Notes from the Field

Selected Posters and Recorded Sessions

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Abstract

This notice provides select listings of posters and recorded sessions presented at the 39th Annual Pacific Rim International Conference on Disability and Diversity in Honolulu, Hawaii.

Keywords: disability, conference, posters, recorded sessions

Selected Posters and Recorded Sessions

The following listed selections represent some of the diversity of posters and recorded sessions shared at the 39th Annual Pacific Rim International Conference on Disability and Diversity in Spring 2024. (Note: not all fields available for all listings.)

Career Advancement Program for Neurodivergent People: A Holistic Lifelong Approach
Type: Poster
Name: Dan Middleton
Affiliation: Catalight Research Institute
Other Contributors: Dr. Lindsey Sneed, Catalight Research Institute
Dr. Vincent Bemmel, Catalight Research Institute

Abstract: The Compass Work Tool is designed to assist neurodivergent individuals in identifying lifelong and meaningful Competitive Integrated Employment (CIE) opportunities that align with their unique strengths, interests, and skills. This person-centered tool offers three different assessments and two employment integrator technologies to help candidates secure a lifetime of employment. The assessments evaluate the candidate's well-being, career skills, and sense of belonging in the job and company.

The Compass Work tool had 7 modules with over 30 training elements like How to write a resume, conduct an interview, ask for accommodations, and accept a job offer. The last module is designed with a 100 day plan that will ensure career success.

Keywords: Competitive Employment, person-centered, neurodivergent, career skills, lifetime of employment

Technology-Enabled Training in Emergency Preparedness for People With Disabilities: A Literature Review
Type: Poster
Strand: Built Environments: Digital, Physical, and Social
Name: Sandra S. Oshiro
Affiliation: University of Hawaiʻi at Mānoa

Abstract: People with disabilities are among those most at risk during and after natural and man-made emergencies (Flanagan et al., 2011). While the literature covers multiple issues in emergency preparedness and response for the general population, research on disaster readiness training specifically for those with disabilities is far from robust. An initial, iterative literature review was undertaken as part of LTEC 750C, a learning design and technology class offered by the University of Hawai'i in the fall of 2023. The review helped determine the sweep of existing research on emergency readiness training for those with disabilities and identified some gaps in the studied area.

The review was conducted using the University of Hawai'i's Hamilton Library OneSearch tool and Google Scholar, exploring journal article databases covering publication in the past 10 years. The following search keywords and combinations of these keywords were used: disaster preparedness, disabilities, climate change, whole community, emergency training, disaster simulation, virtual reality, and augmented reality. Twenty-four relevant journal articles were identified. One described the impact of a virtual reality storm surge simulation that aimed to increase emergency preparation and action (Bernhardt, J., et al., 2019). The search results support the assertion that little is known about enabling emergency preparedness within standing health care, disability, and rehabilitation service systems (Subramaniam & Villeneuve, 2020). More research employing new and emerging technologies to train those with disabilities and prepare for emergencies could help address this deficit. Particularly as climate change increases the frequency and severity of life-threatening weather events (Rodell & Li, 2023), research into effective training practices and approaches in transferring critical emergency preparedness knowledge and skills to vulnerable populations and their families takes on more urgency.

This poster presentation argues for more study into disability-inclusive emergency preparations, harnessing technologies both existing and emerging. Such efforts can help ensure those with disabilities are part of a whole community approach to disaster readiness and mitigation (Kruger et al., 2018). Further, the presentation reflects the conference theme, "Beyond Access: Building A Culture of Belonging," in that it seeks to add to knowledge in a critical area that must be inclusive of people with disabilities. In the planning, implementation, and management of disaster readiness training, those with disabilities have a stake that is indisputably larger than many others. Changing an exclusionist culture to one of belonging can have no more important focus than in ensuring the well-being of the entire community.

Keywords: emergency preparedness, disaster preparedness, disabilities, climate change, whole community, disaster simulation, virtual reality, augmented reality, mixed reality

Students with invisible disabilities and their use of accommodations in Engineering courses

Type: Poster
Name: Isabel Miller
Affiliation: University of Michigan
Other Contributors: Karin Jensen, University of Michigan

