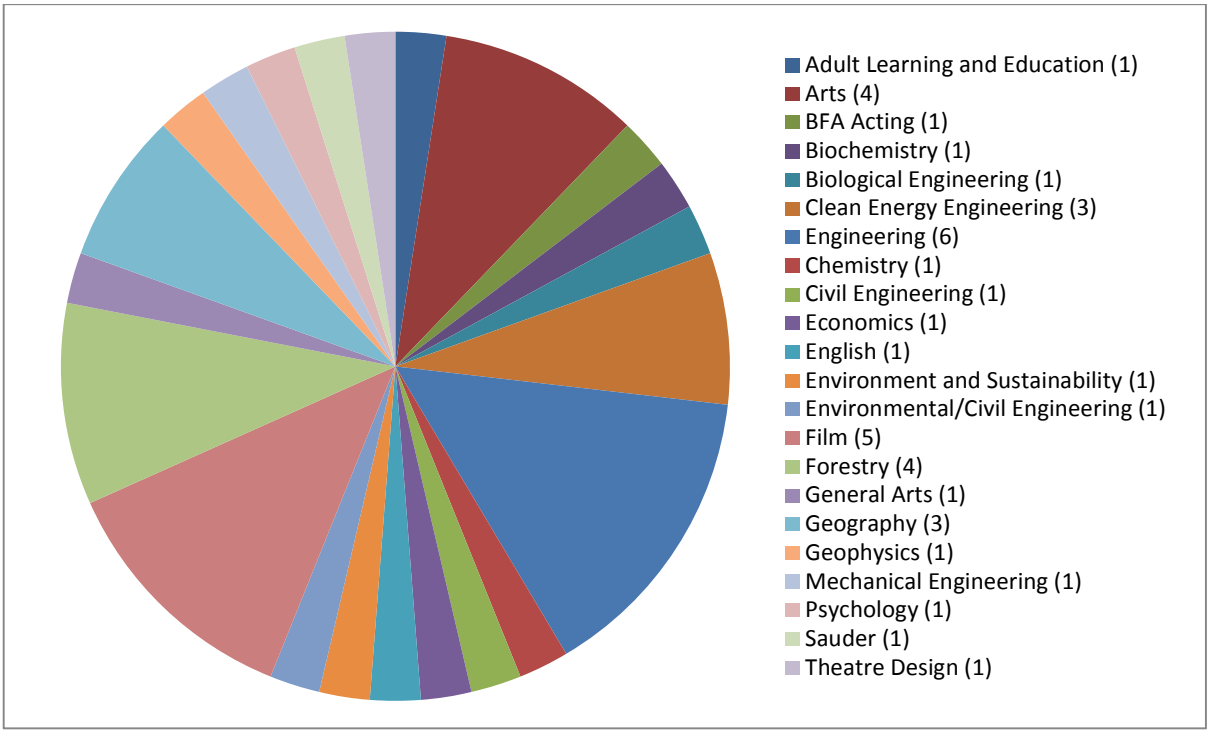
Note: Students in the 'Other' category learned about the event through friends (including members of the Exchange Student Club), family, Facebook, and professors. Two of the ten respondents for CHBE 573 are also members of the CHBE Sustainability Club.

What is your level of study or position at the university?



Note: Seven respondents identified themselves as exchange students.

