Virtual Interdisciplinary Japan Field Trips

Japan Studies Association of Canada Online Conference, October 17-18, 2020

Tom Waldichuk
Department of Geography & Environmental Studies,
Thompson Rivers University
Kamloops, BC V2C 0C8
twaldichuk@tru.ca

Abstract:

This presentation focuses on interdisciplinary virtual field trips in Japan. Interdisciplinarity is an important issue at small universities where one can have difficulty amassing enough students from one discipline -- for example, Geography -- to run a field trip in Japan, so recruiting students from other disciplines has to be an option. This may lead to a joint field trip between, for example, a Geography and a language studies course, where students from the two courses travel together to Japan. But what if the field trip to Japan cannot take place due to, for example, a pandemic? A virtual field trip is the solution. My objective is to review options for interdisciplinary virtual field trips about Japan. First, I examine learning outcomes for interdisciplinary field trips. Then I focus on virtual field trip options by reviewing literature and educational software. Virtual field trips can be as simple as having students watch you-tube presentations and do follow-up activities. Or they can be as sophisticated as having participants wear virtual reality goggles while walking down the streets of Tokyo. The principal conclusion is that whereas virtual field trips do not replace face to face trips, accessible technology is increasingly allowing instructors to engage students' senses and enhance learning about Japan.

Keywords: Japan field trips, interdisciplinarity, learning outcomes, virtual learning, accessible technology

Outline:

- 1. Introduction: Importance of field trips
- 2. What is interdisciplinarity in the context of a Japan Studies field trip?
- 3. Interdisciplinary field trips to Japan & course learning outcomes
- 4. Virtual field trips (VFTs) -- Introduction
- 5. Examples of existing VFTs about Japan
- 6. How does one create an interdisciplinary VFT of Japan?

- 7. Questions for Discussion
- 8. Summary & Conclusion
- 9. References

1. Introduction: importance of field trips

Field trips are an important part of studying Japan – they fall under "experiential learning" (Friess et al., 2016) in the education literature and can take a variety of forms, e.g., from instructor-led to independent investigation (Kent et al., 1997). Field trips are one of the most memorable events of an undergraduate education. They often involve "deep learning" as well (Friess et al., 2016). Courses in Japanese language, business, and geography have all involved field trips to Japan. Some of these trips have involved months or weeks of class-time before leaving for Japan, as part of a field course, whereas other trips have taken place entirely in Japan. But what happens if an instructor falls short of recruiting enough students to take on a field trip to Japan? This has been a concern with my geography of Japan field course, which from time to time has had low student enrolment. My colleague who teaches Japanese has had better success recruiting students for her Japanese language field course. If we were to formally combine the two courses, or at least the field trip component, we would have to consider the interests of a broader range of students. Thus, developing an interdisciplinary field trip becomes an important consideration.

In the first part of this presentation, I discuss options for an interdisciplinary field trip to Japan, which I define as a multi-day field experience, usually as part of a field course that involves class time before leaving for Japan or after returning from Japan. One could also use the terms "field course," "field excursion," or "study tour." I examine the kinds of learning outcomes that can exemplify an interdisciplinary field trip to Japan. What are the common course learning outcomes among the different disciplines? Are there any standard learning outcomes found in most field courses on Japan? What learning outcomes should be promoted? My rationale for promoting interdisciplinary field trips is that they attract the greatest number of students from a variety of disciplines who may all want to visit Japan for different reasons. This is especially important at smaller institutions where there are fewer students studying Japan.

In the second part of the talk, I discuss virtual or online interdisciplinary field trips, which are needed when it is not possible to travel to Japan, *e.g.*, during a disaster or during a pandemic, or when one is lacking finances. What are the different kinds of virtual field trips (VFTs)? What kind of technology is involved? How would one create a VFT? Are learning outcomes the same for VFTs and for in-person field trips? Accessible technology is increasingly allowing instructors to develop engaging virtual

field trips, although most would argue that they do not replace an in-person field trip. I will first focus on creating in-person interdisciplinary field trips.¹

2. What is interdisciplinarity in the context of a Japan Studies field trip?

Japan studies (or Japanese studies as it is often called) tend to be thought of as an interdisciplinary field. For example, Steinhoff (2007), in her review of Japan studies in the US for the Japan Foundation uses the term "interdisciplinary," while acknowledging that Japan studies are taught in different disciplines. Ogawa and Seaton (2020) also acknowledge that Japan studies can be multidisciplinary, but they, like Horn (2013) and Reiher (2018) also associate Japan studies with interdisciplinarity. Many Japan Studies Association of Canada presentations and publications have also had an interdisciplinary focus. In the spring of 2017, my campus colleague and I took a disciplinary approach to Japan field trips as she brought her Japanese language field class to Japan, and I led a geography of Japan field trip at the same time. Although our trips did overlap in the same city for a couple of days, and we shared some cultural activities, we were still running separate disciplinary field trips. My purpose here is to envision what an interdisciplinary field trip would look like if we travelled and took part in the same activities together.

3. Interdisciplinary field trips to Japan & course learning outcomes

How would combining geography students with Japanese language students affect learning outcomes? How would leaning outcomes be changed if my colleague and I created an interdisciplinary Japan field course in the future? A goal of a Japanese language field trip is to practice language skills in a Japanese setting. Whereas a main goal of a geography field trip to Japan is to experience Japan's varied natural and human-modified landscapes. However, one common factor between these disciplines is that they both involve the study of Japanese culture. Dr. T. Bryant of the University of Calgary, who runs a field course focused on Japanese business, also considers culture (see Bryant, 2021). Thus, at a minimum Japanese culture should arguably play a part of an interdisciplinary field trip.

There is no explicit information about "interdisciplinary" field trips to Japan in the literature or on the internet, unlike geography field trips to Japan, *e.g.*, McMorran (2015). I was able to find one article on a university level Japan field course from the US that focuses on popular culture (Orpett Long et al., 2010). I was also able to find

-

¹ Later I will explain the rationale for writing about interdisciplinary and virtual field trips together.

course offerings in online course calendars, *e.g.*, a Japan culture course at Douglas College (Douglas College, 2018) in New Westminster, BC.

Thus, one has to search broadly for information related to interdisciplinary field trips to Japan. I expanded the search to include "field courses," "field experiences or excursions," "study or educational tours," "short-haul fieldwork," and "long-haul fieldwork." I further expanded the internet search to include "study abroad," which initially yielded much advertising but did give results with the keyword "interdisciplinary."

The following are examples of university study tours or study abroad experiences that are arguably interdisciplinary. The U. of Calgary offers short-term study abroad in Japan to learn Japanese language, as well as culture, and involves students staying at a university in the Tokyo area for about four weeks (University of Calgary International, 2021a). The Prince Takamado Japan Centre for Teaching and Research in the Faculty of Arts at the University of Alberta offers two-week courses on "Theme Studies in Japan" (Prince Takamado Japan Centre..., 2021). The University of East Anglia offers an interdisciplinary Japan course called "Japan Orientation" (Embassy of Japan in the UK, 2019), although it takes place in England, not Japan.

