

# Chapter 8. Critical Success Factors for Teaching an Accessible User Experience Project Across National Borders and Disciplinary Boundaries

Sushil K. Oswal

UNIVERSITY OF WASHINGTON

Zsuzsanna B. Palmer

GRAND VALLEY STATE UNIVERSITY

Rita Koris

BUDAPEST UNIVERSITY OF ECONOMICS AND BUSINESS

**Abstract.** Drawing on the data from the third year of a longitudinal study based on an international collaboration among three university faculty—one from Hungary and two from the United States—this reflective chapter narrates the lessons learned in engaging undergraduate students in a simulated client-provider relationship project that incorporated accessible user experience principles in entrepreneurial business planning and web design. While the participating instructors characterize this collaboration as a simulation, from the students' perspective, the pull of the project dwelled in the real life relationships developing out of the client-provider roles assumed by the collaborating groups from each university, the shared understanding of disability and accessibility acquired from the disability and design theory read and discussed during the academic term, and the heavy emphasis on the need for integrating disabled users in defining the overall user experience in each of the three classes.

We compose this piece based on our experiences of an online interdisciplinary and international collaboration project where students from two different universities in the US and a third from a university in Hungary work together to design accessible websites and business plans to attract customers with a variety of cultural and user needs and offer them meaningful and equitable user experiences. This project connects to a rich tradition of intercultural collaborations in the technical and professional communication (TPC) field that focus on developing intercultural communication competence, translation, report writing, technical communication skills (Cardon et al., 2022; Maylath et al., 2013; Starke-Meyerring & Andrews, 2006). Our practice has been to reflect on our teaching philosophy during and after every iteration of this collaboration for the purpose of identifying possibilities for improvements in how we deliver our curriculum through

this project (Alvesson & Sköldberg, 2017). The purpose of this chapter is thus to share the notable lessons learned in delivering a curriculum that centers on user experiences (UX) for all. ISO 9241-210:2019 defines user experience as a “person’s perceptions and responses resulting from the use and/or anticipated use of a product, system or service” (2019, 3.15). According to Nielsen Norman Group, “user experience encompasses all aspects of the end-user’s interaction with the company, its services, and its products” (Norman & Nielsen, 1998, “Summary”). A more comprehensive definition of user experience includes these elements: “a consequence of a user’s internal state (predispositions, expectations, needs, motivation, mood, etc.), the characteristics of the designed system (e.g., complexity, purpose, usability, functionality, etc.) and the context (or the environment) within which the interaction occurs (e.g., organizational/social setting, meaningfulness of the activity, voluntariness of use, etc.)” (Hassenzahl & Tractinsky, 2006).

Whereas the concept of UX has moved TPC and human computer interaction (HCI) fields beyond the narrow concept of usability which centered on user cognition and user performance in human-technology interactions, the definitions of UX both by HCI and TPC experts leave out the accessibility aspect in the definition of user experience (Chong, 2012; Redish, 2010; Redish & Barnum, 2011). We extend earlier disability-centered UX definitions by Oswal (2019) and Sauer and colleagues (2020) from an inclusive design perspective as a holistic ecosystem within which a user experiences a human computer interaction, a technological or informational product or process, and any other conditions that shape the user’s context of use. These conditions include an accessible interface for the technology on the user’s end, ease-of-use in navigation, psychological and physical comfort in interactions, and an equitable reach to the affordances of the resource also for those users who might depend on common adaptive technologies, including keyboard-only input, screen readers, and voice input systems. Paying attention to the different conditions of user’s context of use builds upon the awareness of accessibility in the TPC field that has been developed by the first book-length collection edited by Lisa Melonçon (2014) as well as more recent research published in the two *Business and Professional Communication Quarterly* Special Issues on accessibility edited by Oswal (2018) and Melinda Knight and Oswal (2018), and several scholarly works on different aspects of accessibility by others such as Sherrie Drye and colleagues (2023), Sherena Huntsman (2021), Brian Le Lay and Dan Card (2022), Oswal and Palmer (2022), and Palmer and Palmer (2018).