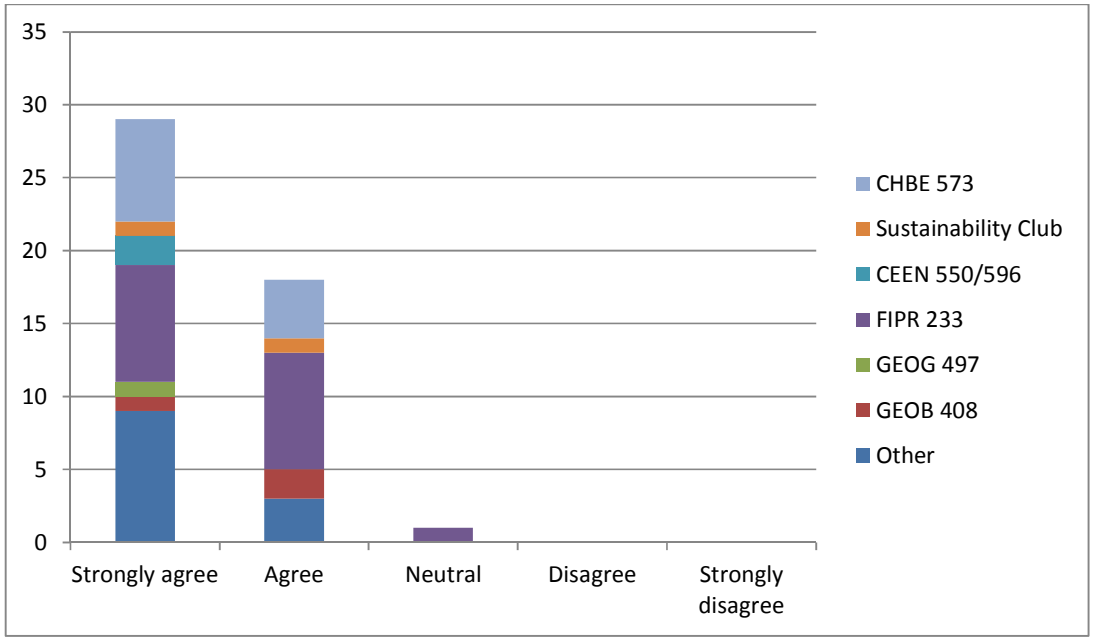
What is your major, program, or department?



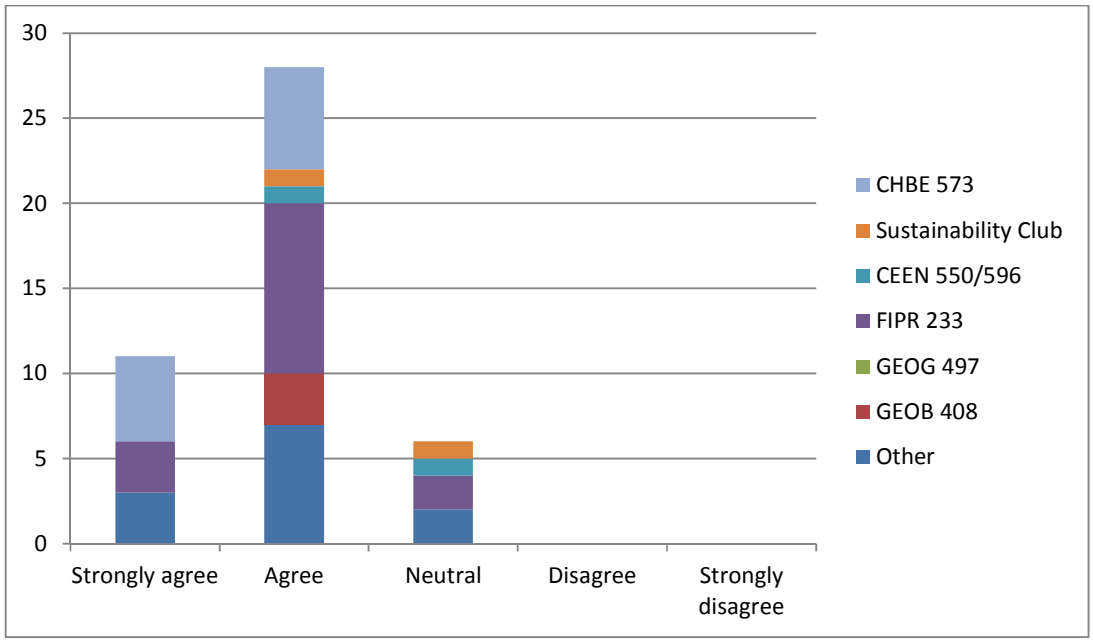
Interdisciplinary values

Please indicate your agreement with the following statements.