Apart from university there are also commercial and tourist field trips to Japan that are interdisciplinary in nature. For example, when one conducts a Google search of "The Learning Adventure" and interdisciplinary Japan field trips, the title "Cultural & Interdisciplinary school trips" appears (The Learning Adventure, 2021a). The Japan National Tourist Organization (JNTO) also advertises educational trips to Japan on a variety of themes (JNTO, n.d.).

Learning Outcomes (and objectives) for an Interdisciplinary Field Trip to Japan

What learning outcomes (and objectives)² do you use for an interdisciplinary field trip to Japan, *e.g.*, field trips that combine language and geography? A key question is are there learning outcomes that all interdisciplinary field trips to Japan should have? If we talk more generally than field trips and consider study abroad, examples of learning

² Learning objectives consider what the instructor wants to accomplish in the course, whereas learning outcomes are written in terms of what the student can accomplish in the course (Teaching Commons, n.d.; Harden, 2002; Centre for Teaching Support and Innovation, 2008; UCLA Health, n.d.).

outcomes for interdisciplinary study abroad programs are easier to find; these outcomes usually deal with intercultural learning, e.g., Smith and Yang (2017).³

There is a well-developed literature on culture and inter-cultural learning outcomes related to study abroad. For example, global citizens and global citizenship (e.g., Ogden, 2010; Alberta Education, 2008), cultural and intercultural competencies (e.g., Deardorff, 2014; Dickinson and Telford 2020; Smolcic and Katunich, 2017; Williams, 2009), and intercultural leaning (e.g., Garson, 2017). What is an inter-cultural learning outcome? Aerden (2015, p.12) states that it "should refer to an ability to value cultures without judging[,] enabling effective and appropriate communication and cooperation with people of all cultures." He continues that "[it] should refer to an ability to function in a certain discipline with and in other contexts and other regional settings of the world." (p.12). Aerden (2015) states that there are no generic inter-cultural learning outcomes – they need to be developed for each program, and the course material needs to support these learning outcomes. However, Smith and Yang (2017) used previously developed generic inter-cultural learning outcomes (by colleagues at the same university), in a questionnaire that they gave to their field course students before and after the field trip.

Combining learning outcomes from Thompson Rivers University (TRU) Modern Languages (MLAN) 2700 Field School with TRU Geog 3700 Field Course in Geography

MLAN 2700 is a shell field course for our university's offerings in modern languages, including Japanese. I compared the Japanese field course outline with my geography field course outline for common learning outcomes. The dominant learning outcomes for each course related to the field trip component are listed below. According to the TRU academic calendar, MLAN 2700 is a high impact practice (HIP) course (Thompson Rivers University, 2021, p.321). It is also formally associated with the institution learning outcome "intercultural awareness." TRU has been adopting general education requirements, e.g., HIP courses, over the past couple of years (Office of the Provost..., n.d.), so course learning outcomes need to be aligned with program and institutional learning outcomes. The Geography 3700 field course is currently not associated with any institutional learning outcomes (Thompson Rivers University, 2021, p.290).⁴

³ Smith and Yang (2017) research intercultural learning outcomes in an interdisciplinary field course taking place in Ghana. This involves distributing questionnaires to students before they go to Ghana and after they return.

⁴ I will talk about field course learning outcomes in relation to educational standards (*e.g.*, AgExplorer, n.d.) later in the paper's discussion.

Modern Languages (MLAN) 2700 Field School course learning outcomes related to the field trip component:

- Develop effective and appropriate communication skills, and show an understanding of cultural differences based on intercultural knowledge, skills, and attitudes
- Engage in and draw experience from the host culture during study abroad or a field school in order to compare and contrast ideologies and aspects of their own culture
- Reflect on the relationships between their international experiences and their personal perspectives
- Demonstrate cultural knowledge specific to their area of research topic

GEOG 3700 Field Course in Geography course learning outcomes related to the field trip component:

- Identify foreign cultural influences that have affected the development of modern Japan
- Understand the multifaceted nature of the social geography and cultural geography of a Japanese community
- Sharpen field observations and develop your ability to reflect on those observations
- Develop observational note-taking skills and the ability to write reflective notes
- Develop the ability to work in a group

The overlapping outcomes for the two courses are related to culture and reflection.

Commercial field trips in Japan also can have explicit learning outcomes or objectives. For example, The Learning Adventure (2021b) "Culture in Japan" educational tour has the following learning outcome: "Uncover Japan's rich history, from its ancient traditions to the devastation it suffered in the Second World War and the country's emergence as a major economic player in the late 20th century."

As well, learning outcomes are well developed in much kindergarten to grade 12 school curriculum and are influenced by field trips. For example, the Alberta government's Japanese Language courses in elementary schools that have field trips

relate these language field trips to general learning outcomes, e.g., global citizenship (Alberta Education, 2008, p.650). The teachers create the more specific course learning outcomes, e.g., "b. identify some places that they (the students) could visit where Japanese is spoken." (p.650). In Manitoba schools, a learning outcome for social studies field trips includes "collaborating in a group" (Manitoba Education...,2008, p.3).

My preliminary analysis of geography field trips in the Japanese academic literature (in Japanese) is that course learning outcomes are not a major focus. However, there is a well-developed literature on field trip content, *e.g.*, at the U. of Tsukuba, in terms of an undergraduate field course in human geography (Kaneko & Kureha, 2015) or the graduate field course on field work in human and regional geography (Matsui, Kaneko, Hashimoto, & Oishi, 2013; Matsui & Kaneko, 2014). Although these articles talk about curriculum, they do not mention course learning outcomes.

I would argue that the following themes dealing with personal development, group dynamics and culture are suitable as learning outcomes for any Japan field trip, including one in MLAN 2700, GEOG 3700 or in an interdisciplinary field course.

- 1. Ability to work well independently
- 2. Teamwork (see Manitoba Education, Citizenship and Youth, 2008)
- 3. Intercultural understanding, learning or competence (see MLAN 2700 course (Thompson Rivers University, 2021, p.321)); Garson, 2017; Williams, 2009)
- 4. Global citizenship (promoted by Alberta Education, 2008; analyzed by Ogden, 2010)

To summarize, the common learning outcomes for MLAN 2700 and GEOG 3700 are related to culture and reflection. As mentioned above, Aerden (2015, p.12) states that intercultural learning outcomes should focus on valuing other cultures without judging them and developing an ability to communicate and co-operate with people from all cultures.