In the project described in this chapter, students in Washington work as accessibility advisors to students in Michigan who create websites for the business ventures proposed by Hungarian students. The Washington accessibility advisors also serve as user experience (UX) testers for the Hungarian business plans to make the proposed ventures more inclusive and to make the Michigan groups’ website designs and content more usable and accessible for customers and consumers representing diverse cultures and abilities.

The breadth and depth of content areas for user experience pedagogy depends on the availability of resources—testing labs, access to participants, and the existing knowledge of students. Our web design and accessibility courses engaged students in select activities essential to the practice of UX design—conducting user research, training in content strategy, and making content design and development choices. In addition, students worked on visual design, interaction design, particularly in the context of accessibility for users with disabilities, and focused on the need for usability testing with disabled users while employing participatory design methods. The class in charge of the building of websites, as well as, the one serving as accessibility consultants, participated in persona design, journey mapping, and wireframe creation, as a part of designing meaningful and inclusive user experiences for all visitors to their websites. We decided to center accessible design issues in this project because we understand that people with disabilities form a significant portion of world-wide user population (WHO, 2019). We also know that no UX design can be adequate unless it can meet the needs of users with a variety of abilities (Urrutia et al., 2017; Yesilada et al., 2012). Last, we believe that UX design courses must help students inculcate the values of disability-inclusive design so that they do not perpetuate the regime of exclusionary UX designs still so common in web environments in their own professional practice as they enter the job market. Under the inclusive orientation of this international collaboration project, we view UX as a design proposition that embraces the needs, preferences, and desired experiences of users irrespective of the body/mind difference. We question and critique workplace practices that re-enforce disableist and ableist viewpoints (Bell & de Gama, 2019; Dale & Burrell, 2014). We further assert that all nondisabled users also do not sit in the middle of the Galton's bell curve and designers regularly take into consideration these differences (For critiques of Galton's bell curve, see Cowan, 1972, and Fendler & Muzaffar, 2008). A commonplace example of these considerations is that clothing, shoes, and most accessories—such as belts—come in different sizes and even further dimensions within these sizes—wide, narrow, tall, short, etc.; if these products are customized based on the needs of different types of users, technology products should also meet the needs of all users. We also posit that all technology—irrespective of what sort of body/mind its users possess—is assistive (Hendren, 2014).

In terms of content, this chapter specifically draws from our third annual iteration of our longitudinal study collected by the three collaborating faculty specializing in three interrelated but diverse fields—human-centered design, technical communication, and business English. Two of us are located in the United States in an interdisciplinary school and a writing studies program respectively, and the third was situated in an international relations program at the beginning of this collaboration and is presently teaching at a business university in Hungary. While our specialties remain relatively stationary, our students swap places as they move on to other coursework, complete their degree requirements, and graduate from

college. Thus, it is a collaborative relationship which remains reasonably stable on the faculty side but shifts on the student side every autumn. Dependent on the vagaries of departmental course schedules and enrollment numbers for each class, our participating courses can change from one year to another requiring major and minor adjustments in the design of our collaboration. We also adjust student group sizes each year to reflect the class enrollment. What anchors our work to a reliable spot is our collaboration's focus on integrating disability and accessibility. We do this in all the three parts—business plans, websites, advisory documents—of the projects that each of our classes collaborate on with one another in a client-provider relationship, while remaining flexible and relatively low-tech about the choice of collaboration technologies from year to year.

On the student side, these three autumn terms, we have formed approximately six project groups. Each project group is made up of three teams, one at each location. In each class, the teams have three to five members. The three teams—one from each location—then make up a project group and function in a client-provider relationship with one another representing three business entities engaged in entrepreneurial venture planning, web design, and accessibility consulting respectively.

