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# Sustainable Mountain Development Advocacy Through Student Engaged Learning by Observing International Mountain Day: The Case of Utah Valley University

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Target 4.7 of the 2030 Agenda for Sustainable Development aims to ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including through education for

sustainable development. To implement this, students at Utah Valley University (UVU) advocate for sustainable mountain development (SMD) in Utah and elsewhere through a student engaged learning (SEL) model. SEL encourages students to solve real-world problems as a group, with a faculty member serving as a mentor. This paper discusses the implementation of a semester-based SEL initiative to observe International Mountain Day (IMD) and analyzes its outcomes. Utah International Mountain Forum, a coalition of student clubs at UVU, is an extracurricular part of the university's SEL model that involves students, especially nontraditional or adult learners, in SMD activities beyond a single semester. Adult students enhance or change their careers while taking care of families. They have diverse experiences, maturity,

and responsibilities. To overcome adult students' reluctance or inability to engage in club activities, the model provides incentives, such as flexible activity schedules, integration of their experience into group efforts, and recognition at the United Nations level. Through the curricular programs, mentors build stronger ties with adult students and encourage them to join Utah International Mountain Forum. Since 2010, students have been encouraged to contribute experience and initiatives, solicit funds, and gain recognition for SMD advocacy as part of IMD at UVU. Our assessment shows that students learn how to tie their own experiences to SMD, implement initiatives collaboratively, build partnerships on different levels, and then use accumulated knowledge for engagement in SMD activities beyond the semester. Thus, UVU's model of observing IMD could serve as another important United Nations experiential learning initiative.

**Keywords:** student engaged learning; student clubs; adult students; Women of the Mountains Conference; Utah International Mountain Forum.

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## Introduction

### Efforts of Utah Valley University to promote sustainable mountain development

Utah is a mountainous state. Its mean elevation stands at 1860 m, the third highest in the United States (Sawe 2019). Utah Valley University (UVU) is the largest public university in Utah, enrolling more than 40,000, mainly undergraduate, students. UVU was founded in 1941 as a technical school. Since becoming a university in 2008, UVU has enhanced students' capacity in the field of sustainable mountain development (SMD). Through its dual-mission education, UVU today implements the idea that a single institution can serve mainly local communities by combining a community college with a focus on vocational and technical training and a baccalaureate program (UVU n.d.). Of the students at UVU, 88% are Utah residents; 19% are students of color,

with Hispanic/Latino students making up the largest group; and 61% are employed locally (UVU 2019a). Adult students (also sometimes referred to as nontraditional students) make up 30% of the UVU student body. Of these, 81% work, 17% require English remediation, and 17% support at least 1 child (Tuminez 2020). Their ages range between 25 and 75 years, and many are enhancing or changing careers (Pelletier 2010). This range reflects a more widespread pattern: adult students represent 35–40% of the student population in the United States and Europe (Hauschildt et al 2015; Hittepole 2015).

Since 1999, UVU has partnered with the International University of Kyrgyzstan (IUK) to share Utah experiences in SMD and explore UVU's contribution to them through educational programs. Since 2006, UVU has promoted SMD by implementing the United Nations (UN) General Assembly resolution proclaiming 2002 the International Year of

Mountains, which recommended that interested institutions (1) join the Mountain Partnership (MP); (2) support, including financially, programs resulting from the International Year of Mountains; and (3) organize UN International Mountain Day (IMD) events, on 11 December, at all levels to highlight the importance of SMD (UN 2003).

For this purpose, UVU joined the MP, hosted by the Food and Agriculture Organization of the UN (FAO), in 2006; it was the first North American university to do so. The MP is an alliance of approximately 400 members (as of 1 June 2020) that work toward achieving sustainable development in mountains around the world. Members are governments, intergovernmental organizations, nongovernmental organizations (NGOs), and other major groups from civil society and the private sector. The United States has not joined the MP, and North America was represented in 2006 by a handful of NGOs. MP membership provided an opportunity for UVU to involve faculty and students inclusively in an SMD agenda that also complements the university's dual mission. It allowed the university to raise awareness about SMD in Utah and North America, more generally, in order to recruit new MP members who will fill the existing void and contribute to SMD globally.

In March 2007, UVU and IUK cohosted the first international Women of the Mountains Conference (WOMC) in Orem, UT, USA, as a major initiative to implement the 2003 UN General Assembly resolution (Rudaz and Krause 2007). The WOMC continued the traditions of the 2002 Celebrating Mountain Women conference in Bhutan, and UVU raised the funds to host it. The first WOMC provided an academic forum to discuss how to “improve mountain women’s status globally” and to “create a regional network on gender and SMD.” It included 4 MP members from North America (UNSG 2007: 9, UNSG 2009: 12).

### Student engaged learning and SMD advocacy

In 2011, as a next step in implementing the 2003 UN General Assembly resolution, UVU embarked on a student engaged learning (SEL) initiative. SEL, also known as experiential, service-, or problem-based learning, encourages students to exchange knowledge and resources with different communities. SEL aims at intellectual development, basic skills acquisition, moral and ethical development, social and civic responsibility, career preparation, multicultural understanding, and personal growth of the students (Boud 1985; Witmer and Anderson 1994; Rama et al 2000; Driscoll 2008; Berger et al 2014). SEL is based on the following principles from problem-based learning: (1) students are asked to study problems, (2) students investigate these problems as a group in a collaborative way, (3) teachers facilitate the students’ self-learning, and (4) students are responsible for their self-learning (Bonwell and Eison 1991; Burch 2000).

To ensure student involvement in SMD activities beyond a semester, UVU developed an inclusive SEL model comprising 2 parts: (1) *the extracurricular part*, the core of the model, encourages student interest and contributions to the activities and extends over several semesters; and (2) *the curricular part*, raises interest and encourages student involvement in extracurricular activities.

The extracurricular part of the model is implemented through the Utah International Mountain Forum (UIMF), a

coalition of student clubs. Student clubs are important for learning outside of the classroom and provide opportunities to work interdependently in groups and be mentored by faculty members (Eccles and Barber 1999; Foubert and Urbanski 2006; Logan and Scarborough 2008). Moreover, clubs usually raise funds for their activities. Hence, student clubs meet the requirements for implementing SEL.