Abstract: College students with invisible or non-apparent disabilities, including learning disabilities and mental health challenges, can be reluctant to ask for accommodations or disclose to instructors their disability. Sense of belonging, as partially determined by social contexts and classroom climate, influences help-seeking behavior. Engineering students in particular may be less likely to seek help or self-identify as having a disability because of the tense culture and climates within engineering. Situated in Social Cognitive Theory and Weidman's Model of Undergraduate Socialization, and through a Social Model of Disability lens, this work uses the word "disability" to mean any impediment or limitation a person faces from the physical and social environment at any time. In a higher education context, institutional and programmatic structures and practices, such as attendance policies or unwelcoming climates, create barriers in the environment that impact students with disabilities. The following work investigates how language and attitudes presented by the instructor on the first day of class establish a classroom climate that along with students' attitude towards accommodations influence accommodation utilization. Using a convergent mixed methods approach, surveys containing the Attitudes Towards Requesting Accommodations (ATRA) scale and free response items will be distributed to approximately 7,600 undergraduate engineering students at a large, public, research-intensive institution in the Midwest after the first week of class to assess their initial experiences. The ATRA scale prompted students to respond to items about their views on disability, academic integrity, and the accommodation process. We included 10 additional items on perceived classroom climate that were validated and refined with cognitive interviews. Open-ended questions asked students to share their experiences (positive and negative) with requesting and using accommodations in their engineering courses. In this presentation geared to faculty and staff, we will identify common attitudes of disabled students towards using accommodations in engineering courses, and specific language and actions instructors can use to build a welcoming classroom climate that improves student comfort in asking for accommodations.

Keywords:
Students with disabilities; engineering; Social cognitive theory; help-seeking

Music Therapy in the Diverse Early Childhood Setting: Two Research Studies
Type: Poster
Name: Andrew Knight, PhD, MT-BC
Affiliation: Able Arts Work and Colorado State University

Centering Voices of People with Multiple Sclerosis to Promote Environments Supporting Community Participation: A Community-engaged Mixed Methods Study
Type: Poster
Strand: Built Environments: Digital, Physical and Social
Name: Bishan Yang
Affiliation: University of Washington
Other Contributors: Danbi Lee, University of Washington
Ivan Molton, University of Washington
Andrew Humbert, University of Washington
Carolyn Baylor, University of Washington
Emma Gregg, University of Washington
Dawn Ehde, University of Washington
Sarah Iribarren, University of Washington

Abstract: Multiple Sclerosis (MS) is the most common inflammatory and neurodegenerative disease affecting approximately one million adults in the US. Active, autonomous, and contributive participation in important and meaningful out-of-home activities is a human right. However, people with MS encounter external barriers to community participation and experience feelings of isolation. Most of the MS research focuses on the impact of impairments. MS studies examining external impact, centering stakeholders' needs, and advocating for sociopolitical changes to promote community participation are generally lacking. This study adopted a participatory approach by having a community advisor board involved throughout the study and utilized a mixed methods design that included a secondary analysis of GPS-measured and self-reported data and focus group discussions with mobility aid users and nonusers. The objectives were to understand the influences of physical, social, and attitudinal environments and to identify individual and desired collective actions to address environmental barriers. Preliminary findings revealed that environmental factors were significantly associated with satisfaction with participation and activity range. Mobility aid users with MS discussed more concerns about the built environment, whereas nonusers shared increased barriers related to other people's lack of understanding and employment. In addition, focus group participants shared how environmental support helped mitigate the

negative impact of impairments and enabled their community participation, although quantitative results did not confirm such interactive effects. Improving the ease of access to information, increasing the availability of accessible transportation and MS specialty care across regions, and enforcing regulations to improve physical accessibility were examples of advocacy topics.

Keywords: environmental impact, community participation, multiple sclerosis, participatory research

Embracing universal design for learning (UDL) principles for transforming higher education for students with disability and diverse equity groups.
Type: Poster
Strand: Inclusive Practices in Education
Name: Dr Christine Krol
Affiliation: Western Sydney University
Other Contributors: Josie Galeng, Western Sydney University

Abstract: We welcome conversations about universal design for learning (UDL) principles for transforming higher education experiences for students from diverse equity groups. Equity groups include students with disability, carers, First Nations, mature-aged, first in family to attend university, from lower socio-economic communities and those whose first language is not English. The Center for Applied Special Technology (CAST) defines UDL principles as an approach to teaching aimed at meeting the needs of all students. The three key principles are: '1) providing multiple means of engagement (so that students are engaged and motivated to learn in different ways), 2) representation (offering or delivering teaching and learning experiences in more than one format), 3) action and expression (allowing students to express their understanding of the content differently)'. Multiple higher education institutions are successfully implementing these strategies across the globe. UDL strategies go beyond offering affirmative interventions, such as the provision of accommodations, for academic engagement. It promotes equitable participation and fosters building a culture of belonging with accessible curricula and educational environments. Being part of UDL community of practice (CoP) groups is a wonderful way to learn. Likeminded members share their UDL strategies, both successful and in need of improvement. If you are part of a higher education UDL CoP group, we encourage you to share your group's contact details. If you would like to join a group, we can pass on contacts of established groups. If you would like more information about using UDL principles, we are happy to share some resources.