The reflective commentary presented here outlines what we have learned in engaging undergraduate students in this simulated client-provider relationship. The project incorporated the inclusion of accessible user experience principles into the process of our Hungarian students building up entrepreneurial business plans in small groups. The project for the Michigan students focused on designing and developing business websites for these Hungarian entrepreneurial ventures. At the same time, groups from the Washington campus supplied foundational disability and accessibility knowhow in short informational documents, providing usability and accessibility testing services both for business ventures and web development, and serving as UX experts in the overall scheme of things to the other two linked groups. Each Hungarian group was responsible for delivering a well-developed, inclusive entrepreneurial business plan by the end of the term whereas the Michigan teams built accessible websites to serve the proposed businesses by their linked Hungarian teams. The advisory information from the Washington groups took the form of a report on conceptualizing inclusive businesses, a manual for designing accessible websites, and multiple feedback reports on rough drafts of the business venture plan and the related website. Thus, each Washington team generated advisory documents for their linked Hungarian and Michigan teams within their project group toward the beginning of the project term, produced usability and accessibility test reports on the drafts of Hungarian business plans and Michigan websites during the term, and provided advice on an as-needed basis throughout the term. Since the design process in Hungarian and Michigan teams was iterative, they were in touch with one another, and with their linked Washington advisory teams throughout the drafting process. These interactions could happen via email, through Moodle Forums, or

via prescheduled video meetings, and the drafts of the deliverables could also be exchanged using agreed upon technologies. In more recent iterations of this collaboration, our student cohorts have used Google Groups and Google Docs to carry on their collaboration work since these tools have gained a certain purchase on our campuses. To manage overall teaching schedules and to keep students on task, the instructors drew a commonly shared timeline with several synchronized deadlines for the three classes.

Our overall purpose in designing this collaboration was to create a learning environment where students might themselves create user experiences that might go beyond providing for those nondisabled users who are already well-accommodated and reach the users who have been excluded from meaningful net experiences for these full three decades of the World Wide Web (Aizpurua et al., 2016). While the participating instructors characterize this international and interdisciplinary collaboration among the teams within each project group from their three classes as a simulated learning environment, from the students' perspective, the pull of the project dwelt in the real-life relationships developing out of the client-provider roles assumed by the collaborating teams from each school. In addition, working relationships among groups were strengthened by the shared understanding of disability and accessibility acquired from the disability and design literature read and discussed during the academic term, and the heavy emphasis on the need for integrating disabled users in defining the overall user experience in each of the three classes. In comparison with most of the wide-ranging collaborations among distributed teams both in university and workplace contexts, our project continues to have an inclusive edge unmatched by other collaborations although we hope that other faculty will follow the success of our long-lasting collaboration.

Over these years, we have, by design, moved toward drawing the readings for our students from the formal and informal trade literature about and on accessibility—studies by technical communication and web design practitioners, blog entries discussing industry resistance to inclusive website development, and short how-to articles and book chapters describing accessible design—so that students could wet their feet with industry discourse in this area. (For examples of these readings, see Biddle, 2013; Henry, 2007; Horton & Quesenbery, 2014; Nielsen, 2001; Oswal, 2014; Sandnes, 2017; WebAIM, 2016). We believe our students can, and will, change the design market with their upbeat attitudes toward disability and help their employers capture some of this 15 percent market of disabled users often overlooked by business and industry (Biddle, 2013).

As we track the success factors in the design of this project—both from the perspective of learner and instructor satisfaction—we have discovered that our success has been dependent on the avoidance of certain traps relating to technology, overly limited focus on the multilingual aspect of projects, and emphasizing intercultural communication and learning without a context. For example, our project is not structured around the use of a particular technology which often

limits other aspects of international learning. Such projects are technologically interesting (see the internet-mediated, audio-graphic conferencing project from Carnegie Mellon University by Hauck, 2007), but these projects do not intercept with other curricular goals as effectively such as teaching web design principles for intercultural audiences or entrepreneurial business development in international settings. We recognize that the question of technology acceptance and use goes beyond simple consumer or pedagogical choices as researchers in allied fields have given close attention to these matters (Alvesson & Kärreman, 2007; Venkatesh et al., 2012). We also realize that transnational and intercultural contexts similar to ours require dedicated TPC research on technology acceptance and use in distributed students teams. Likewise, bi-lingual collaborations solely reliant on telecollaborative exchanges for the purpose of language learning (O'Dowd, 2003; Ware, 2005) restrict the scope of such collaborations for faculty working in other knowledge domains such as access computing, web design, inclusive design, and business planning. Similarly, a large number of collaborations are centered on intercultural learning as a purpose in itself without a context for long-term learning (Muller-Hartmann, 2000). Such intercultural learning usually has limited applications for the workplace setting because these collaborations do not embed workplace contexts to show students how intercultural knowledge is essential for functioning adequately in today's globally networked work environments. We have, instead, let the intercultural and international learning happen through the processes embedded in the relationship building and maintenance activities for getting to the essential tasks for accomplishing the goals of the client-provider projects. As it might have been true in any local project, the technical communication practitioner learners and business planners in this collaboration from three locations across regional and national boundaries carry out their professional responsibilities in a simulated workplace context while connecting, interacting, and learning about one another's culture, language, and work orientations.