Adult students usually prefer academic programs, believing they better contribute to their education, and are reluctant to become involved in student clubs or any other extracurricular activity due to time constraints (Dill and Henley 1998; Wyatt 2011). Some might join clubs if the activities provided match their professional interests, have flexible schedules, and allow their families to become involved (see Wyatt 2011). Adult students also often experience social or educational disadvantages. They have different interests and values than their traditional peers and, therefore, require different treatment (Taylor and Burgess 1997; Kim 2002; Schuetze and Slowey 2002; Wyatt 2011). They have diverse experiences and motivations (Cross 1980; Chung et al 2014). However, the goals and structures of the UIMF addressed their reluctance and provided them with adequate incentives. They were able to contribute their experience to group efforts and, due to their maturity, were able to take on the responsibility of leading activities to successfully complete group tasks and eventually gain recognition from the MP (Eraut 1994; Rogers 1996; Taylor and Burgess 1997; Bye et al 2007). The model also encouraged adult students to raise awareness and interest in SMD within other US and UN institutions and gain their recognition too.

The curricular part supported extracurricular activities by building faculty ties with students, especially adult students, raising interest in SMD advocacy, and creating incentives for involvement with clubs (Bruner 1975; Donaldson and Graham 1999; Bye 2007; Timpson et al 2013).

Since 2015, SEL activities have focused on promoting progress on the 3 mountain targets of the 2030 Agenda for Sustainable Development (UN 2015): targets 6.6, 15.1, and 15.4. These are linked with efforts to achieve target 4.7, which aims to ensure “that all learners acquire the knowledge and skills needed to promote sustainable development, including ... through education for sustainable development and sustainable lifestyles” by 2030 (UN 2015: 17/35).

As an example of the implementation of a UN (2003) recommendation, this paper assesses the implementation of the semester-based SEL education initiative to raise awareness about SMD by observing IMD. The assessment is based on an analysis of the learning outcomes of students since the initiative was launched.

## The SEL model implemented at UVU

### Extracurricular part

The UIMF was created in 2011 by a student initiative after the second WOMC, which was cohosted by 60 UVU students (UIMF n.d.; MP 2011). It was formed as a coalition of existing student clubs. The UIMF encourages students, especially adult learners, to join 1 or more clubs or create their own to allow them to contribute more effectively to SMD activities (Bruner 1975; Timpson et al 2013). It requires clubs to host 1

service project per semester in order to receive funding from UVU. Overall, the UIMF commits to hosting at least 3 activities in a semester and raises additional funds per the UVU requirement for clubs to self-fund activities (UVU 2019b).

The first SEL principle is to identify a problem for study. The model encourages students to organize events that are in line with the 3 major objectives of UIMF (n.d.: 1) in SMD advocacy: “1) raise awareness of mountain (including in the State of Utah) sustainability topics; 2) bring the public into contact with international guests and foreign dignitaries; or 3) bring communities together to recognize their shared mountainous heritage.” The student clubs on SMD, foreign affairs, and Model UN became core to UIMF in this respect. With other clubs of the coalition, they also provide a variety of opportunities for students, including adult learners, to join and participate in specific club activities at a time convenient to them.

The second SEL principle is to jointly study a problem. This requires clubs to have at least 6 members with a full-time student as president (UVU 2019b). The president must be able to contribute to SMD over several semesters. This ensures the continuity of activities. Presidents also represent UIMF at national and international gatherings. As outlined by Burch (2000), they facilitate, in the presence of their advisor, weekly group meetings to select activities and discuss their implementation. Each semester new members are recruited through club rushes, events to promote UIMF at the UVU campus, and visits to classes. Although UIMF implements projects proposed by the MP, most activities are initiated by students. Projects initiated by adult students allow better mitigation of possible disagreements between them and their traditional peers due to their ability to take the lead in assembling and coordinating team efforts to implement projects. Meetings allow individual student learning to be scaffolded (Bruner 1975) by using a task list and “breaking the selected initiative into smaller pieces; . . . and outlining steps so that everyone can measure progress toward a goal” (Timpson et al 2013: 34).

A faculty member, serving as club advisor, ensures the implementation of the third SEL principle and, in collaboration with the president of UIMF/club, “organizes learning objectives, problems and questions, and pilots the learning cycle, then teaches skills within that format” (Burch 2000: 36) to ensure that students will become responsible for their own learning (Burch 1995). Advisors help presidents connect and finalize activities with the SMD in Utah and elsewhere and help members tie their experiences to the UIMF/club activities. As feedback, all group correspondence on implementing activities is copied to the advisor.

Students fulfill the fourth SEL principle by finishing task list assignments. Implementation of assignments requires student interactions with UVU staff and administration, which is also important for their education (Wyatt 2011). To fully implement the activity, the UIMF/club president or the initiative leader, with the advisors’ guidance, ensures the submissions of (1) essays by students presenting learning outcomes from finished assignments to a website ([www.utahimf.org](http://www.utahimf.org)), (2) their own report to the MP, and (3) a report to the UVU club’s office about the finished project, which is necessary to receive funds. As a rule, the model encourages students to raise funds, preferably in small amounts, for

every new activity from multiple donors. Clubs always contribute their own share.

### Curricular part

In the model, in-class learning helps faculty to raise students’ awareness and interest in extracurricular activities that focus on SMD (Donaldson and Graham 1999; Bye 2007). During classes, for 8–10 minutes each week, UIMF members inform students about SMD activities and invite them to join the coalition. Four general classes, including Introduction to International Relations and Introduction to Comparative Politics, award students extra credit for joining UIMF and writing reflective essays about lessons learned. These can be based on finishing assigned tasks while contributing to the SMD activity or observing the activity and its implementation by their peers (Timpson et al 2013).

Because adult students value academic programs, curricular activities allow faculty members to build a better understanding and ties with them (Donaldson and Graham 1999; Bye 2007). This allows faculty to identify potential new UIMF members and help them to connect their experience or interests with SMD advocacy (Bruner 1975; Timpson et al 2013). Students also enroll in a 3-credit course, Globalization and SMD, currently the only course related to the SMD agenda, which is taught during the spring semester. They learn theories and practices of SMD in Utah and globally, and they learn skills to match their professional experiences, which allows them to become club leaders and advocate for Utah practices in SMD at the UN, among others.

As part of the curriculum, they contribute to UIMF activities and write a peer-reviewed research paper about different aspects of sustainable development in Utah and globally for the undergraduate student journal *Youth and the Mountains* (UVU History and Political Science n.d.). The students are responsible for peer reviewing, editing, and managing the journal.