Summary of literature on Interdisciplinary Japan field trips & Learning Outcomes:

I have not found explicit examples of "interdisciplinary" university undergraduate field trips or field courses about Japan on the internet. Most field trips are associated with disciplinary field courses, e.g., a geography field course (e.g., McMorran, 2015) or a Japanese business field course, such as that offered by Dr. T. Bryant at the University of Calgary (Bryant, 2021). Culture is a theme that seems to transcend the other disciplinary field trips. The most interdisciplinary field course that I have found is the popular culture field course at John Carol University (Orpett Long et al., 2010).

One has to search broadly on the internet for an interdisciplinary field trip or field experience. There is often mention of field trips (or field experiences) built into study abroad experiences, often organized by academic programs that identify with the word "interdisciplinary." Also, I have found examples of interdisciplinary field courses focused on countries other than Japan, which have been helpful in creating learning outcomes, especially those related to culture, and have been helpful when organizing an interdisciplinary Japan field course.

Commercial field trips about Japan also exist and are marketed as broad-based, interdisciplinary-like field trips that can be adapted to specific Japan courses. Also, the Japanese government, through JNTO, is promoting educational field trips (JNTO, n.d.). These field trip themes could potentially be used by an interdisciplinary Japan course from abroad.

Common learning outcomes for interdisciplinary field trips involving different disciplines, *e.g.*, Japanese language or geography, could be communication skills; personal development, *e.g.*, working well as an individual or group; and reflection (as mentioned above in the case of MLAN 2700 and GEOG 3700). Some commercial field trips and K to grade 12 Japanese language and social studies classes also have learning outcomes for their field trips which can be adapted for an interdisciplinary Japan field trip.

4. Virtual field trips (VFTs) - part II of presentation

A. Introduction to VFTs -- What are VFTs?

When talking with my colleague who teaches Japanese at TRU, we thought we would be hosting the JSAC2020 conference on campus in Kamloops. But after we decided to postpone the conference due to the Covid-19 virus pandemic, I changed my presentation from "Interdisciplinary Japan field trips" to "*Virtual* interdisciplinary Japan field trips." We need VFTs when it is not possible to travel to the destination, *e.g.*, during a disaster or a pandemic, or when it is not safe (Brown, 2019a).

The history of VFTs dates back to the late 1980s and early to mid-1990s (at least in earth and environmental sciences) (Caliskan, 2011; Hurst, 1998). One can define a VFT as "...a collection of resources designed for the effective teaching and learning of fieldwork based on computer and web technologies" (Arrowsmith, Counihan, & McGreevy, 2005, para. 4).

Stainfield et al., (2000) also state the following about field trips. The purpose of VFTs is not to replace field trips but to supplement them in terms of teaching skills before the field trip or as part of follow-up activities after the field trip (Gilmour, 1997, cited in Stainfield et al., 2000). VFTs can thus save time in the field by dealing with skills or other activities. VFTs are useful for students who do not have the financial

resources to go on an actual field trip or who have physical disabilities that prevent them from taking a field trip. Stainfield et al. (2000) also state that VFTs should be available in multiple languages.

At the University of Victoria in British Columbia, some field courses went online during the pandemic in 2020 (Ross & Dawson, 2021), ⁵ and at the University of Calgary, a Japan study abroad field experience went online in the spring of 2021. A 20 day intensive Japanese language program was developed online involving students from the university of Calgary and students from a college in Japan who were studying English (University of Calgary International, 2021b). This was a virtual group program in which students worked on group projects and involved virtual conferencing with students in Japan. Are these virtual versions of field courses or field experiences equivalent to the in-person version? How can we make them as realistic as possible?

Twenty years ago, Stainfield et al. (2000) talked about trying to increase the interactivity of VFTs by producing interactive field exercises, encouraging students to put their work on a web page, and by developing generic software for running VFTs. One can still make a distinction between virtual field trips that are non-interactive and those that are interactive.⁶ An example of a non-interactive virtual field trip can involve watching videos and answering questions on a handout. MS-Bing categorizes YouTube videos by field trip (bing.com/videos), which makes it easy to select the non-interactive VFT that one wants.

Some interactive VFTs are real time VFTs.⁷ One can communicate with other students or experts onsite via accessible technology, *e.g.*, zoom, or even email. These VFTS do not have to be high tech, and some have been around for a number of years, *e.g.*, Godwin-Jones (2004) writes about RAFT (remotely accessible field trips), where students in the field collaborate on field projects with students in classroom by using computers and the internet, or where, *e.g.*, there is collaboration between classes from different countries, *e.g.*, Korea and China (intercultural exchange) (Choi & Choi, 2019). Another example is COIL (Collaborative Online International Learning) (SUNY, n.d.).⁸ COIL connects instructors in different countries, and can involve collaborative course projects for students, which involve intercultural learning. Some Japanese universities are involved in COIL, *e.g.*, Sophia U. (Sophia University, n.d.). Another type of

⁵ At the University of Victoria, one geography course, taught by Dr. Cam Owens, that went online was cited as being a success due to, in part, the inclusion of guest speakers (MacLaurin, 2020). This course also had students involved in community projects.

⁶ Wikipedia (Virtual field trip, 2020) does a very good job of making the distinction between non-interactive and interactive field trips in their write-up on virtual field trips.

⁷ The best VFT format is a "real time[,] guided field trip," using "interactive" web pages (Virtual field trip, 2020, para. 4). One can also connect live with experts at places, *e.g.*, talking to mine workers underground (Virtual field trip, 2020), which involves videoconferencing or audio-conferencing software.
⁸ Professor Akiko Sharp from the U. of Calgary introduced me to COIL.

interactive virtual field trip (but not related to Japan) takes place at historic Barkerville, which is an old Gold Rush town northwest of the city of Quesnel, in central British Columbia, that has been transformed into an outdoor museum, where video conferencing is used to connect school classes with actors in the town (Barkerville Historic Town and Park, 2021). These video conferencing sessions can involve acting out scenes from the late 1800s when Barkerville was a real Gold Rush town and can involve student participation. This is a good example of adapting to the Covid-19 pandemic by using accessible video conferencing to create a virtual field trip.

B. Virtual, Augmented, & Mixed realities

In 2000, Stainfield et al. stated that the purpose of a VFT "...is not at present an attempt to create a virtual reality (VR), where the intention is to immerse the user fully in an interactive computer-generated environment using sensors and input devices such as data gloves and body suits and output devices such as head mounted displays and surround-sound audio systems." p.256. VR software has now progressed to the point where this situation is now becoming possible.