We provide a synopsis of two group projects executed by our tri-campus teams. One of the projects was centered on a proposed company that sells their organic beauty products online. The Hungarian team focused their business plan on emphasizing the unique characteristics of these products that are not only natural but also edible. The Washington team provided feedback on this business plan and made the Hungarian team aware of a wide array of demographics that need to be considered as customers. They also advised the Michigan team on creating a website structure and incorporating accessibility features—such as skip links and alt text—early on. The final website featured a wide array of products and was easily navigable and accessible. Another enterprise that was proposed by a Hungarian team was a yoga studio. As this enterprise was to be located in a brick-and-mortar building, the Washington team made the Hungarian team aware of the physical features that would make the location of this studio also accessible to people with disabilities. In addition, the Washington team tested the proposed website using the WAVE tool, and pointed out specific issues on



the website that needed to be corrected in order to achieve better accessibility. This type of three-way interaction and collective iteration to produce deliverables is complex from the students' side, and this complexity becomes even more pronounced on the instructors' side. In the ensuing three sections, each of us instructors involved in the project share our thoughts on this collaboration.

## ■ Thoughts of The Human-Centered Design and Engineering Faculty on this Joint Pedagogical Venture

If I were to write about what I have learned from our collaboration, I would start with probably not that rash a claim that an international teaching collaboration first of all “is work” in the very rudimentary sense of the term—“to act, do, function, operate” and it is also associated with “tilling or ploughing the earth” for new growth (Oxford University Press, n.d.). Then, as a project, it is an ongoing attempt at developing a structure, or organization that could support a multi-year collaboration. This organization has to happen at several levels and in many areas—keeping all the pieces of the project together while keeping the colleagues apprised of one's movements; collecting the appropriate information for and about student project groups' work at the right time; constantly adding to and building on what already exists; and giving it the semblance of an order through a home-grown schema to keep it accessible for all the participants' use. And last, such a collaboration is a constant study of technologies involved, particularly when the so-called technologies of collaboration circulate so freely and are ubiquitous in faculty and student environments on almost every platform and in so many forms. We could say that a collaboration in the technical communication or human-centered design course is a combination of work, organization, and technology and this effort is as much about cooperation as it is a collaboration among the participants which also makes endless demands on the instructors' skills to coordinate all its pieces. Kjeld Schmidt (1991) describes the process in more measured terms when he writes, “cooperative work arrangements should be conceived of as emerging formations that change dynamically and involve distributed decision making” (p. 1).

On the social side of such international collaborations is the excruciating awareness of one's partners' desire to retain their autonomy and freedom to think their own ways—something that we in the United States—howsoever unknowingly—tend to overlook and assume that everything we do in this country is universal. One such practical learning happened at the end of the first year of our collaboration when our Hungarian partner had to correct one of my statements in a co-authored manuscript that characterized Hungary as an eastern European country. For them, the post-Soviet Hungary had nothing to do with its eastern past and it was very much a central European country. Not too different was the need to remember that outside the United States, faculty—like most other

working people—go away from their university research, teaching, and academic chores on Friday and the weekend belongs to them, and to them only. The workaholic tendencies exhibited by most tenure-track U.S. research faculty, to them probably appears verging on the perverse. Another learning we keep on experiencing—like thousands of other faculty around the world—is about the extent of technology savviness our internet generation students actually possess which goes against our own presumptions about their digital native status (Ryberg et al., 2011). Beyond the exchange of information, drafts, and coordination of meetings via email, we always had some students who got lost in the Moodle pages, or should we say, got hung out in Google Hangouts. The takeaway for us is to introduce every technology for collaboration from square one and make sure that all our student cohorts are on board with every course activity in progress.