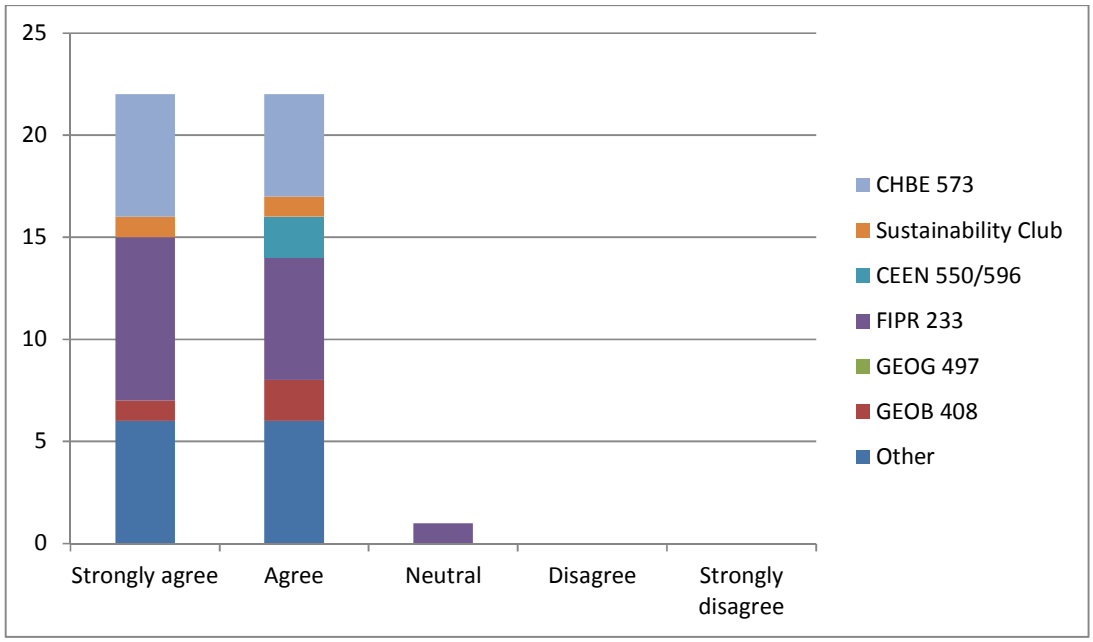
This event was educationally valuable to me.



The interdisciplinary nature of this event enhanced my learning.



In general, connecting with students and instructors in other disciplines enriches my education.



Qualitative Responses

What does interdisciplinary learning mean for you?

Please share your thoughts on the values, challenges, and possibilities for interdisciplinary learning. We also welcome your own definitions of interdisciplinary learning.

Note: Nine respondents did not answer this question.

Definitions

- Interdisciplinary, to me, means taking two disciplines, or fields of study, and combining them to focus on a specific field of interest in which the two studies play vital roles. For me, I would like to combine documentary filmmaking and environmental studies to bring awareness to my audience on important things and changes happening around the world. (FIPR 233)
- Definition: to share ideas and thoughts on a subject by people coming from different backgrounds, holding different perspectives, where ideas are presented in a way that one has never thought of before, and it really broadens your perspective (CHBE 573)
- Definition: learn about how different backgrounds interact in a way to find solutions for humanity's problems (CHBE 573)
- I am in an interdisciplinary program, so I'm very familiar with the concept. I think it is the embodiment of university life, gathering as much different knowledge as possible (FIPR 233)
- It means to make connection between the disciplines. I learned w/other disciplines. It always makes what I learned richer and sometimes can create new discipline. (FIPR 233)
- I think interdisciplinary learning is incredibly valuable. To me, it means seeking out opportunities to learn about topics surrounding a different area of study. These learnings can do nothing but supplement and advance what you already know. Promotes a more well-rounded education!

Different points of view/Perspective

- Interesting to see different reactions/approaches to same issues
- Discussing and debating with students who have different opinions and perspectives
- I feel that having a well-rounded education is one of the most important aspects of attending a university. Working and engaging with people of different disciplines and backgrounds helps me to gain perspective on a variety of issues and academic fields. (FIPR 233)
- Nice to get different perspectives (CHBE 573)
- Definition: to share ideas and thoughts on a subject by people coming from different backgrounds, holding different perspectives, where ideas are presented in a way that one has never thought of before, and it really broadens your perspective (CHBE 573)
- To have the opportunity to listen other point of views about the same topic (CEEN 550/596)
- A great opportunity to communicate based on one topic from a different perspective (FIPR 233)
- I think interdisciplinary learning is very important because people from different disciplines have different minds in which they view things. An engineering student is going to have more knowledge on certain topics than a film student and vice versa (FIPR 233)

- Interdisciplinary learning I feel is a great to gain different perspectives when learning. It is also a great way to learn about other disciplines (FIPR 233)

Sharing knowledge and ideas

- Sharing insight and knowledge. Communicating ideas from a different perspective. (CHBE 573)
- Sharing our ideas and knowing the opinion of someone who is from another department is really great (CHBE 573)
- It's about sharing points of view around a topic from different disciplinary perspectives. It is a collaborative way of learning. (FIPR 233)
- Interdisciplinary learning is when you immerse with students from other faculties to collaborate and share ideas (FIPR 233)
- Acquiring knowledge and skills from other disciplines (FIPR 233)
- Connecting people of different training areas to share perspectives and methods of thinking/learning/investigation/communication (GEOB 408)
- To discuss ideas shared amongst… [?]