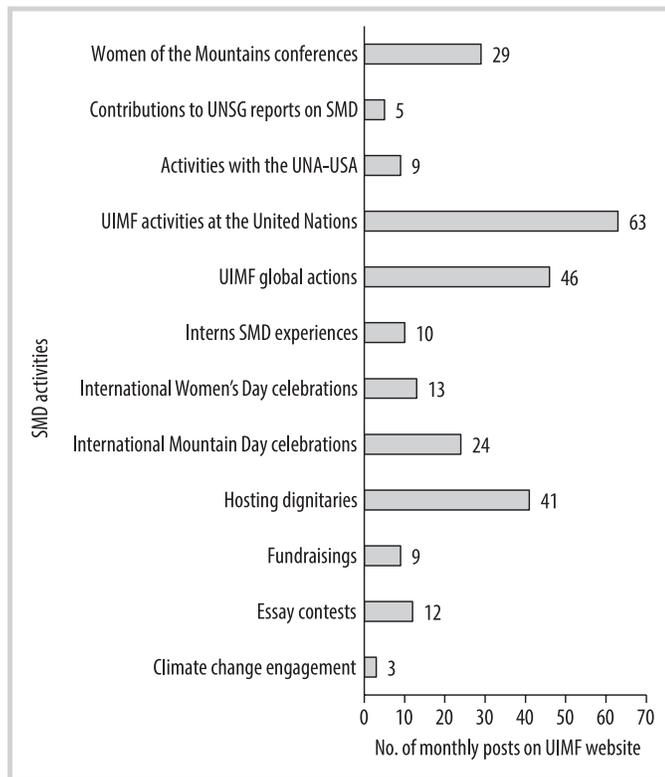
### Competence and recognition gained by students from activities

Since 2011, a website ([www.utahimf.org](http://www.utahimf.org)) designed and maintained by students has been used to post information about all UIMF initiatives. This includes copies of agendas, task lists, posters, brochures, links to media, and student reflective essays written as cohosts or observers of activities.

The website allows an external audience to assess the range of UIMF activities and has thus promoted SMD since 2011. It is a forum for students’ reflections on the experience and skills they have gained in collaboratively implementing SMD advocacy tasks. The successful projects described on the website provide templates for future activities and act as an institutional record of the activities.

The major SMD activities posted on the UIMF website from November 2011–November 2019 demonstrate a variety of initiatives, experiences, and fundraising activities by students (including adult students) that contributed to SMD advocacy (Figure 1). More than 750 reflective essays posted on the website during that time offer lessons learned by students. About 30% of the essays share lessons on how hosting events helps students (1) link their own professional interests with UN activities; (2) gain skills in areas of protocol, logistics, and analysis; (3) understand how to work together as a group; and (4) develop networking competences at the university, local community, and MP

**FIGURE 1** Major SMD activities posted on the UIMF website.



levels. About 70% of the essays reflect student observers' experiences of learning about SMD and the benefits of SEL for their education and professional advancement.

Moreover, since 2007, UVU and UIMF have raised about \$250,000 for SMD advocacy and experiences. Fundraising activities were reflected in posts about students participating in club rushes, hosting events promoting UIMF at the UVU campus, developing fundraising campaigns, and applying for grants (Hone 2015; Medina 2015; Genes 2017; Ashcraft 2018; Isaackson 2018a; Pigott 2018; Gum-Causey 2019).

UVU's SEL model has both similarities to and differences from existing UN experiential learning initiatives (Datta 2013):

1. UN Academic Impact (UNAI), an initiative of the UN Department of Global Communications, encourages its 1300 members to support the principles of the UN (UN n.d. a) through scholarships and research. By linking UVU with the MP, the university follows the UNAI initiative's aim to align higher education institutions with UN efforts. Several posts show how students learned to advocate for SMD through UNAI (eg Meyer 2017; Isaackson 2018b; Elzinga 2019a).
2. The SEL-based Model UN initiative involves students in UN activities by simulating UN bodies, such as the General Assembly, Economic and Social Council (ECOSOC) (UN n.d. b). Students participating in conferences act as delegates, are placed in committees, and assigned to countries (Crossley-Frolick 2010). They conduct research before the conferences and formulate positions that will be debated with their peers in the committees (Shaw 2004; Haack 2008). The UVU's model, in contrast to the Model UN, engages students in

implementing SMD rather than only simulating UN efforts. Moreover, posts by Mansfield (2017), Erickson (2018), and Pedler (2019b) reflect student efforts to promote SMD during these conferences.

3. Through the current model, students also intern at the UN and advocate for SMD (see McCain 2014; Dzhukev 2016a, 2016b; Pedler 2019a).

The distribution of more than 310 SMD activities hosted by UIMF since November 2011, an average of 3.7 activities per month, demonstrates a sustained interest from students in involvement with UIMF (Figure 2). In addition, posts on the UIMF website serve as references for news at MP media outlets. They are used by FAO, showing its continued recognition, support, and promotion of the model, which no other academic institution among the current MP members has yet used. Since 2011, UVU and UIMF have been recognized 82 times (or 10 times per year) on the MP and FAO news websites and 57 times (or more than 7 times per year) in the monthly MP newsletter *Peak to Peak* (Figure 3). The number of recognized cases drops off in 2019, reflecting a shift of UIMF's focus to gaining more recognition for SMD advocacy in the United States (Elzinga 2019b; McAdams 2019) and UN ECOSOC (2018).

Finally, UIMF has been recognized in MP's annual reports on SMD since 2015 (FAO 2016a, 2019). It was highlighted twice in the UN Secretary General's reports on SMD, the only student club coalition worldwide to receive such recognition (UNSG 2016, 2019). The model and UIMF were also recognized by UN ECOSOC (2016, 2017, 2018).