Keywords: UDL, equitable participation, disability, higher education

Implementing Healthy Living Habits in College with Young Adult with Intellectual Disability
Type: Poster
Strand: Inclusive Physical Activity, Recreation, and Sport
Name: Kelly R. Kelley, Ph.D.
Affiliation: Western Carolina University
Other Contributors: Meredith Morrison, Western Carolina University
Ryan Rockey, Western Carolina University

Abstract: Peers can influence behavioral changes, particularly within inclusive postsecondary education (IPSE) programs. Since the Higher Education Opportunity Act was reauthorized in 2008 to provide Transition Programs for Students with Intellectual Disabilities (TPSIDs) there are now 325 IPSEs across the United States (Think College, 2023). With IPSEs evolving in almost all states and 127 of them offering housing opportunities, peers (natural supports) can play a vital role in teaching important skills beyond academics, employment, social interactions, and healthy lifestyles since young adults with intellectual and developmental disabilities (IDD) are living away from their family members for the first time.

College students with IDD encounter challenges with healthy lifestyles. Implementing healthy lifestyles can improve overall quality of life, life expectancy, and personal fulfillment. Having healthy lifestyle habits is challenging for all individuals and can host additional unique challenges for individuals with IDD. Many college students with IDD indicate a desire and interest in participating in inclusive physical activities, recreation, and sports with other college students. This preliminary study focused on topics including macronutrients, vitamins and minerals, nutrition labels, whole foods, implementing MyPlate recommendations, resistance training, cardiovascular endurance, stress management, and superfoods. The health education curriculum lessons used were modified from the university's introductory health education courses (e.g., MyPlate, nutrition labels, stress management, exercise, meal planning, macronutrients). Preliminary data indicated 9 of 10 college students with IDD increased their nutritional knowledge, 10 of 10 increased servings of fruits and vegetables, and 6 of 10 increased cardiovascular endurance.

Keywords: intellectual disability, inclusive postsecondary education, healthy living

Practical report on a short-term paid internship program for high school students with intellectual disabilities.
Type: Poster

Strand: Employment
Name: Ayumi Matsukiyo
Affiliation: Research Center for Advanced Science and Technology, the University of Tokyo
Other Contributors: Takeo Kondo, Research Center for Advanced Science and Technology, the University of Tokyo

Abstract: The purpose of this study was to develop a short-time paid internship program for students of special-needs schools. By engaging only in specific tasks that are determined by the company, students can gain a sense of accomplishment, and the rewarding internship provides them with a different sense of responsibility and a real sense of work experience. To realize this program, it is necessary for schools, local companies, local employment support organizations, and various other related organizations to organically connect and collaborate with each other.

There are several courses offered at Japanese special-needs schools for the intellectually disabled, some of the students enrolled in this course think that they cannot work in a company. However, the problem is not that they really cannot work, but that they cannot match their skills with jobs.

To increase their work opportunities, it is important to adjust the employment environment and promote a system that allows them to be employed only for specific jobs with short times. The current challenge in Japanese society is that employment opportunities for people with disabilities are not expanding because "a system of employment in specific jobs for a short time" that facilitates work for people with disabilities is not common.

Therefore, this study aims to develop an internship program that leads to post-graduation professional life, focusing on the establishment of an organizational structure to realize a short-time paid internship, clarification of the roles of each organization, and sustainable organizational management through the utilization of social resources.

Keywords: a short-time paid internship program, students of special-needs schools

Mapping Accessibility in the August 8, 2020 Wisconsin Primary Election

Type: Poster
Strand: Built Environments: Digital, Physical and Social
Name: Emmett Lockwood
Affiliation: University of Wisconsin - Madison

Abstract: According to the Centers for Disease Control (CDC), in 2022, 26% of American adults have documented disabilities. This means that there are currently 1,200,000 eligible voters in Wisconsin with documented disabilities. In 2013, the Wisconsin Elections Commission found an average of 6.5 violations of the Americans with Disabilities Act of 1990 in the state of Wisconsin. Any one of these elections can cause disenfranchisement of a

voter. In this study, I used a fifty-four point criteria to measure the adherence to the Americans with Disabilities Act of 2010 and the Helping America Vote Act of 2002 in voting sites in the greater Madison area during voting in the Wisconsin Primary Election. Forty polling sites were surveyed during the early voting and day-off voting in Madison, WI. There was an average of 3.73 violations of the Americans with Disabilities Act and the Helping America Vote Act per polling site. There was an average of 3.33 violations per early voting site and 3.93 violations per day-of the polling site. Early voting sites having fewer violations was not surprising because of their positions as the site where absentee ballots are returned. Two of the leading causes for violations were the lack of free accessible parking in downtown Madison, Wisconsin, and the disconnect in incentives for adherence at polling sites that need to adhere to the Americans with Disabilities Act of 1990 every day until when they are a polling site and need to adhere to the Americans with Disabilities Act of 2010.