VR has been a part of geographic education since at least the early 2000s in Japan.⁹ VFTs have become more interactive due to VR. VR involves wearing computer headsets with goggles to interact with a place, which can be simulated by computer technology. This is an immersive experience where one can view 360 degrees using a 360-degree camera (OISE..., 2021) -- for example, while walking down the streets of Tokyo. Pantoja (2017) states, however, that true VR only happens when one is detached from reality, e.g., when one cannot see reality due to sensors in a headset tracking one's movements and altering what one can see. She continues that there is non-interactive VR, in which the user is just a spectator, but there is also interactive VR where one can move around and interact with objects – this usually involves powerful personal computers set up for gaming. Pantoja (2017) also describes augmented and mixed reality. Augmented reality (AR) allows one to overlay the real world with digital images, such as a sign, label, or Pokémon Go. Mixed reality (MR) is a blending of VR and AR when virtual objects interact with real objects or places, e.g., when showing a virtual bean stalk growing through the roof of a real house (Pantoja, 2017). One can see virtual reality by inserting one's smart phone into a Google cardboard viewer. These viewers are affordable (only about \$20); however, Google has recently stopped selling the cardboard viewers (Amadeo, 2021), but the cardboard technology is now open source (Chen, 2019). On the internet one can find other headsets costing \$400 to \$500 for viewing VR, AR, and MR. Stainfield et al. (2000)

⁹ Hashimoto (2006) writes about creating three-dimensional geography teaching material using virtual reality, animation, and geographical information systems.

make note of the high cost of VR software and hardware, and while in 2021 this is still an issue, costs are decreasing.

5. Examples of existing VFTs about Japan

One can find several examples of videos on YouTube, which one could use for a non-interactive VFT. One example is "Japan Travel: Virtual trip to Kyoto P.I Kinkakuji" (Yalcin, 2012). This video has sub-titles with background music. Another example is JNTO's (2018) 360-degree virtual tour of Tokyo for international tourists, which is reviewed in Tokyo Weekender magazine (Take a virtual tour..., 2018). The review mentions that the video uses a rotating 360-degree camera, similar to Google Street View, and it recommends having the latest version of Chrome or Firefox browsers and a Google Cardboard viewer. VFT videos can be focused on one theme of a field trip, e.g., visiting museums, such as the Toyota Museum in Nagoya, Japan (Joy of museums..., 2020), or they can be focused on a particular activity, e.g., walking, such as "Higashiyama walk, Kyoto, Japan – virtual trip" (Higashiyama walk, 2018).

VFTs suitable for an Interdisciplinary Japan Field Trip

Nearpod is a company started in 2012 in Florida that produces electronic educational materials for elementary and secondary schools (Nearpod, n.d.-a). This company creates virtual field trips (although they are not titled field trips) that can be modified. One such example is "Take a trip to Japan!" which is geared toward elementary school students (Nearpod, n.d.-b). These VFTs come with a downloadable teacher's guide with a page titled "field trip notes," on which students can write down observations in the left-hand column and questions in the right-hand column. Another example is "Exploring Japan," which is geared more toward high school students (Nearpod, n.d.-c). Both these lessons involve virtual reality (VR) images of, e.g., Kinkakuji temple in Kyoto, that requires one to wear a virtual headset or Google Cardboard viewers to obtain the full benefit of the VR image, but one can look at the photos without any of these aides. Both these presentations have sections that give facts about Japan. These are presented using Microsoft Sway software, which allows for interactive presentations. The first section is titled "Location," which maps out Japan's location. This is followed by "Key information," pertaining to the Japanese language, the capital, and national anthem. Finally, sections titled "Major religions," "Demographics," "Economy," and "Culture" are included. Both videos, "Take a Trip to Japan!" and "Exploring Japan," have the same content and writeup, even though, as mentioned above, "Take a Trip to Japan!" is stated as being for elementary school students and "Exploring Japan" is for secondary school students. The designers of the lessons recommend 45 minutes to complete them.

These lessons could probably be adapted to an introductory interdisciplinary university course about Japan. The lessons do come with objectives, oriented toward elementary school students: 1. "Experience Japan through a virtual field trip," 2. "Learn facts about Japan," and 3. "Compare and contrast Japan with their (your) own country." The images are mostly from Wikimedia Commons and the content is mostly from Wikipedia. An example video, which is not a VFT, is on the Samurai (Nearpod, n.d.-d), which includes a typed question at the bottom of the screen asking how much you already know about the Samurai and fill in the blank and true-false comprehension questions about the video lesson. A final activity, which could be incorporated into a VFT, is titled "Skill Builder: Landmarks 'round the world: Let's travel to Japan" (Nearpod, n.d.-e). This activity combines a short video with activities that students do alone and in pairs to reinforce knowledge learned about Japan. The objectives include locating Japan on a map and identifying important landmarks in Japan.

6. How does one create an interdisciplinary VFT of Japan?

I focus on using accessible technology in terms of cost and ease of use. YouTube videos explain how to make a VFT. There is a VR version of Google Earth. One YouTube video highlights the use of Google Earth knowledge cards¹⁰ and combines Google Earth with "Wevideo.¹¹"

As mentioned previously, one can plan collaborative activities between students in a class in one country and those in a class in another country (Choi & Choi, 2019). I would try creating a field trip in each respective country, highlighting places and events from each community.

Three-hundred and sixty-degree rotating photography, as described previously, is also inexpensive to include in a VFT (Wallgrun et al., 2019). The following url (https://360-panorama.org/kyoto_ui/) (Creative Office Haruka, n.d.) is a detailed example of a Kyoto city VR field trip that makes use of a rotating camera and map of Kyoto superimposed on the video.

Another easy-to-use software for a VFT is Prezi, which rivals PowerPoint for onscreen presentations, although one needs to register to use this software (registration is free for a two-week trial) (Prezi, 2021). These Prezi field trips can be linked to Google

¹⁰ Google Earth knowledge cards are boxes with labels and descriptions about places (Google Earth Help, 2021). ...

¹¹ Wevideo is a commercial video editing software that can be used in combination with Google Earth to create geography or social studies lessons (Kline, 2021). Regarding Wevideo and virtual field trips, see also: Lang-Raad (2021) and Spada (2020).

Maps using tiny URLS embedded in them to locate places (*e.g.*, Zaidi, 2011). Another Prezi possibility is to use embedded videos, rather than maps (Ohnsorg, 2017).

National Geographic provides VFT opportunities through Explorer Classroom, which are currently (as of July 2021) accessible for free on YouTube (National Geographic..., 2021a). While accessing National Geographic Explorer on a livestreaming field trip, one can ask questions using Twitter (Bales, 2021). Unfortunately, I have only found one recorded VFT on Japan (about Matagi hunters) through National Geographic Explorer (National Geographic..., 2021b). One can also view VR on National Geographic Explore VR using Oculus headsets (e.g., Facebook, n.d.-a.). To view VR content, one can use the Oculus Quest 2 headsets that cost about \$460 (Facebook, n.d.-b.), making this an expensive and less financially accessible option.

Esri ArcGIS StoryMap software has been used in cultural geography to document field trips by instructors and students (Mukherjee, 2019). Dr. David Telfer (personal communication, 1 July 2021) from Brock U., who has used StoryMap for assignments in his undergraduate classes, also suggests that students who cannot travel to Japan due to Covid-19 restrictions, could create virtual versions of their field trips using this software, which could involve adding maps, images, and text. He mentions that the software does take some practice to use it competently, so before he had his students work on class assignments, he first had them take a tutorial session that he developed with the university library (D. Telfer, personal communication, 1 July 2021). To create a StoryMap, one can obtain a free ArcGIS online account with limited capability or an account with full capability with a school subscription (Hall and Sawle, 2020). ¹² Thus, in terms of cost, this software is reasonably accessible, and it is accessible in terms of ease of use.