## IMD observations

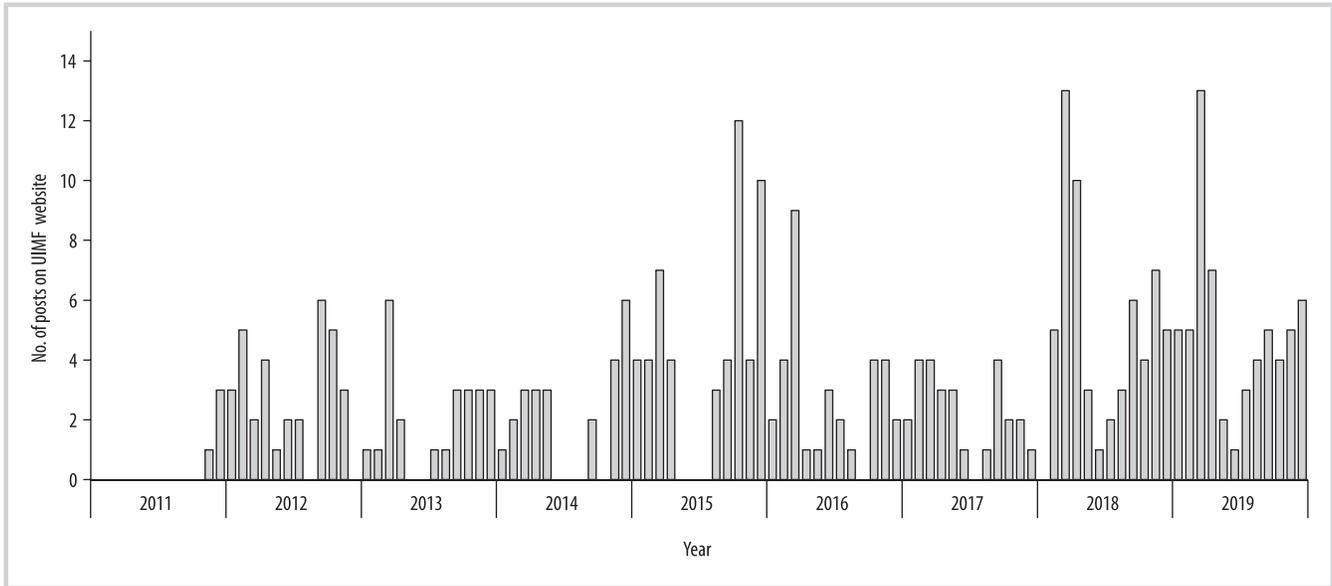
### IMD as an on-campus UN experiential learning initiative

Annually, since 2010, students have observed IMD (UN 2003) at the UVU campus and elsewhere as an essential activity of the model (Table S1, *Supplemental material*, <https://doi.org/10.1659/MRD-JOURNAL-D-19-00070.1.S1>).

During IMD observations UIMF members:

1. *Raise awareness about SMD and gradually accumulate experiences for future actions.* In 2010, UVU students hosted a coauthor of this paper to speak on the main IMD theme. In addition, they contributed a cultural activity to the event agenda. The task list included simple assignments in logistics, protocol and media, implementation deadlines, and student contact information (Timpson et al 2013). This served as a template for IMD 2013 and IMD 2014, when UIMF hosted roundtable discussions with other experts to promote SMD beyond the UVU campus. IMD 2015 allowed UIMF members to advocate SMD during a special meeting and lunch at UVU with the permanent representative of Fiji to the UN. Students discussed UIMF contributions to SMD and how to jointly address, at the UN, the impact of climate change on mountain and small island state communities. Major assignments in the task list then focused student efforts on writing a special memo and discussing the issues with the president of UN General Assembly-designate. This provided UIMF with a template for SMD advocacy during meetings with diplomats from other countries accredited by the UN.
2. *Build alliances for joint activities* (FAO n.d.). Since 2011, UIMF has observed IMDs and more effectively advocated

FIGURE 2 Monthly posts on the UIMF website about SMD activities.



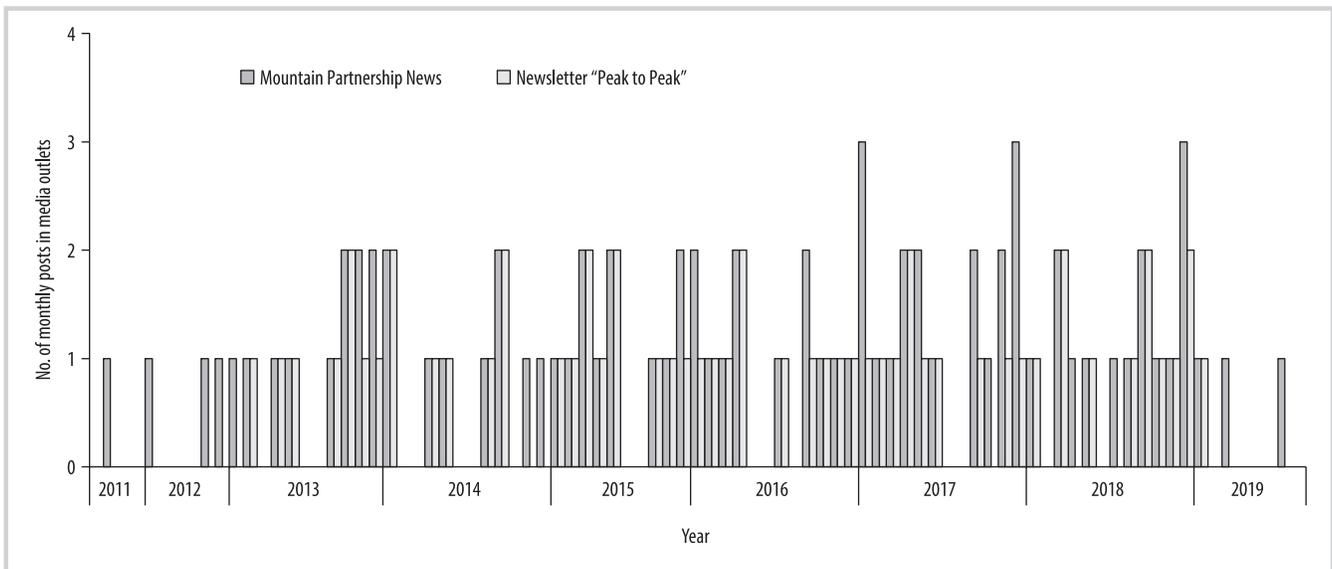
SMD due to joint efforts with MP members such as the city of Orem, the Gruppman International Music Institute, and the IUK. In 2013, the alliance observed IMD as a gathering of North American MP members. Since 2017, the Russian Academy of Natural Sciences and the Utah China Friendship Improvement Sharing Hands Development and Commerce, NGOs in consultative status with ECOSOC, have joined MP and the alliance. IMDs were also commemorated under the UNAI umbrella. During IMD 2019, UIMF advocated for SMD by becoming a chapter of the UN Association of the United States of America (UNA-USA). This was important recognition from the oldest US NGO dedicated to supporting the UN (UNA-USA n.d.). UNA-USA (2019) posted a toolkit on SMD and urged its 20,000 members and 200 chapters nationwide to observe IMD (Elzinga 2019b).

3. *Contribute to IMDs elsewhere.* For IMD 2012, UIMF leaders with IUK cohosted international conferences on the

impact of climate change on mountain communities in Bishkek and Osh, Kyrgyzstan. On 11 December 2013, the UIMF president advocated for SMD at the session of the Open Working Group on Sustainable Development Goals in New York. In recognition of successful SMD advocacy, UIMF leaders spoke during the IMD 2018 and IMD 2019 observations hosted by the Group of Friends of Mountain Countries at the UN headquarters.