Challenges

- I think the value of interdisciplinary learning is that it allows us to see things from another perspective. The challenge with interdisciplinary learning is getting people to a place where they can value other perspectives and see them as being equal to their own. (CHBE 573)
- Interdisciplinary learning facilitates discussion and interaction between different disciplines that would probably not come together otherwise; there's always that common ground but the challenge can be finding that language to communicate effectively. (CHBE 573)
- I welcome the challenges and learning of talking with, collaborating with students and faculty from a range of disciplines (FIPR 233)
- Extremely valuable, the challenge is applying the learning to my life and influencing others to do the same for theirs. Possibilities of community and forming an agreement towards creating change of industry across the globe.

Problem-solving and transformation

- Definition: learn about how different backgrounds interact in a way to find solutions for humanity's problems (CHBE 573)
- To tackle such complex problem as climate change, we must engage various disciplines. Academia is one of the best breeding ground for this type of learning to occur (CHBE 573)
- The possibilities seem huge, mainly the possibility of combining ideas to problem solve, it seems fairly intuitive that the more perspectives available, the greater the chance of success (Sustainability Club)
- Interdisciplinary learning allows for creative/cumulative solutions to problems. Complex issues/investigations require a compilation of data from multiple fields and perspectives. (FIPR 233)
- As seen in the video you need a team to make things happen. You cannot be by yourself. You need engineers, photographers, cinematographers, people that know about the (?) …

Interdisciplinary learning helps you by making that connection into different disciplines that someday somehow can work together to create change, transform things. ☺ (FIPR 233)

- There are only positive aspects about getting together with people from other faculties. Only with common knowledge we could set up something that changes the world – internationally and interdisciplinary!

Expansion: scope, ideas, possibilities

- Interdisciplinary for me is a very unique and powerful strategy to convey our messages and theories. I mean, tailor-making our projects and how we illustrate them from a multidisciplinary perspective will help us in accomplishing many things and discover new areas and extend our boundaries. I recently facilitated a book on how should we teach Environmental Studies from multiple perspectives and physics, biology, religion, and economy… (CHBE 573)
- To study events beyond the scope within my own knowledge base. Many problems are complicated and require collective efforts from all sectors and fields. Interdisciplinary learning provides such angles and opportunities to view and do so. (CHBE 573)
- For me it means to push the boundaries of traditional learning by increasing the number of answers and/or questions that may rise from a particular conversation/discussion. I think it's an interesting (and natural) learning technique that may actually be more effective than sitting in a classroom with a group of people who are focused on the same area of study. I truly believe that it's important to share our knowledge. Who knows? It might get us further than we think. (FIPR 233)
- Interdisciplinary learning allows for the opportunities of students in different disciplines the ability to see things they may be interested in but aren't offered or discussing in their major (GEOG 497)
- It broadens my horizons

Mix Experience Comments

- This particular experience was really interesting because we had the opportunity to discuss with people from different backgrounds and from different fields, and it really added value to the discussion. The discussion after the film was really valuable, giving us a chance to hear different perspectives, and the opportunity to reflect about really relevant issues (CHBE 573)
- Challenges – the reasons for coming to this event may not always be the same, i.e. I wanted to discuss climate science whereas film studies were focused on technical filming aspects (CHBE 573)

Other

- I'm studying environmental sustainability and urban studies, prior to doing my Masters next year, 'Greening the Large Metropolis.' I'm interested in sustainability issues in large cities, and it requires a surprising amount of scientific knowledge on the environment to be able to then improve cities organization/design

What did you find most interesting, surprising, or valuable about this film screening and discussion?

Note: Eight respondents did not answer this question.