A group in the geography department at the University of British Columbia (UBC) has been developing VFTS (Open Geography, n.d.-a). Brown (2019b, para. 1) describes developing 3D images using specialized software and how to view the resulting VR imagery with "HTC Vive" headsets using "Unity" gaming engines. This technology is not as accessible, in terms of ease of use, as some of the other software mentioned above. However, this project, which focuses on Stanley Park in Vancouver, is open sourced and released under a "Creative Commons…Non- Commercial-Share Alike license" (Brown, 2019a), which makes the software accessible.

The UBC group has also developed FieldPress (Green, 2016) – a plugin for WordPress software, which is a content management system, *e.g.*, for managing digital

¹² See Hall & Sawle (2020) for information about creating a virtual field trip using Esri StoryMap software. Also, ESRI (n.d.) provides information about the different kinds of accounts related to StoryMaps.

images and blogs, and is used for publishing. This software is also an Open Educational Resource. Thus, this software is accessible in that it is free to use. FieldPress is easy to use, and one can add multimedia content and create student assessments (Green, 2016).

The UBC group points out that VFTs can be used to explore past landscapes, e.g., how an intersection looked 10 years ago (Open Geography, n.d.-a). One can look at photos taken of the same place over time. This is known as repeat photography, which is used to increase cultural understanding when one is trying to emphasize historic changes in a place (Lemmons et al., 2014).

7. Questions for Discussion:

First, what exactly is a virtual field trip (or field course)? How does it differ from an online or virtual course? There is a range of interactive and non-interactive VFTs, similar to the range of field trips that Kent et al. (1997) describe in terms of students participating versus students observing. At both the JSAC 2020 conference and my western division geography conference in 2021 people discussed the close relationship between virtual courses and virtual field courses.

Second, what does one expect students to learn from a virtual field trip? Are learning outcomes different for a VFT compared to those of a real face to face field trip? Ross and Dawson (2021) addressed this question for geography-related field courses that went online during the Covid-19 pandemic at the University of Victoria. Stokes et al. (2012), say that, based on their teaching experience in geography, one can achieve similar learning outcomes for specific virtual field exercises compared with the same inperson field exercises. Does this apply to non-geography-related exercises? More generally, McEwen (1996) states that how one delivers field instruction (with a brief mention of virtual delivery) is dependant on course learning outcomes.

Third, how can one standardize the learning outcomes of interdisciplinary Japan field trips and VFTs? I previously mentioned that our university course learning outcomes are now supposed to be aligned with program and institutional learning outcomes, and that in Alberta schools, specific course learning outcomes tie into broader learning outcomes, e.g., global citizenship (Alberta Education, 2008, p.650). Although not focused on Japan, AgExplorer (n.d., p.3) relates its VFTs to US "national standards" and US "Next Generation Science Standards," e.g., HS-LS2-7. "Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity." Such a systemization of learning outcomes for interdisciplinary Japan field trips and VFTs would be useful, especially with the growth of general education standards at TRU and other universities. The Nearpod VFTs do have learning objectives, although as mentioned above, they are geared toward elementary students, so they would need to be modified for university students. The

relationship among in-person field trips, VFTs, and learning outcomes needs to be explored further. I have only given a few examples of interdisciplinary Japan field trips and VFTs – a more comprehensive review of them is needed, along with their learning outcomes.

Although Stainfield et al. (2000) do not call them learning outcomes, they do list what VFTs should be used for. At a broad level they say that VFTs should develop field skills. Second, VFTs should provide interactive experiences. Third, VFTs should allow students to experience student-centred projects. Fourth, VFTs should encourage students to collaborate (this is similar to a learning outcome of an interdisciplinary field trip or even a study abroad experience that was discussed earlier in the paper when talking about COIL).

Can a series of VFTs replace a real field trip, e.g., a two-week trip? How many days or weeks of a real field trip can a VFT represent? As an example, a UBC Open Geography VFT (Open Geography, n.d.-b) seems to replace a normal face to face day field trip (part of Geog316) around the greater Vancouver area, including sites near the Squamish Highway. Could a series of similar VFTs meant to replace one-day field trips, combined with guest lectures using video conferencing, and online projects focused on the field trip location, replace a real field trip? During the Covid-19 pandemic, such efforts have been made. But will they continue once the pandemic is over?

8. Summary & Conclusion

Field trips are a part of experiential learning – they are impactful. They are what students remember from university. An interdisciplinary Japan field trip can attract a larger and more diverse group of students, which is especially important at smaller universities with a smaller student body studying Japan. What are the essential components of an interdisciplinary undergraduate field trip to Japan? One needs to review the content of existing disciplinary Japan field trips and successful study abroad programs. One should also include standard learning outcomes related to culture and personal development, *e.g.*, intercultural understanding and an ability to work independently or in a group. Learning outcomes that meet general education requirements or other learning standards should be included, if possible, so that learning from the field trip ties in with the student's overall education.

Virtual interdisciplinary field trips are needed when one cannot go to Japan because of natural disasters, a pandemic, or financial constraints. There are non-interactive VFTs, e.g., watching a video and answering questions, and interactive VFTs, e.g., talking to people live from the field trip location. VFTs can supplement a field course, i.e., one can show the VFT before going to Japan. Can VFTs replace a field trip? Although this has been attempted during the Covid-19 pandemic -- probably not (e.g., see Stainfield et al., 2000). A VFT can give an overview of an entire field trip, or

just one day of field trip activities, *e.g.*, visits to a factory. My focus is accessible technology – in other words, not expensive and easy to use, *e.g.*, using YouTube, 360-degree photography, or Google cardboard technology to view virtual reality content. A student's visual and auditory senses can be stimulated using this technology. One can also have an interactive VFT by creating partnerships – using video-conferencing or even email – with experts or student groups in Japan or elsewhere. The key is to make the VFT appeal to as many of the student's senses as possible and make it as interactive and as accessible as possible.