In closing, if we were to dig out the conceptual foundation of our collaboration, I would say that it rests on three posts: 1) a philosophy of work where meeting your collaborators' needs sits right next to your own; 2) a sociology of groups that remains fluid to avail the affordances of every moment of contact from student groups to student groups, from faculty to faculty, from faculty to student groups, and from student groups to faculty; and 3) an approach to technology based on necessity and meaningful use rather than on the compulsion to embrace the most recent fad on the market.

## Thoughts of the Technical Communication Faculty on this Multi-year Project

Reflecting back on this collaboration project, I would highly emphasize how teaching as an ever-evolving and reflective practice becomes even more important in a collaboration project between classrooms than it is in a singular classroom (Ward, 2009). In our reflection process, we build on established observations about intercultural virtual collaboration within the TPC field such as the transatlantic project (Maylath et al., 2013) or the peer-review project involving technical communication students in two countries (Anderson et al., 2010) as well as more recent collaboration projects where students from several countries are included in report writing using Slack (Cardon, et al., 2022). To reflect, we also review the results of our multiyear research projects focusing on this specific collaboration (Koris et al., 2021; Palmer et al., 2021, Oswal et al., 2021). This reflection results in our understanding that while as an individual instructor one is only responsible for the learning outcomes within one's class, in a collaboration project such as ours, the learning outcomes can only be met effectively in one class when they are also met in the other two classes. In this sense, our collaboration project very much replicates the connections observed in contemporary conditions of distributed work (Treviranus, 2009) and is aimed at teaching students skills required in this environment (Paretti et al.,



2007). As we continued to work on each iteration of the project, we take time to reflect on the successes and shortcomings of our previous method and design shared approaches that allow us to reach our individual classroom's goals. These reflections among us happen both on an individual basis as well as collaboratively. We take notes on our teaching regularly and share them with one another via email and phone calls as frequently as time permits. The observations recorded in these emails and notes from the phone conversations assist us in tracking how the nuts and bolts of our collaboration are working in our classes and also start our brainstorming as a team to seek out likely solutions for the hurdles confronted. In addition, as we gear up for a new round of this project, we hold planned meetings using conference call technologies like Zoom to sort out the details—specifically the details about the schedules of our classes since our academic terms begin at different times and the pacing of various assignments in each of the classes requires some serious juggling—to design the new elements we want to introduce to that year's project, and to foresee the problems we might face in the coming term due to the introduction of new elements. When possible, we also try to connect at academic conferences where we assess our recent successes and debacles while chartering our next moves. These in-person meetings have been easier for Sushil Oswal and me (Zsuzsanna Palmer) since we attend roughly the same conferences in the United States every year but Rita Koris also has been able to travel to one of the 4Cs Conferences in these years. Of course, these academic conferences were moved to the virtual sphere due to the COVID-19 pandemic. I might also note that some of our conversations spill out into our conference papers and provide us with further opportunities to reflect on this collaboration. To give our readers a sense of the kind of problems we address in our meetings from time to time, I share this example from one of our earliest reflection meetings: we noticed that during the first year of our collaboration our students were not interacting with other groups to the extent we had expected them to do. We also knew that the key to a successful project would be effective communication between groups, so we had to take a critical approach to deciding about different technologies to coordinate these communication encounters (Turnley, 2007). We had to openly discuss what sort of technological savviness we could expect from our students in each of the classes and what would be the appropriate technological median to serve all of them equitably and adequately.

Beyond deciding about communication technologies in tandem with the other instructors, I also had to determine which content management systems my students will use for building their websites. The use of a content management system was a necessity as only some of the students enrolled in my course possess sufficient coding skills to build a website from the ground up. One of the specific decisions that students needed to make in the first iteration of the project was choosing a content management system or a free website-building tool (Everett, 2014). The idea behind this decision was based on not having

students go through a steep learning curve by letting them use a tool that they are already comfortable with. While this freedom certainly resulted in a quick start-up phase, students soon learned that the amount of changes they were able to make to their websites in order to make them more accessible varied greatly across platforms. For this reason, in the later iterations of the project we have expected all student groups to use the free version of the WordPress CMS and scaffolded their learning of this CMS before the start of the collaboration project. While this version of WordPress is still somewhat limited in the ways that accessibility can be customized, it has several templates that are developed to be accessible and also options for accessing and making changes in the actual code. In addition, this platform also allows students to get familiar with a content management system that improves their skills in component content management environments (Batova & Andersen, 2017).