4. *Provide MP recognition to SMD contributors and recruit new UIMF members.* UIMF is recognized every year for its IMD observation when its reports are posted at the special FAO website. Since 2013, UIMF has presented specially designed FAO certificates to all contributors to SMD activities over the year. This allows UIMF leaders to recognize their peers from previous semesters who have already left the coalition and invite them to join UIMF during the next semester.

FIGURE 3 Monthly posts about UIMF in MP media outlets.



**BOX 1: Example of IMD observation**

The main theme of IMD 2016 was mountain cultures. This was observed by UIMF clubs over an entire semester by hosting 3 relevant events, each initiated and coordinated by adult students. At the start of the fall semester, students selected assignments from 1 of 3 task lists (Jensen and Batmunkh 2016; Medina and Alarco 2016; Torsak and Medina 2016) and followed them through weekly meetings (Bruner 1975).

1. An opening of an art exhibition from the Republic of Georgia in Utah took place on 15 September. Six UIMF members learned how to organize a Utah-wide student essay contest on the Georgian exhibition paintings. They presented the winners' essays at the event (Leavitt 2016; Spjut 2016) and then published them in the *Youth and the Mountains* journal (Medina 2016). Four students gained professional skills in writing a memo and discussing joint activities at the UN during the coming year with the Georgian envoy to the UN. The event was a follow-up of the 2015 visit of the permanent representative of Georgia to the UN, Ambassador Kaha Imnadze, to UVU, and was hosted by Tony Medina, UIMF president (2015–2016), and coalition members. Medina, a 29-year-old student and military veteran, combined education with a part-time job and taking care of a family. He coordinated all the events under IMD 2016 and graduated from UVU in December of the same year.
2. A Utah Rotary event was hosted by the Foreign Affairs Club on 15 November. Experiences were shared by 4 leaders of Utah Rotary about polio eradication in India, cultural traditions in Japan, and their activities in Utah. More than 40 students learned about Rotary International, a prominent NGO in general consultative status with the ECOSOC, the potential for SMD advocacy, and student career advancement (Taylor 2016). The event stimulated a UVU Rotaract (a student club for Rotary International) to join UIMF during spring semester 2017 and then eventually to work with Rotary International at ECOSOC in 2019. Angela Jackson, an adult student and Rotarian proposed an event to involve Utah Rotary in SMD. It was hosted by Christian Jensen, president of the Foreign Affairs Club, and the club's 15 members. Jensen balanced his education at UVU with a full-time job and family responsibilities.
3. A young movie producer from Pakistan was invited to present a documentary about the smallest ethnoreligious group that lives in the mountains of that country during the main event on 2 December. The event provided lessons to 4 students led by the UIMF president in fundraising. They solicited funds for the guest's air travel from several UVU institutions, and the SMD club president, as a club contribution, provided accommodation in her own house, as well as transportation and meals. This is in line with Wyatt (2011), who highlights the importance of involving adult student families as an incentive to join clubs. The UIMF president then was able to teach 3 other UIMF members how to secure visa and tickets for the VIP guest. The event was proposed by Deann Torsak, SMD club president. She hosted it together with 26 members of the club. Torsak pursued a degree in political science along with a part-time job at her husband's small company while raising 4 teenage children. A UIMF member since 2013, she became president of the SMD Club in 2016.

A presentation of the documentary "Daughter of Kalash" was held at the University of Utah (2016) on 29 November and at UVU on 2 December. Audiences learned how this animism-preaching group in Pakistan coexists with the Muslim-majority population. It was followed by a presentation by UVU faculty about cultures in the mountain areas of the Democratic Republic of Congo. UIMF also presented MP certificates to more than 80 contributors to the 12 SMD activities hosted during 2016.

Eleven essays by student observers on the UIMF website shared lessons learned about culture's role in building bridges between mountain communities (Medina 2016). The SMD club president reflected on the experiences of her family and neighbors of hosting the guest from Pakistan (Torsak 2017). The FAO IMD website highlighted all events and linked UIMF posts (FAO 2016b). As another example of UIMF recognition for a contribution to SMD advocacy, a student club coalition was featured in the *Outdoor Journal* (Kumar 2016).

As an on-campus UN-related activity, IMD observations are beneficial, especially for students and adult learners who cannot go to the UN due to time or financial constraints (see example in Box 1). Therefore, the SEL model developed for SMD advocacy through observing IMD provides an important UN experiential learning pedagogy. This experience adds to the existing initiatives, such as UNAI, Model UN, and internships at the UN (Datta 2013).

**Conclusions**

This study examined experiences at UVU in raising awareness about the SMD agenda. It builds capacity for MP in the state of Utah, the United States, and elsewhere

through an inclusive SEL model. The model combines extracurricular activities and curricular elements. This educational initiative is based on UIMF, a coalition of student clubs at UVU. Since 2010, it has encouraged students, including adult students, to gain skills in successful advocacy for SMD, particularly by observing IMD.

Our findings show that the effectiveness and inclusiveness of such a model are ensured by the following:

- The thematic focus, for example, promoting SMD, matches the mission of the academic institution. This will ensure that the necessary academic support is provided and that faculty members and students across the campus are involved in the activities.

- The format allows for activities that go beyond a regular semester as SMD advocacy efforts often last longer. Extracurricular activities through student clubs are an effective means towards this end.
- Incentives are provided, particularly to adult students, to join clubs, by creating structures or functions that fit their schedules and interests. Contributions should also be recognized by UN-related organizations, such as the MP.
- Advice from faculty members, coordination by club presidents or project leaders, and rules for implementing assignments support students. This enables them to take on maximum responsibilities for implementing activities and to contribute their own experience, initiatives, and funds to SMD advocacy. A database of comprehensive information about implemented SMD activities can help evaluate students' learning and contribution, as well as ensure institutional memory.
- Fundraising activities that are combined with raising awareness of SMD allow students to meet the requirement that student clubs should self-fund activities through several sources and provide their own share. This also sensitizes donors to the concerns of sustainable development in mountains.

The SEL model for SMD advocacy through observing IMD is an important UN experiential learning pedagogy. Observing IMD gains UN recognition. Over a semester-long activity, it allows students to accumulate the experience necessary for the successful implementation of longer and more complex SMD initiatives. As mainly campus-based activities, they are affordable and beneficial, especially for adult learners, many of whom are not able to visit the UN due to time or financial constraints.