9. References:

- Aerden, A. (2015). *An introduction to international and intercultural learning outcomes* (ECA occasional paper). ECA (European Consortium for Accreditation in Higher Education). http://ecahe.eu/assets/uploads/2013/11/CeQuint-An-introduction-to-International-and-Intercultural-Learning-Outcomes.pdf
- AgExplorer. (n.d.). AgExplorer and Syngenta virtual field trip educator guide.

 https://agexplorer.com/sites/default/files/resource/EducatorGuideFFASyngenta_F
 INAL EDResources.pdf
- Alberta Education. (2008). *Japanese language and culture:* 9-year program guide to implementation, grades 4–5–6. Learning and Teaching Resources Branch. https://education.alberta.ca/media/384775/japanese-language-and-culture-nine-year-program-guide-to-implementation-grades-4-5-and-6.pdfAg
- Amadeo, R. (2021, March 3). Google's VR dreams are dead: Google Cardboard is no longer for sale. Ars Technica. https://arstechnica.com/gadgets/2021/03/googles-vr-dreams-are-dead-google-cardboard-is-no-longer-for-sale/
- Arrowsmith, C., Counihan, A. & McGreevy, D. (2005). Development of a multi-scaled virtual field trip for the teaching and learning of geospatial science. *International Journal of Education and Development using ICT*, 1(3). approximately 41 paragraphs. http://ijedict.dec.uwi.edu//viewarticle.php?id=29&layout=html
- Bales, K. (2021, February 17). Explore the world from your home or classroom with these 7 virtual field trips. ThoughtCo. https://www.thoughtco.com/virtual-field-trips-4160925
- Barkerville Historic Town & Park. (2021). 2021 virtual field trips program. Barkerville. https://www.barkerville.ca/virtual-field-trip-program/
- Brown, L. (2019a, March 20). *Stanley Park virtual field trip*. Open Geography, UBC. https://open.geog.ubc.ca/stanley-park-virtual-fieldtrip/

- Brown, L. (2019b, March 20). *A guide to capturing and preparing photogrammetry for Unity*. Open Geography, UBC. https://open.geog.ubc.ca/a-guide-to-capturing-and-preparing-photogrammetry-for-unity/
- Bryant, T. (2021). 2021 Experiencing Japanese business Immerse yourself in the hustle and bustle of Tokyo! University of Calgary International, University of Calgary. https://www.ucalgary.ca/international/study-abroad/japan-sgma
- Çaliskan, O. (2011). Virtual field trips in education of earth and environmental sciences. *Procedia - Social and Behavioral Sciences*, *15*, 3239–3243. https://doi.org/10.1016/j.sbspro.2011.04.278
- Centre for Teaching Support and Innovation. (2008). *Developing learning outcomes: A guide for University of Toronto faculty*. University of Toronto. https://teaching.utoronto.ca/wp-content/uploads/2015/08/Developing-Learning-Outcomes-Guide-Aug-2014.pdf
- Chen, J. (2019, November 6). *Open sourcing Google Cardboard*. Google Developers Blog. https://developers.googleblog.com/2019/11/open-sourcing-google-cardboard.htm
- Choi, Suh-hee, & Choi, Sung-hun. (2020). Virtual short-term intercultural exchange as an inclusive educational strategy: Lessons from the collaboration of two classes in South Korea and China. *J. of Teaching in Travel and Tourism*, 20(4), 1-18. https://doi.org/10.1080/15313220.2019.1707147
- Creative Office Haruka. (n.d.). *Kyoto 360° panorama VR tsua-* [Kyoto 360° panorama VR tour]. 360-Panorama.Jp. https://360-panorama.org/kyoto_ui/
- Deardorff, D. (2014, May). Some thoughts on assessing intercultural competence.

 National Institute for Learning Outcomes Assessment.

 https://www.learningoutcomesassessment.org/wp-content/uploads/2019/08/Viewpoint-Deardorff.pdf
- Dickinson, S. & Telford, A. (2020). The visualities of digital story mapping: Teaching the "messiness" of qualitative methods through story mapping technologies. *Journal of Geography in Higher Education 44*(3), 441-457 https://doi.org/10.1080/03098265.2020.1712686
- Douglas College. (2018, January 1). *Introduction to Japan: Language, culture and society* | *MODL* 2273. https://www.douglascollege.ca/course/modl-2273
- Embassy of Japan in the UK. (2019). Japan-UK season of culture. International summer school. Japan orientation: An introduction to the study of Japan and its place in the world. 29 June-13 July. University of East Anglia. https://www.uk.emb-japan.go.jp/SeasonCulture/event/2019/201906/29 CentreforJapaneseStudies JapanOrientation.html

- ESRI. (n.d.). Licensing—ArcGIS StoryMaps. ARCGIS. <a href="https://doc.arcgis.com/en/arcgis-storymaps/reference/licensing.htm#:%7E:text=Public%20account%20(free)&text=When%20using%20ArcGIS%20StoryMaps%20with,a%20Google%20Analytics%20tracking%20ID
- Facebook. (n.d.-a.). *National Geographic Explore VR*. Oculus. https://www.oculus.com/experiences/quest/2046607608728563/?locale=en_US
- Facebook. (n.d.-b.). Quest 2: All in one, One for all, No wires, A world of experiences, Unlike anything you've ever seen. Facebook Technologies, LLC.. Retrieved July 10, 2021, from https://www.oculus.com/quest-2/
- Friess, D., Oliver, G., Quak, M., & Lau, A. (2016). Incorporating "virtual" and "real world" field trips into introductory geography modules. *J. of Geography in Higher Education*, 40(6), 546-564. https://doi.org/10.1080/03098265.2016.1174818
- Garson, K. (2017). Internationalization and intercultural learning: A mixed methods study. In G. M. Garcia-Perez & C. Rojas-Primus (Eds.), *Promoting intercultural communication competencies in higher education* (pp. 54–88). A volume in the Advances in Higher Education and Professional Development (AHEPD) book series, www.igi-global.com. https://doi.org/10.4018/978-1-5225-1732-0.ch003
- Godwin-Jones, R. (2004). Language in action: From webquests to virtual realities. Language Learning & Technology, 8(3), 9–14. http://dx.doi.org/10125/25246
- Google Earth Help. (2021). Learn about places Android. Google.

 https://support.google.com/earth/answer/7365544?co=GENIE.Platform%3DAndroid&hl=en
- Green, A. (2016, July 8). *Announcing FieldPress an OER plugin for WordPress*. Open Geography, UBC. https://open.geog.ubc.ca/announcing-fieldpress-an-oer-plugin-for-wordpress/
- Hall, K., & Sawle, J. (2020, April 23). *Virtual 3D field trips in ArcGIS online*. ArcGIS StoryMaps. https://storymaps.arcgis.com/stories/99c6efc77e5149bdbc238831823a6f19
- Harden, R. (2002). Learning outcomes and instructional objectives: is there a difference? *Medical Teacher*, 24(2), 151-155. https://doi.org/10.1080/0142159022020687
- Hashimoto, Y. (2006). Ba-charu riariti oyobi animeishon ni yoru 3-jigen chiri kyouzai no kaihatsu to riyou [Development of three-dimensional materials for geographical education by virtual reality and animation]. *Hokkaido Chiri*, *81*, 1-18. https://www.hokkaidogeog.org/modules/journal/gs/gs81/gs81_01.pdf
- Higashiyama walk, Kyoto, Japan [Virtual Trip] [Video] (2018, YouTube, June 17) YouTube. https://www.youtube.com/watch?v=PuenS4BXYpM