Another reason why my pedagogy has evolved through the different iterations of the project was that I had to reframe this task three times for my different classes I was assigned to teach during our multi-year collaboration project. The first time around, I was teaching a business communication class for mostly IT majors, and thus I included business communication assignments such as proposals and progress reports into the project. In the second year, the project became part of a professional writing class where I had to foreground technical specifications and descriptions. In the third year, a web writing class was connected to the project, where I have replaced a formal proposal with creating personas, journey maps, and wireframes. All the while, I continued to improve the accessibility aspect of our project while incorporating readings about website accessibility (WebAIM, 2016) and including videos about how screen readers work. As we continue to work on this longitudinal collaboration among three instructors, I remind myself that with each new approach we take to this project, it is important to stay focused on our main shared objective, accessibility and accessible user experience, and to communicate this objective to our students in our classes, assignments, and shared online discussions in as many ways as possible.

The main takeaways for me from this project are principles that are connected to effective pedagogical practice in any classroom. First, the choice of technology in any course should be carefully weighed in order for it to facilitate collaboration without influencing its content. Second, while assignments might be similar from year to year, making these assignments relevant to students at all three institutions always involves improvisation and creativity. A slight change to the same project assignment can communicate so many different things across places and cultures. At the same time, when students are exposed to concepts across disciplinary boundaries, as our project's focus on accessibility does, they can be better prepared for their work life and civic involvement after college. Relying on these principles is something I myself learned from our engagement with disability and accessibility work that a social focus is essential for me to maintain the significance of longitudinal collaboration projects.

## Thoughts of the Business English Faculty on this International Project

Online international collaboration projects are still a rare opportunity for many university students in Hungary. Being able to participate in the project provides students with a unique international experience that they would not gain in any other way. Internationalization and international collaborations are also becoming a high priority in European higher education to develop students' English language communication competence and increase their preparedness for employment (European Political Strategy Centre, 2017). Students lacking any form of global experience are often at a disadvantage when they step out to the European job market (Eurofound, 2019). It is our role to equip fresh graduates not only with marketable knowledge, but also with skills to facilitate their school-to-work transition. It is an unstated requirement of the business English curriculum to cover and teach these new sets of skills to boost students' English business communication competence with digital and transversal skills. Having gone through the implementation of our project for several years, we can see that students highly appreciate the achievements and personal skills development they undergo and the competitive advantage they gain as a result of their participation in the project. Students often report that their online collaboration and communication skills as well as their digital competence developed due to their involvement in the project.

The international collaboration project on my side was entirely embedded into the business English course curriculum combining theory with practice. Hungarian students had the opportunity to instantly apply the theories by collaborating with their international peers on the project tasks and deliverables. Also, they were able to demonstrate their business English language competence in meaningful and real-life exchanges with native speakers of English. Hence the project gave them a lot of instances for learning, practice, development, and confidence-building.

Accessibility and disability inclusion were originally not part of the business English university curriculum for the Hungarian students, but interdisciplinarity and awareness-raising on disability that became key elements of our project are highly valued by university leaders as these broaden the perspectives of our graduates. During the years, I could witness how the participating students became more and more accustomed to the concepts of disability and accessibility. They also became more open to the theoretical and practical applications of these concepts to their discipline. In the very first year, the participating student groups took disability less into consideration when working on their business ventures, while students in the third iteration of the project actively took up the challenge of accommodating disabled users, customers, and business partners. After having consulted with their peers in Washington advising on accessibility, the Hungarian students discussed and considered possible areas for inclusion in their

business plans and proactively suggested solutions—such as adding a wheelchair ramp—for making their businesses accessible for users with various disabilities, thus adapting the concepts of accessibility learned from their peers. Thinking beyond their project assignments, one of the student groups also questioned the problems with elevators in one of the academic buildings on our campus as well as the overall accessibility of in-campus services. Another spontaneously reflected on the Hungarian public's attitudes toward disabled people that she had observed during her daily train commute to campus.