The SEL model empowers all students professionally through affiliation to the SMD agenda. They become full-fledged contributors and gain recognition for implementing the 3 mountain targets in interaction with target 4.7 of the 2030 Agenda for Sustainable Development.

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## REFERENCES

- Ashcraft D.** 2018. Raising funds to promote sustainable mountain development. *Utah International Mountain Forum*. <http://utahimf.org/archives/3540>; accessed on 10 March 2020.
- Berger R, Rugen L, Woodfin L.** 2014. *Leaders of Their Own Learning: Transforming Schools Through Student-Engaged Assessment*. San Francisco, CA: Jossey Bass.
- Bonwell C, Eison J.** 1991. *Active Learning: Creating Excitement in the Classroom*. ASHE [Association for the Study of Higher Education] ERIC [Education Resource Information Center] Higher Education Report No. 1. Washington, DC: George Washington University, School of Education and Human Development.
- Boud D.** 1985. Problem-based learning in perspective. In: Boud D, editor. *Problem-based Learning in Education for the Professionals*. Sydney, Australia: Higher Education Research and Development Society of Australia, pp 13–18.
- Bruner S.** 1975. The ontogenesis of speech acts. *Journal of Child Language* 2(1):1–19.
- Burch K.** 1995. PBL and the lively classroom. *About Teaching* 47(2):8.
- Burch K.** 2000. A primer on problem-based learning for international relations course. *International Studies Perspectives* 1:31–44.
- Bye D, Pushkar D, Conway M.** 2007. Motivation, interest, and positive affect in traditional and non-traditional undergraduate students. *Adult Education Quarterly: A Journal of Research and Theory* 57(2):141–158.
- Bye E.** 2007. Alcohol and violence: Use of possible confounders in a time-series analysis. *Addiction* 102(3):369–376.

- Chung E, Turnbull D, Chur-Hansen A.** 2014. Who are 'non-traditional students'? A systematic review of published definitions in research on mental health of tertiary students. *Educational Research and Reviews* 9(23):1224–1238. <https://academicjournals.org/journal/ERR/article-full-text/FE9A0F748686>.
- Cross K.** 1980. Our changing students and their impact on colleges: Prospects for a true learning society. *Phi Delta Kappan* 61(9):630–632.
- Crossley-Frolick K.** 2010. Beyond model UN: Simulating multi-level, multi-actor diplomacy using the millennium development goals. *International Studies Perspectives* 11(2):184–201.
- Datta R.** 2013. Teaching the UN through experiential education. *UN Chronicle* 50(4):8–12. <https://www.un.org/en/chronicle/article/teaching-un-through-experiential-education>.
- Dill L, Henley T.** 1998. Stressors of college: A comparison of traditional and nontraditional students. *Journal of Psychology* 132(1):25–32.
- Donaldson F, Graham S.** 1999. A model of college outcomes for adults. *Adult Education Quarterly* 50(1):24–40.
- Driscoll A.** 2008. Carnegie's community-engagement classification: Intentions and insights. *Change: The Magazine of Higher Learning* 40(1):38–41.
- Dzhukev Y.** 2016a. The first UVU intern working at FAO UN to promote sustainable mountain development. *Utah International Mountain Forum*. <http://utahimf.org/archives/1944>; accessed on 10 March 2020.
- Dzhukev Y.** 2016b. End of a marathon, beginning of a new journey. *Utah International Mountain Forum*. <http://utahimf.org/archives/2252/>; accessed on 10 March 2020.
- Eccles J, Barber B.** 1999. Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research* 14(1):10–43.
- ECOSOC [United Nations Economic and Social Council].** 2016. Statement submitted by Russian Academy of Natural Sciences, a Non-governmental Organization in Consultative Status with the Economic and Social Council\*. 2016 Session, High-level Segment, 24 May 2016. E/2016/NGO/60. New York, NY: ECOSOC. <https://undocs.org/E/2016/NGO/60>; accessed on 10 March 2020.
- ECOSOC [United Nations Economic and Social Council].** 2017. Statement submitted by Russian Academy of Natural Sciences, Utah China Friendship Improvement Sharing Hands Development and Commerce, Non-governmental Organizations in Consultative Status with the Economic and Social Council\*. 62nd Session, Commission on the Status of Women, 7 December 2017. E/CN.6/2018/NGO/37. New York, NY: ECOSOC. <https://undocs.org/E/CN.6/2018/NGO/37>; accessed on 10 March 2020.
- ECOSOC [United Nations Economic and Social Council].** 2018. Statement submitted by Russian Academy of Natural Sciences and Utah China Friendship Improvement Sharing Hands Development and Commerce, non-governmental organizations in consultative status with the Economic and Social Council\*. 63rd Session, Commission on the Status of Women, 19 November 2018. E/CN.6/2019/NGO/64. New York, NY: ECOSOC. <https://undocs.org/E/CN.6/2019/NGO/64>; accessed on 10 March 2020.
- Elzinga S.** 2019a. 10th annual International Mountain Day observation at Utah Valley University. *Utah International Mountain Forum*. <http://utahimf.org/archives/5368>; accessed on 15 March 2020.
- Elzinga S.** 2019b. Celebrate International Mountain Day: Mountains matter for youth. *United Nations Association of the United States of America (UNA-USA)*. <https://unusa.org/celebrate-international-mountain-day-mountains-matter-for-youth/>; accessed on 10 March 2020.
- Eraut M.** 1994. *Developing Professional Knowledge and Competence*. London, United Kingdom: Falmer Press.
- Erickson N.** 2018. Model U.N. Conference of the Far West in San Francisco. *Utah International Mountain Forum*. <http://utahimf.org/archives/3629>; accessed on 10 March 2020.
- FAO [Food and Agriculture Organization of the United Nations].** 2016a. *Our Journey in 2015: Mountain Partnership Secretariat Annual Report*. Rome, Italy: FAO. <http://www.fao.org/3/a-i5490e.pdf/>; accessed on 10 May 2020.
- FAO [Food and Agriculture Organization of the United Nations].** 2016b. IMD around the world. *International Mountain Day*. <http://www.fao.org/international-mountain-day/imd-around-the-world/en/>; accessed on 10 March 2020.
- FAO [Food and Agriculture Organization of the United Nations].** 2019. *Mountain Partnership Secretariat Annual Report 2018*. Rome, Italy: FAO. <http://www.fao.org/3/ca5654en/ca5654en.pdf>; accessed on 10 March 2020.
- FAO [Food and Agriculture Organization of the United Nations].** n.d. *International Mountain Day*. <http://www.fao.org/international-mountain-day/en/>; accessed on 10 May 2020.
- Foubert J, Urbanski L.** 2006. Effects of involvement in clubs and organizations on the psychosocial development of first-year and senior college students. *NASPA Journal* 43(1):166–182.
- Genes D.** 2017. Club rush at Utah Valley University. *Utah International Mountain Forum*. <http://utahimf.org/archives/2930>; accessed on 10 March 2020.
- Gum-Causey W.** 2019. *My Experiences Hosting a Foreign Dignitary*. Orem, UT: Utah International Mountain Forum. <http://utahimf.org/wp-content/uploads/2019/09/19-10-18-William-Gum-My-Experiences-Hosting-a-Foreign-Dignitary-FINAL.pdf>; accessed on 10 March 2020.
- Haack K.** 2008. UN studies and the curriculum as active learning tool. *International Studies Perspectives* 9(4):395–410.
- Hauschildt K, Gwosc C, Netz N, Mishra S.** 2015. *Social and Economic Conditions of Student Life in Europe. Synopsis of Indicators: Eurostudent V 2012–2015*. Bielefeld, Germany: W. Bertelsmann Verlag.
- Hittepole C.** 2015. *Nontraditional Students: Supporting Changing Student Populations A Guide for Chief Academic Officers & Chief Student Affairs Officers*.