Film comments

- The methodology of the movie: i.e., visually showing is indeed extremely convincing. As a geography student, I'm used to tackling the issue of climate change through data, but I feel this approach is much more efficient for a wider audience
- Amazing screening, great editing to illustrate the story
- I found extremely interesting to be able to see what the so heard 'global warming' is doing to our planet. I for sure look forward to watching more documentation like this one in the future.
- It's surprising how much the glaciers have receded. How one man's vision resulted in this film and knowledge.
- 1) Photography equipment, 2) Results!!, 3) human capital and persistency
- I really enjoyed watching this film and think that it does a really good job of giving people a visual representation of climate change
- I was thrilled to have the opportunity to watch this film because I wanted to watch it since I've learned about it. The topic is amazing and it was quite surprising to see climate change through an artistic perspective.
- I think the film was pretty gut-wrenching because it literally showcases the effects of climate change so effectively – but at the same time the photography and cinematography was simply breathtaking
- When James said that 'after twenty year what do you want to answer to the next generation about global warming?' that made me... (?)
- The spectacular visual imagery of what global warming is doing. Was the goal of this film to evoke sympathy toward global warming or create social change (change in behaviour from its viewers)?
- The most interesting thing about this film screening was the power that images can have. People can ignore statistics but it's much harder to ignore photo evidence. It reminds me that 'a picture is worth a thousand words.'
- I loved the photography
- The effort one man is willing to commit to fight against climate change
- Patience!
- Imagery had deep emotional impact I didn't think I would have
- It's so much more powerful to view the images than reading the stats. With his personal stories, it's also touching and motivating
- The images and the relateability
- New way of portraying climate change accessible to all – not just pages of statistics
- Surprising: his dedication to photography, to particular shots. It's not a normal science attitude, to go all out for one shot. Valuable: His personal story and passion portrayed along with the factual evidence, shots, facts, and figures. Relating the science to people and emotions helps the viewer to engage and breaks the barriers of stereotypical emotionless science. People engage in climate change issues by personal stories and narratives

- Real visual evidence for the reality happen in the nature. Striking when we have the image compare from 2006 to 2010
- It surprised me that how powerful a human being is and how much difference a human being can do to the world. How much a human being can affect the world!
- Know how it was filmed and to know the impact we are having in our world. And also how visual research can have a great impact in people's life.

Climate change science

- The most interesting thing to me was how literally the dust and residue from gasoline factories are single-handedly melting the glaciers with excess CO2
- That the public is still sceptical about this climate change.
- The visuality of the climate change and how beautiful and frightening at the same time
- Put into perspective through the images of the core concepts I have been learning about
- The rapid melt in the past 8 years compared to 100 years before
- Probably the results that the movie states. I wasn't aware of the huge effect of glacier melting.
- How to convey science to society
- The rate of change in glacial icebergs and its impact on people. Also, the intersection between human and nature, how much can be extrapolated from still photographs
- The evidence of the climate change
- Incredible to see change happening at a speed that we can understand

Discussion/Learning from others

- Various perspectives others have! We got into a few heated discussions.
- Being able to take time to discuss all aspects of film, i.e., science, story, etc.
- The different faculties represented was a pleasant surprise as well as the amount of discussion
- The film was very well-made, and thought-provoking. It was interesting to have students who study science and have a different perspective on this film
- The discussion
- Watching the film from the perspective of a film-making rather than a scientist was a great exercise in how cinematography can be used as a powerful tool for rhetoric
- That the screening and discussion was about a contemporary problem that everyone can be identified with.

An aha moment from sharing ideas with your neighbour or through discussion…

Note: Twenty-seven respondents did not answer this question.

Reflecting on Content

- How they got money to make this film?
- You have to be balanced when talking about climate change between having no emotion, and being unengaging, or being too emotional, and seen as manipulative (of people's emotions). Thoughts on methods of communication.
- What natural variation and the idea is.
- The big calving events! The dating back and analysing of the ancient air bubbles
- How important it is that certain events are captured on camera and how much work must be involved in capturing such geographical events
- Just how powerful visual representations can resonate to the public. Just the diff. views: should we just adapt, should we commercialize going green, taxing, etc.
- It is amazing how things are changing and so fast due to global warming.

Others' Comments

- Many people believe climate change is a myth created to make money
- The idea that some people are actually still sceptical of climate science…

Interdisciplinarity

- Fields such as visual arts/photography that superficially seem disconnected from scientific pursuits can profoundly contribute to the investigators (not just communicate results)
- That I can combine my studies with someone else's to spread a valuable message

International/Intercultural Observations

- How much awareness is evolved in different countries. The discussion occurred among international students, and we all have very different experiences of how the global warming issue is handled at home.
- We came up with a really interesting conversation – sharing cultural points of view from global warming that opens visions about other actions we can make to contribute to stop the problem.