- Horn, S. (2013). Interdisciplinary engagement as an acculturation process: The case of Japanese studies. *Social Science Japan Journal*, *16*(2), 251-277. http://www.jstor.org/stable/43920392
- Hurst, S. (1998). Use of "virtual" field trips in teaching introductory geology. *Computers & Geosciences*, 24(7), 653-658. https://doi.org/10.1016/S0098-3004(98)00043-0
- JNTO (Japan National Tourist Organization) [Visit Japan]. (2018, January 15). [360°VR] JAPAN - Where tradition meets the future [Video]. YouTube. https://www.youtube.com/watch?v=OR_Y7vj66PU
- JNTO (Japan National Tourist Organization) (n.d.). *Japan educational travel*. https://education.jnto.go.jp/en/
- Joy of Museums Virtual Tours. (2021). *Toyota museum in Nagoya, Japan Virtual tour*. Joy of Museums. https://joyofmuseums.com/museums/japan-museums/japan-museums/toyota-commemorative-museum-industry-technology/
- Kaneko, J. & Kureha, M. (2015). Daigaku kyoiku ni okeru kaigai junken no jisshi to sono kouka Tsukuba daigaku chikyuu gakurui kaisetsu 「Chishi-gaku yagai jikken A」 Ousutoria, Chiroru-shuu junken no jirei [The practice and educational effects of field trip in Tyrol, Austria: A case of the course "Field works on Regional Geography A" held at the University of Tsukuba, (College of Geoscience, School of Life and Environmental Sciences)], Tsukuba City, Japan. https://tsukuba.repo.nii.ac.jp/record/33464/files/02.pdf
- Kent, M., Gilbertson, D., & Hunt, C. (1997). Fieldwork in geography teaching: A critical review of the literature and approaches. *Journal of Geography in Higher Education*, 21(3), 313-332. DOI: 10.1080/03098269708725439
- Kline, J. (2021). *Google Earth screen cast and green screen*. Wevideo. https://www.wevideo.com/education-resources/tutorials/google-earth-screencast-green-screen
- Lang-Raad, N. [WeVideo]. (2021). Virtual field trip with Google Earth and WeVideo [Video]. YouTube. https://www.wevideo.com/education-resources/inspiration/virtual-field-trip-with-google-earth-and-wevideo
- Lemmons, K.K., Brannstrom, C., & Hurd, D. (2014). Exposing students to repeat photography: Increasing cultural understanding on a short-term study abroad. *Journal of Geography in Higher Education, 38*(1), 86-105. https://doi.org/10.1080/03098265.2013.836745
- MacLaurin, A. (2020, 19 June). Sustainable cities field school goes virtual. University of Victoria, UVic News. https://www.uvic.ca/news/topics/2020+copenhagen-virtual-field-school+news

- Manitoba Education, Citizenship and Youth. (2008). Social studies field-based experience guidebook. School Programs Division. https://www.edu.gov.mb.ca/k12/cur/socstud/fbe_guidebook/full_document.pdf
- Matsui, K., & Kaneko, J. (2014). Daigakuin ni okeru fe-rudowa-ku kyouiku no jissen tsukuba daigaku jinbunchirigaku-chishigaku kyoushitsu no jirei [Fieldwork education practice at the University of Tsukuba: Fieldwork as the method of geography]. *Jinbunchirigaku Kenkyuu 34*, 107-125. http://www.geoenv.tsukuba.ac.jp/~chicho/hugeo/34/07.pdf
- Matsui, K., Kaneko, J., Hashimoto, A., & Oishi, T. (2013). Fieldwork education practice in graduate schools: A case study on human geography and regional geography classes at the University of Tsukuba. *Tsukuba Geoenvironmental Sciences*, 9, 21-29. https://tsukuba.repo.nii.ac.jp/record/29834/file_preview/TGS_9-3.pdf
- McEwen, L. (1996). Fieldwork in the undergraduate programme: Challenges and changes. *J. of Geography in Higher Education*, *20*(3), 379-384. https://doi.org/10.1080/03098269608709380
- McMorran, C. (2015). Between fan pilgrimage and dark tourism: Competing agendas in overseas field learning. *Journal of Geography in Higher Education*, *39* (4), 568-583. https://doi.org/10.1080/03098265.2015.1084495
- Mukherjee, F. (2019). Exploring cultural geography field course using story maps. *Journal of Geography in Higher Education*, *43*(2), 201-223. https://doi.org/10.1080/03098265.2019.1597031
- National Geographic Society. (2021a). *Explorer classroom*. https://www.nationalgeographic.org/tickets/explorer-classroom/
- National Geographic Society [National Geographic Education]. (2021b, May 20). *Explorer classroom, photographing the Matagi hunters with Javier Corso* [Video]. YouTube. https://www.youtube.com/watch?v=XG6MCttloiY
- Nearpod. (n.d.-a). We believe teaching is the most important job in the world. Our history is part of our story. https://nearpod.com/about
- Nearpod. (n.d.-b). *Take a trip to Japan!* https://nearpod.com/t/social-studies/kindergarten/take-a-trip-to-japan-L35412716
- Nearpod. (n.d.-c). *Exploring Japan*. https://nearpod.com/t/social-studies/8th/exploring-japan-L35412862 (accessed 26 June 2021)
- Nearpod. (n.d.-d). *The Samurai*. https://nearpod.com/t/social-studies/8th/the-samurai-L57932516
- Nearpod. (n.d.-e). *Skill builder: Landmarks 'round the world: let's travel to Japan.*https://nearpod.com/t/social-studies/4th/landmarks-round-the-world-lets-travel-to-japan-L40037503

- Office of the Provost and Vice President Academic and Research. (n.d.). *General education model*. Thompson Rivers University.