- Washington, DC: National Association of Student Personnel Administrators. [https://www.naspa.org/images/uploads/main/Hittepole\\_NASPA\\_Memo.pdf](https://www.naspa.org/images/uploads/main/Hittepole_NASPA_Memo.pdf); accessed on 10 March 2020.
- Hone T.** 2015. Great lessons of the Women of the Mountains Conference. *Utah International Mountain Forum*. <http://utahimf.org/archives/1807>; accessed on 10 March 2020.
- Isaackson H.** 2018a. Club rush provides UIMF an opportunity to promote mountain cause. *Utah International Mountain Forum*. <http://utahimf.org/archives/3799>; accessed on 10 March 2020.
- Isaackson H.** 2018b. Ninth International Mountain Day celebration at Utah Valley University. *Utah International Mountain Forum*. <http://utahimf.org/archives/4029>; accessed on 10 March 2020.
- Jensen C, Batmunkh M.** 2016. Rotary International: "Learning Cultures to Build Ties with Mountain Nations". Round Table Agenda. Orem, UT: Utah International Mountain Forum. <http://utahimf.org/wp-content/uploads/2016/11/16-10-22-Task-List-Rotary-Round-Table.pdf>; accessed on 10 March 2020.
- Kim K.** 2002. ERIC review: Exploring the meaning of "nontraditional" at the community college. *Community College Review* 30(1):74–89. <https://doi.org/10.1177/009155210203000104>.
- Kumar Y.** 2016. International Mountain Day: Are we on the right track? *Outdoor Journal*. 11 December 2016. <https://www.outdoorjournal.com/news-2/international-mountain-day/>; accessed on 10 March 2020.
- Leavitt H.** 2016. The Soviet Babushka: A standard of tradition and keeper of faith. *Youth and the Mountains* 4:76–79; <https://www.uvu.edu/hps/docs/youth.mountains/vol-iv-youthmts.pdf>; accessed on 10 May 2020.
- Logan W, Scarborough J.** 2008. Connections through clubs: Collaboration and coordination of a schoolwide program. *Professional School Counseling* 12(2):157–161.
- Mansfield T.** 2017. Promoting mountain countries during the Model UN Conference. *Utah International Mountain Forum*. <http://utahimf.org/archives/2841>; accessed on 10 March 2020.
- McAdams B.** 2019. Recognizing Utah Valley University students for advocacy on behalf of women in mountain communities at the 63rd Session of the Commission on the Status of Women. Proceedings and Debates of the 116th Congress, First Session, Washington, Friday, 12 April 2019. *Congressional Record – Extensions of Remarks* 165(64):E453. <https://www.congress.gov/116/crec/2019/04/12/CREC-2019-04-12-pt1-PgE453-2.pdf>; accessed on 10 June 2020.
- McCain J.** 2014. Promoting sustainable mountain development as an intern at the United Nations. *Utah International Mountain Forum*. <http://utahimf.org/archives/1250>; accessed on 10 March 2020.
- Medina S.** 2015. Fundraiser and silent auction benefitted Women of the Mountains Conference. *Utah International Mountain Forum*. <http://utahimf.org/fundraiser-and-silent-auction-benefitted-women-of-the-mountains-conference/>; accessed on 10 March 2020.
- Medina T.** 2016. Celebrating International Mountain Day 2016 through experiential learning. *Utah International Mountain Forum*. <http://utahimf.org/archives/2288>; accessed on 10 March 2020.
- Medina T, Alarco C.** 2016. Building Bridges: Exploring Georgian Art And Politics. Agenda and Task List. Orem, UT: Utah International Mountain Forum. <http://utahimf.org/wp-content/uploads/2016/09/16-07-10-Task-List-Georgian-Art.pdf>; accessed on 10 March 2020.
- MP [Mountain Partnership].** 2011. Women of the Mountains Conference: Orem, UT, USA. *Mountain Partnership: Events*. <http://www.fao.org/mountain-partnership/events/event-detail/en/c/142470/>; accessed on 10 March 2020.
- Pedler B.** 2019a. Path to the State Department and UN internships goes through UIMF. *Utah International Mountain Forum*. <http://utahimf.org/archives/4787>; accessed on 10 March 2020.
- Pedler B.** 2019b. Utah Valley University students at the Model United Nations Conference in San Francisco. *Utah International Mountain Forum*. <http://utahimf.org/archives/4691>; accessed on 10 March 2020.
- Pelletier S.** 2010. Success for Adult Students. *Public Purpose Magazine* Fall 2010:2–6. [https://www.aascu.org/uploadedFiles/AASCU/Content/Root/MediaAndPublications/PublicPurposeMagazines/Issue/10fall\\_adultstudents.pdf](https://www.aascu.org/uploadedFiles/AASCU/Content/Root/MediaAndPublications/PublicPurposeMagazines/Issue/10fall_adultstudents.pdf).
- Pigott K.** 2018. SMD club focuses on improving air quality in Utah. *Utah International Mountain Forum*. <http://utahimf.org/archives/3645>; accessed on 10 March 2020.
- Rama D, Ravenscroft S, Wolcott S, Zlotkowski E.** 2000. Service-learning outcomes: Guidelines for educators and researchers. *Issues in Accounting Education* 15(4):657–692.
- Rogers A.** 1996. *Teaching Adults*. Buckingham, United Kingdom: Open University Press.
- Rudaz G, Krause A.** 2007. Women of the Mountains: An international conference. *Mountain Research and Development* 27(2):178. <https://doi.org/10.1659/mrd.0908>.
- Sawe B.** 2019. The most mountainous states. *WorldAtlas*. <https://www.worldatlas.com/articles/us-states-with-the-highest-average-elevations.html>; accessed on 13 November 2020.
- Schuetze H, Slowey M.** 2002. Participation and exclusion: A comparative analysis of non-traditional students and lifelong learners in higher education. *Higher Education* 44(3–4):309–327.