Next steps/possibilities of action

- We talk about the impact of one man's vision and how that vision can be shared to others and then change more and more people.
- It seems like it is already in an irreversible process. The solution is beyond awareness and education. It's about survival in that sense.
- Getting the word out about this video while keeping with integrity

Other

- That I could be an educator… the film piqued interest and then I was able to add my knowledge and expand to teach things the other students didn't know

What kind of interdisciplinary learning activities would interest you?

Please share an idea for cross-discipline learning activities on campus. (For example, biology and fine art students collaborating to design diagrams of cells; or a debate between students in geography and mining on the environmental, social, and economic possibilities and problems for diamond mining; or a student symposium on globalization. Get creative!)

Note: Nineteen respondents did not answer this question.

Formats

- Debate
- Debates
- The above examples sound great, would definitely be interested in debates.
- Simulation models and management strategies with interdisciplinary groups – team work in groups
- Debate, panel, workshops/sessions, conferences, 'speakers' or panel series advertised on campus for students from all faculties

Topical Ideas

- Related to sustainability
- Debate on whether we are capable of stopping global warming and how this can be achieved.
- Designing programs that facilitate cross-discipline learning – soliciting masters students in education to design such programs
- Especially interested in projects about economic sustainability and how policies and regulations can be developed to actually make an impact
- I would like to see more studies on the relationship of diseases, in particular infections, and the environmental changes
- Environmental sustainability and engineering – the people who create our technological future need to be aware of the direction they need to aim for: energy, consumption, reduction, recycling…

Specific Interdisciplinary Collaborations

- As I've mentioned before: a fine arts in film production in collaboration with an environmental studies project
- Design or arts and engineers collaborating to create a new biological design of a prosthesis
- Environmental engineering and medicine – discussing the impact of climate change in nature and in humans' physiology
- Creating a video to explain a topic from science or geography
- Environment, biology, geography w/fine arts (or film making, drama)
- Would like to see history/English/sociology et al. students attend plays presented by Theatre at UBC and participate in discussions about literary, historical, sociological contents of contemporary theatre
- Business and marketing collaborate with film studies
- I would be interested in film production and music majors for crossdisciplinary learning as I have always wanted to link soundwork in film and music theory
- For sure, connect geographers and miners! Also, social types who think about ethical investors, with those EOSC students and their fancy new Goldcorp sponsored building. Connect the

hydrocarbon students with the geographers/the clubs (Social Justice) who spend their time thinking about the ethical implications of their lives and JOBS

- Video game design for sustainability and global warming education
- Media/Sciences -> creative + effective ways to communicate environmental issues to the public
- Build something cool (like the green wall in CHBE), and/or stuff that involves food. Media people can help advertise in or explain it with visuals, engineers can build it, Land and Food Systems people can cook
- Fine Arts + Clean Energy Depart. I would like to attend a show at VAG for example showing work done with principal of clean energy.
- Engineering and art students working together to create accurate infographics to communicate data/research effectively across disciplines and to the public
- Engineering and film students collaborating on a film together. Or science students doing research projects using a film student to get the point of their research thesis to a greater audience.
- Use film to communicate the advances of scientific research being made at UBC!
- I would like to see a collaboration of geographic, environmental, and corporations like oil and resources in implementing plans to rehabilitate sites after the resources are exhausted

Please share any suggestions for improvement for this event, comments or questions, or thoughts on interdisciplinary teaching and learning.

Note: Twenty-nine respondents did not answer this question.

Suggestions for improvement

- You guys should have publicized it more – I know lots of people who would have loved to come
- I would have appreciated the moderators to introduce themselves and their background. It would have been valuable to invite an expert of those issues…
- It would be great if we can have more activities other than listening to lecture, discussion, or watching a film, such as that we can really go outside and do something or go to other countries to do something
- Great experience! It could be great to have more events in the term with the same group of students so we can know them more.

Great/Thank you

- Great event!
- Great film!
- It's great to learn about other disciplines without having to dig too deep
- Great that people involved took the time to put this screening on!

More interdisciplinarity

- Is it possible to gather together students to take the same course (from different programs) and collaborate in final projects?
- The ideal of interdisciplinary teaching should be aggressively marketed and shared
- It's great, please do more! (How about assessed interdisciplinary group projects)