As for improvement for future implementations of the project, I constantly try to increase the work efficiency of the student groups. All three of us now incorporate more icebreaker activities—personal introductions, synchronous team meetings—for participants before the actual start of the collaboration. By experience, the teams where team members developed a good working relationship early on performed much better, were more effective in assigning and completing tasks, managed their time and resources more efficiently, and communicated with their partner teams more effectively while solving problems and creating streamlined business documents that incorporate accessibility and account for the needs of all users.

Based on my conversations with students, they felt that they gained three important benefits from this international project. First, they developed a new set of skills related to teamwork, online collaboration, and work efficiency that they considered highly marketable in finding a job after graduation. Second, they became highly confident in using new technologies and applications for collaboration that most of them had never used before, yet they thought that it would be essential to use in their future workplace. Third, they believed the project experience broadened their own disciplinary horizons and got an insight into disability and accessibility concepts, which would not have been possible otherwise. Therefore, the main takeaway of this project for me is that the project has proved to provide an outstanding opportunity for the students to acquire international experience without stepping out of their classrooms, try themselves out in a real work situation, and engage in interdisciplinary conversation with their peers.

## ■ Conclusion

As our discussion shows, there are many considerations that need to be taken into account when planning and executing such complex projects. First, faculty interested in taking on such a project need to be able to see the benefits of such a collaboration and see how the inter-university teams in these projects can help students reach the learning objectives in their classes. Next, they need to find collaboration partners at other institutions who see the same benefits and are willing to do the extra work of coordinating these complex projects. Connecting with like-minded faculty can happen at conferences, through partner institutions or even through just cold calling to previously known colleagues across universities.

For example, the popularly known *IVEC* Conference, an international conference on the topic of virtual exchanges brings together dozens of university faculty from around the world and is a promising venue for finding partners for teaching collaborations. Study abroad offices on many campuses also offer advice on setting up such faculty collaborations, and more and more, universities are offering small grants to faculty for establishing such projects. Through planning of the timeline, collaboration method, and discussions around shared objectives, the project will slowly take shape and can be piloted with students from a single class from each campus. Every time the project runs, additional quantitative and qualitative data can be gathered about the effectiveness of the project through term end surveys and student reflections. Through iteration of such collaborations among faculty, new ideas are born that shape future iterations of the project. This evaluative aspect of such virtual projects also assists participating faculty in collecting data to support their case for funding for the additional time spent on preparation for this complex pedagogy while stressing the data provided by students about the novel instruction offered and skills quired by this internationally-minded pedagogy. We also want to add that this faculty collaboration continued during the two peak years of COVID-19 pandemic although classes from each campus endured the hardships imposed by the unusual circumstances arising out of this emergency.

As a teaching team that has gone through this iteration process several times at the time of publication of this collection, we have three additional takeaways for our colleagues to realize the overall success of such a multi-year pedagogical collaboration. Our first recommendation: always give a full hearing to your colleagues' ideas howsoever raw or unrealistic they might appear to your ear, and commit to working with them to develop and refine them further as you would do to your own. Our second recommendation: once you have settled on a theme or focus for your UX practice and teaching philosophy—disability and accessibility has been our chosen area of pedagogical development for ourselves, our curricula, and our students' learning—make a concerted effort together to integrate it in as many aspects of your participating course as you can while drawing on the group members' expertise and learning from one another as teachers, practitioners, and scholars. Finally, our third recommendation: maintain strong communication channels—formal and informal—among your team and your student groups, even during the busiest time of your teaching semester, to keep your finger on the pulse of each other's participating classes, to support one another, and to learn from your partners' location-specific circumstances and cultural differences. Through the different iterations of this collaboration project, each of us had developed our pedagogies significantly to ensure that the complex tasks of collaboration led to meaningful learning experiences in all three classes. Most importantly though, all three of us have arrived at the understanding that focusing our instruction efforts in all three classes on accessible user experience naturally led to a shared set of values and priorities. Acting on this shared set of

values created a sense of urgency in our classrooms where students not only completed assignments but also participated in the valuable work of changing society, one business idea at a time.

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We also invite our colleagues to undertake such collaboration projects involving distributed student teams to expand the sphere of interaction in their courses. Interacting with students from unfamiliar places and cultures can assist our students in mitigating the hegemonic effects of social media of our times.

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