- Shaw C.** 2004. Using role-play scenarios in the IR classroom: An examination of exercises on peacekeeping operations and foreign policy decision making. *International Studies Perspectives* 5(1):1–22.
- Spjut A.** 2016. Toska: A Soviet longing for community and spiritual fulfillment. *Youth and the Mountains* 4:80–83. <https://www.uvu.edu/hps/docs/youth.mountains/vol-iv-youthmts.pdf>; accessed on 10 May 2020.
- Taylor I, Burgess H.** 1997. Responding to "non-traditional" students: An enquiry and action approach. In: Boud D, Feletti G, editors. *The Challenge of Problem Based Learning*. 2nd edition (1st edition 1991). London, United Kingdom: Kogan Page, pp 103–116.
- Taylor M.** 2016. Rotary International: Learning cultures to build ties with mountain nations. *Utah International Mountain Forum*. <http://utahimf.org/archives/2191>; accessed on 10 March 2020.
- Timpson W, Foley J, Kees N, Waite A.** 2013. *147 Practical Tips for Using Experiential Learning*. Madison, WI: Atwood Publishing.
- Torsak D.** 2017. International Mountain Day builds friendship between families in Utah and Pakistan. *Utah International Mountain Forum*. <http://utahimf.org/archives/2434>; accessed on 10 March 2020.
- Torsak D, Medina T.** 2016. Utah Valley University: International Mountain Day Celebration. Agenda and Task List. Orem, UT: Utah International Mountain Forum (UIMF). <http://utahimf.org/wp-content/uploads/2016/12/16-07-10-Task-List-IMD-2016.pdf>; accessed on 10 March 2020.
- Tuminez A.** 2020. Stringent completion measures don't tell the whole story at Utah universities. *Deseret News*. 19 April 2020. <https://www.deseret.com/opinion/2020/4/19/21224282/uvu-education-inclusivity-equality-growth-college-applications-graduation>; accessed on 3 July 2020.
- UIMF [Utah International Mountain Forum].** n.d. Welcome to utahimf.org. *Utah International Mountain Forum*. <http://utahimf.org>; accessed on 10 March 2020.
- UN [United Nations].** 2003. *International Year of Mountains, 2002*. A/RES/57/245. New York, NY: UN. <https://undocs.org/A/RES/57/245>; accessed on 10 March 2020.
- UN [United Nations].** 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development*. A/RES/70/1. New York, NY: UN. <https://undocs.org/A/RES/70/1>; accessed on 3 July 2020.
- UN [United Nations].** n.d. a. About UNAI. *Academic Impact*. <https://academicimpact.un.org/content/about-unai>; accessed on 10 March 2020.
- UN [United Nations].** n.d. b. Model UN Guide. *Model United Nations*. <https://www.un.org/en/mun/model-un-guide/>; accessed on 10 March 2020.
- UNA-USA [United Nations Association of the United States of America].** 2019. International Mountain Day. *United Nations Association of the United States of America (UNA-USA)*. <https://unausa.org/event/international-mountains-day/>; accessed on 10 March 2020.
- UNA-USA [United Nations Association of the United States of America].** n.d. Who We Are. *United Nations Association of the United States of America (UNA-USA)*. <https://unausa.org/mission/>; accessed on 10 March 2020.
- University of Utah.** 2016. "Daughter of Kalash": A free film presented by the Asian Center and the Marriott Library. Asia Center, College of Humanities: Events Calendar. <https://asia-center.utah.edu/calendar.php?trumbaEmbed=view%3Devent%26eventid%3D121378531>; accessed on 10 March 2020.
- UNSG [United Nations Secretary General].** 2007. *Sustainable Mountain Development*. Report 62/292 released on 23 August 2007. New York, NY: UNSG. <https://undocs.org/A/62/292>; accessed on 10 March 2020.
- UNSG [United Nations Secretary General].** 2009. *Sustainable Mountain Development*. Report 64/222 released on 3 August 2009. New York, NY: UNSG. <https://undocs.org/A/64/222>; accessed on 10 March 2020.
- UNSG [United Nations Secretary General].** 2016. *Sustainable Mountain Development*. Report 71/256 released on 29 July 2016. New York, NY: UNSG. <https://undocs.org/A/71/256>; accessed on 10 March 2020.
- UNSG [United Nations Secretary General].** 2019. *Sustainable Mountain Development*. Report 74/209 released on 22 July 2019. New York, NY: UNSG. <https://undocs.org/a/74/209>; accessed on 10 March 2020.
- UVU [Utah Valley University].** 2019a. *Institutional Research: 2019 Fact Book*. Orem, UT: UVU. [https://www.uvu.edu/ir/docs/info\\_about\\_uvu/fact\\_books/2019\\_fact\\_book.pdf](https://www.uvu.edu/ir/docs/info_about_uvu/fact_books/2019_fact_book.pdf); accessed on 10 March 2020.
- UVU [Utah Valley University].** 2019b. *Do More of What You Like: Utah Valley University Handbook for Clubs*. Orem, UT: UVU. <https://www.uvu.edu/clubs/docs/clubshandbookwebsite.pdf>; accessed on 10 March 2020.
- UVU [Utah Valley University].** n.d. About UVU. *Utah Valley University (UVU)*. <https://www.uvu.edu/about/>; accessed on 10 March 2020.
- UVU [Utah Valley University] History and Political Science.** n.d. Youth and the Mountains. *Utah Valley University (UVU): History and Political Science*. <https://www.uvu.edu/hps/youthjournal.html>; accessed on 10 March 2020.
- Witmer J, Anderson C.** 1994. *How to Establish a High School Service-Learning Program*. Alexandria, VA: Association for Supervision and Curriculum Development (ASCD).
- Wyatt L.** 2011. Non-traditional student engagement: Increasing adult student success and retention. *Journal of Continuing Higher Education* 59:10–20.

## Supplemental material

**TABLE S1** Observation of International Mountain Day by the Utah International Mountain Forum.

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