Keywords: Americans with Disabilities Act, Helping America Vote Act of 2002, disability studies, accessibility, elections, voting

Enhancing Asynchronous Online Classes in Higher Education for Students through Virtual Learning Environments

Type: Poster
Strand: Built Environments: Digital, Physical and Social
Name: Joseph Peters & Patrick Agullana
Affiliation: UH Manoa
Other Contributors: Patrick Agullana, University of Hawaii at Manoa

Abstract: Virtual reality (VR) technology has emerged as a promising tool for transforming traditional educational practices by offering immersive and interactive learning experiences. VR can offer place-based learning in the form of immersive virtual field trips in a digital virtual learning environment.

For example, at the University of Hawaii at Manoa, I helped make an asynchronous online course in the Sakai learning management system that embedded a window that linked to Mozilla Hubs, a free virtual reality digital environment platform to present 3D coral objects and the concept of coral bleaching for a public health course. This paper presents a proposal for a qualitative research study on the potential for virtual reality to enhance learning by leveraging the capabilities of VR to situate cognition through added digital access to realistic contexts.

Keywords: Digital & Virtual Environments

US-Japan Comparison of the Working Context: Impact on People with Disabilities and Challenges in Japan

Name: Yumi Yuzawa
Affiliation: Department of Advanced Interdisciplinary Studies, Graduate School of Engineering, The University of Tokyo

Abstract: Plans to improve social systems and support methods to empower people with disabilities to work at their full potential must be based on the characteristics of cultural views of work of a particular country or region. Therefore, this study explored the Japan's working environment in comparison with the U.S. Relevant literature was searched on the PsycNet database using the search terms "job stress," "United States," and "Japan," and external factors leading to job stress were compared. A correspondence analysis was conducted, and a text-mining approach, to compare the environmental context descriptions for both countries. The factor "relationships with colleagues" was mentioned more frequently in Japan than in the U.S. The term "support" was used as a variable for factors that buffer job stress in Japan, versus the term "resources" in the U.S. Furthermore, the correspondence analysis shows that the term "organization" was mentioned in the U.S. in response to the frequent mention of "workplace" in Japan. These results suggest that job stress arises between organizations and individuals in the U.S. versus the "workplace" in Japan. Moreover, relationships with colleagues are closer in Japan than in the U.S. Therefore, in Japan, uncertainty about becoming a harmonious member of the "workplace" can inhibit employment decision-making among people with disabilities. Furthermore, the mindset of workers may be more "support-oriented" than "resource-oriented" in Japan. This context limits the career development of people with disabilities and might position them as "being supported." Transforming this context is a challenge for Japan.

Keywords: working context, regional characteristics, impact on people with disabilities, challenges in Japan

Practitioner Research on Online Social Skills Training Incorporating Discussion for Adults with Developmental Disabilities or Tendencies

Type: Poster
Strand: Employment
Name: Shoji Sayaka
Affiliation: Counseling and Rehabilitation Center of University of Tsukuba
Other Contributors: Kuagai Keiko, University of Tsukuba

Abstract: It is known that people with developmental disabilities (DD) find it difficult to take turns in a conversation and maintain relationships. Therefore, we provide social skill training (SST) to adults with DD who have difficulty communicating.

The SST we provide involves listening to individual goals and planning the program. The program involves procedures such as instruction, modeling, roleplaying, and positive reinforcement for skill improvement, in addition to discussions among clients. The clients practice their speech for another group of children with DD in the final session. Moreover, discussions among clients increase their experiences, such as through expressing their opinions to others. In the final session, all clients discuss how they can express their opinions in an easy-to-understand manner within the allotted time.

In the SST, six participants were asked to fill out a 24-item questionnaire on communication skills, divided into six categories, both before and after the intervention using a seven-point Likert scale. These seven-point Likert scale results were analyzed using the Wilcoxon signed rank test.