 https://www.tru.ca/vpacademic/curriculum_development_approval/general-education.html
- Ogawa, A., & Seaton, P. (2020). Introduction: Envisioning new frontiers in Japanese studies. In A. Ogawa and P. Seaton (Eds.), *New Frontiers in Japanese Studies (Routledge Contemporary Japan Series)* (1st ed., pp. 1–18). Routledge, Taylor and Francis Group. https://doi.org/10.4324/9780367821494
- Ogden, A. (2010, May). Education abroad and the making of global citizens: Assessing learning outcomes of course-embedded, faculty-led international programming [Doctoral dissertation in educational theory and policy & comparative and international education]. Graduate School, College of Education, The Pennsylvania State University. https://etda.libraries.psu.edu/files/final_submissions/52
- Ohnsorg, N. (2017, April 27). *Virtual field trip of Japan*. https://prezi.com/vhtoet6q-a5 /virtual-field-trip-of-japan/
- OISE (Ontario Institute for Studies in Education). (2021, May 26). Virtual Reality in the Classroom: What is VR? (2021, May 26). University of Toronto. https://guides.library.utoronto.ca/c.php?g=607624&p=4938314
- Open Geography. (n.d.-a). *Virtual field trips*. Department of Geography, Environment & Sustainability Program, University of British Columbia. https://open.geog.ubc.ca/resources/field-trips/
- Open Geography. (n.d.-b). Geog316 virtual field trip. *UBC Blogs*. http://blogs.ubc.ca/fieldtrips/
- Orpett Long, S., Akande, Y., Purdy, R., & Nakano, K. (2010). Deepening learning and inspiring rigor: Bridging academic and experiential learning using a host country approach to a study tour. *J. of Studies in International Education*, *14*(1), 89-111. https://doi.org/10.1177/1028315308327952
- Pantoja, P. (2017, May 18). VR vs. AR vs. MR and then 360 degree! What's the difference? Medium. https://medium.com/@paulettepantoja/vr-vs-ar-vs-mr-and-then-360-whats-the-difference-253a783d252b
- Prezi. (n.d.). Start your 14-day standard trial today. Prezi Inc. https://prezi.com/signup/standard/
- Prince Takamado Japan Centre for Teaching and Research. (2021). Theme studies in Japan. Faculty of Arts, University of Alberta. https://www.ualberta.ca/prince-takamado-japan-centre/student-programs/summer-courses-in-japan/theme-studies/index.html

- Reiher, C. (2018, Oktober). Editorial. Fieldwork in Japan: New trends and challenges. *Asien 149*, S. 5-13. http://asien.asienforschung.de/wp-content/uploads/sites/6/2020/02/149 ED Reiher.pdf
- Ross, M. & Dawson, T. (2021, March 5-6). *Is anyone out there? Can signature in- person field school learning outcomes be achieved online?* [Conference presentation]." Western Division of the Canadian Association of Geographers 2021 annual conference online "Beyond 2020: Geographical Research During Crises," hosted by University of Lethbridge, Lethbridge, AB., Canada https://www.eventbrite.ca/e/wdcag-2021-beyond-2020-geographical-research-during-crises-tickets-124115253063#
- Smith, B., & Yang, W. (2017). Learning outcomes in an interdisciplinary study abroad program: Developing a global perspective. J. of Family and Consumer Sciences, 109 (1), 43-50. https://doi.org/10.14307/JFCS109.1.43
- Smolcic, E., & Katunich, J. (2017). Teachers crossing borders: A review of the research into cultural immersion field experience for teachers. *Teaching and Teacher Education*, 62, 47-59. https://doi.org/10.1016/j.tate.2016.11.002
- Sophia University. (n.d.). Global: About "Collaborative online international leaning programs toward human security and multicultural coexistence: COIL." https://www.sophia.ac.jp/eng/global/coil.html
- Spada, D. [The EdTech Show with Dan Spada]. (2020, April 20). How to create virtual field trips with Dr. Nathan Lang-Raad using Google Earth and WeVideo [Video]. YouTube. https://www.youtube.com/watch?v=TdMNExc8z6c
- Stainfield, J., Fisher, P., Ford, B., & Solem, M. (2000). International virtual field trips: A new direction? *J. of Geography in Higher Education*, *24*(2), 255-262. https://doi.org/10.1080/713677387
- Steinhoff, P. (2007). Part I: Japanese studies in the United States. In Japan Foundation, P. Steinhoff, & M. Donnelly (Eds.), *Japanese studies in the United States and Canada: Continuities and opportunities* (Japanese Studies Series XXXVI, pp. 1–190). Japan Foundation.
- Stokes, A. Collins, T., Maskall, J., Lea, J., Lunt, P. & Davies, S. (2012). Enabling remote access to field work: Gaining insight into the pedagogic effectiveness of 'Direct' and 'Remote' field activities. *J. of Geography in Higher Education*, 36(2), 197-222. https://doi.org/10.1080/03098265.2011.619004
- SUNY (State University of New York). (n.d.). SUNY Coil Center: Collaborative online international learning. State University of New York. https://online.suny.edu/introtocoil/
- Take a virtual tour of Japan with this new 360-degree VR video. (2018, January 29). *Tokyo Weekender*. https://www.tokyoweekender.com/2018/01/take-a-virtual-tour-of-japan-with-this-new-360-degree-vr-video/

- Teaching Commons. (n.d.). Course objectives & learning outcomes, course design, teaching guides. Depaul University, Chicago.

 https://resources.depaul.edu/teaching-commons/teaching-guides/course-design/Pages/course-objectives-learning-outcomes.aspx
- The Learning Adventure. (2021a). School trips, educational tours, & faculty-led programs Culture. https://thelearningadventure.com/subjects/cultural-school-trips/
- The Learning Adventure. (2021b). *Culture in Japan*. https://thelearningadventure.com/trip/japan-cultural-highlights-trip/#outcomes
- Thompson Rivers University. (2021, April). *Thompson Rivers University Academic Calendar 2021–2022*.

 https://www.tru.ca/ shared/assets/Academic Calendar 2021-2022 April53540.pdf#pagemode=bookmarks&navpanes=1
- UCLA Health. (2016, May). Course planning tip sheet. Learning outcome vs. learning objective.

 https://www.uclahealth.org/nursing/workfiles/Education%20Courses/ContinuingEducation/ce-LearningOutcome-v-LearningObjective-052016.pdf
- University of Calgary International. (2021a). 2021 Japanese language and culture in an immersion setting. University of Calgary.

 https://www.ucalgary.ca/international/study-abroad/japan-jpns
- University of Calgary International. (2021b). 2021 UGO group program: Japanese language and culture in a virtual setting. University of Calgary. https://www.ucalgary.ca/international/ugo-japan-jpns
- Virtual field trip. (2020, February 20). Wikipedia. https://en.wikipedia.org/wiki/Virtual field trip
- Wallgrun, J., Chang, J. (S.-K.), Zhao, J., Sajjadi, P., Oprean, D., Murphy, T., ..., & Klippel, A. (2019). For the many, not the one: Designing low-cost joint VR experiences for place-based learning. In P. Bourdot, V. Interrante, L. Nedel, N. Magnenat-Thalmann, & G. Zachmann (Eds.), Virtual Reality and Augmented Reality. EuroVR 2019. Lecture Notes in Computer Science: Vol. 11883 (pp. 126-148). Springer, Cham. https://doi.org/10.1007/978-3-030-31908-3 9
- Williams, T. (2009). The reflective model of intercultural competency: A multidimensional, qualitative approach to study abroad assessment. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 18, 289-306. https://doi.org/10.36366/frontiers.v18i1.267
- Yalcin, T. (2012, 25 December 25). *Japan Travel: Virtual trip to Kyoto P.I Kinkakuji Temple* [Video]. YouTube. https://www.youtube.com/watch?v=REBhuZg8ucU
- Zaidi, Z. (2011). Virtual field trip of Japan. Panda's virtual tour of Japan. https://prezi.com/z4h3y a9tdfa/virtual-field-trip-of-japan/