As a result, this online SST program suggested improvements in two categories. The first category was "self-control," which involved suppressing one's impulses and desires and managing one's emotions effectively. The second was "regulation of interpersonal relationships," which involved prioritizing human relationships in one's actions and striving to maintain good relationships.

Furthermore, clients supported each other through discussions and experienced mutual growth. Additionally, by giving advice to school-aged children, clients had a positive experience wherein their own past experiences proved to be useful.

Keywords: Social skill training, adults, developmental disabilities, online SST

The Significance of "Experience Narratives" in Career Support for People with Neurodevelopmental Disorders.

Type: Poster
Strand: Employment
Name: Ayaka Sueyoshi
Affiliation: University of Tsukuba, Institute of Human Sciences

Abstract: It continues to be pointed out in Japan that students with Neurodevelopmental Disorders (NDD) enrolled in HEIs face challenges in their career development. It is necessary to propose specific support methods and verify the effectiveness of support for people with NDD in the process of transitioning from higher education institutions and career support offices to the workplace, and for them to work stably in the workplace after the transition. Efforts to provide opportunities to listen to the experiences of others or to talk about one's own experiences have been reported in Japan and abroad as a way to support people with illnesses and disabilities. However, in these practices, especially in Japan, how much attention has been paid to those in a position to "tell others about their own experiences"? It is expected that people with NDD (or students with NDD) would benefit from hearing about the experiences of their "senior" colleagues. Not only that, for "senior people with NDD who talk about their experiences," it may be inferred that sharing their experiences with others may have some impact on their self-understanding and motivation to work. This presentation will examine how listening to others' experiences with employment and sharing one's own experiences with employment affected people with NDD in terms of their self-understanding and their attitudes toward employment.

Keywords: Neurodevelopmental Disorders, Career Support, Narratives

Accessibility First: Designing an Effective and Proactive Procurement Policy for Digital Products
Type: Recorded Presentation
Strand: Built Environments: Digital, Physical and Social
Name: M. Beth Valentine, PhD
Affiliation: University of North Dakota
Other Contributors: Jessica D. Gilbert Redman, MLIS, University of North Dakota School of Medicine & Health Sciences

Abstract: Software and other digital resources are integral to most built environments. To create a sense of belonging in these environments, organizations must go beyond merely providing access to these resources and instead ensure that they are accessible to all, which requires selecting accessible software and other digital products. Creating a policy governing procurement of digital products can help achieve this goal organization-wide. The associated recording provides resources to help with these tasks by sharing lessons learned from the Digital Accessibility Policy implementation at a flagship state university in the U.S. The presenters define foundational terms, criteria, and documents surrounding digital accessibility before providing guidance for the three key phases of policymaking: (1) pre-policy writing, (2) policy writing, and (3) implementation. Presenters highlight often overlooked logistical issues and ways to generate organizational support which are critical to the first phase. They then identify considerations for the policy-writing stage: which office will have policy

ownership, what digital products – if any – will be exempt from the policy, how often digital products should be reviewed, what that review process is, and what review standards will be used. Because these standards are often unfamiliar to those purchasing digital products, education on the review process, the required documentation, and the importance of accessible products is key and should be done prior to implementation as well as at regular intervals post-implementation. Lastly, the presenters will address the ongoing work needed during the implementation and post-implementation phase to promote success.

Keywords: digital procurement, software accessibility, digital accessibility, ACR, VPAT, WCAG

Metabolic Equivalents of Outrigger Canoe Paddling for Health Equity: Methods of an Inclusive AccessMETs Study
Type: Recorded Presentation
Strand: Inclusive Physical Activity, Recreation, and Sport
Name: Simone M. Schmid
Affiliation: University of Hawaiʻi, Office of Public Health Studies and Hawaiʻi Department of Health, Chronic Disease Prevention and Health Promotion Division, Surveillance, Evaluation and Epidemiology Office
Other Contributors: Daniel Heil, Montana State University
Ann Yoshida, AccesSurf Hawaiʻi
Penny Kalua, Honolulu Pearl Canoe Club
Lance Ching, Hawaiʻi Department of Health, Chronic Disease Prevention and Health Promotion Division, Surveillance, Evaluation and Epidemiology Office
Tetine Sentell, University of Hawaiʻi, Office of Public Health Studies

Abstract: People with disabilities, as well as Native Hawaiian and other Pacific Islanders, have relatively low reported physical activity rates that increases risk for chronic diseases, all-cause and early mortality. This paper proposes a study design for evaluating the efficacy of outrigger canoe paddling as a culturally relevant means for promoting physical activity.

Keywords: Energy Expenditure, NHPI, METs