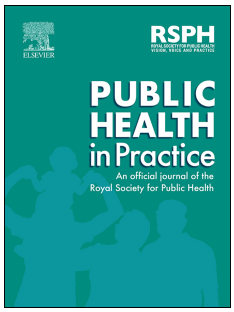

Inclusive Education for People with Intellectual Disabilities: Insights from a COST Action Training School

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Abstract

Objectives:
People with intellectual and developmental disabilities (PWIDD) face persistent inequalities in accessing inclusive and health education. This contributes to lower participation in cancer screening, limited access to tailored health information, and poorer health outcomes. This study aimed to develop and evaluate a co-produced, pan-European COST Action CUPID Training School applying Universal Design for Learning (UDL) to improve cancer prevention education and health literacy for PWIDD.

Study Design:
Co-produced, pan-European training intervention.

Methods:
A cross-European Training School was collaboratively developed by researchers, health professionals, educators, and PWIDD. UDL principles guided its design to ensure flexibility, accessibility, and inclusivity. A framework comprising six principles informed the approach: health literacy through tailored resources; inclusion of PWIDD as equal participants; co-production in shaping content and delivery; accessibility through easy-read, multimedia, and plain language formats; scaffolding to support confidence and comprehension; and cultural adaptation to different national contexts.

Results:
The Training School demonstrated that inclusive education, UDL, and participatory approaches can be applied effectively across international and cultural contexts. PWIDD contributed as both co-trainers and learners, enhancing relevance and accessibility. Participants reported increased awareness of inclusive practices, improved understanding of cancer prevention, and strengthened communication skills.

Conclusions:
A co-produced, UDL-informed framework centred on inclusion, co-production, health literacy, accessibility, scaffolding, and cultural adaptation offers a promising approach to advancing health literacy for PWIDD. Embedding these principles within mainstream health prevention and inclusive education strategies, alongside addressing systemic barriers, is essential for achieving sustained improvements in health equity.

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Highlights

- Inclusive cancer education was co-produced with PWIDD and other key stakeholders from across Europe.
- Universal Design for Learning guided all content design and delivery strategies.
- Multimodal, accessible materials supported diverse cognitive and cultural needs.
- Scaffolded learning promoted reflection, autonomy, and peer interaction.
- PWIDD were active contributors, not just recipients, of health education efforts.
- This paper offers key considerations for co-producing education with PWIDD.

Introduction

Increasingly, people recognise inclusive education for PWIDD as both a fundamental human right and a crucial public health priority. The United Nations Convention on the Rights of Persons with Disabilities [1] firmly roots this recognition, articulating that inclusion encompasses not only physical access to educational facilities but also the essential aspects of active participation, a sense of belonging, and the provision of equitable opportunities for educational engagement. Despite established international policy commitments, the practical implementation of inclusive education exhibits significant inconsistencies across various contexts. Such disparities adversely affect critical areas such as health literacy and outcomes, social participation, and overall well-being among PWIDD.

Cancer and cancer prevention are key areas of inequity for PWIDD. The incidence of cancer continues to rise, and in 2023, it was among the leading causes of death [2]. Beyond mortality, cancer contributes to disability, psychosocial distress, and financial hardship for PWIDD and their families [3]. Significant inequalities exist for PWIDD including lower participation in screening programs, delayed diagnoses, and higher mortality rates [4,5]. Factors such as diagnostic overshadowing, inaccessible communication, exclusion from public health campaigns, and healthcare provider bias further exacerbate these disparities [6,2].

Although these inequities are well documented, they remain insufficiently addressed in health policies [7,8]. While international reports [2,8] recognise the need for inclusive strategies, concrete guidelines for implementing cancer prevention initiatives for PWIDD are still lacking. Most often, it is the families of PWIDD who assume the role of intermediaries and advocates for equitable access, typically with limited systemic support [9,10].

PWIDD typically have lower levels of health literacy than the general population [11,12]. Moreover, they are rarely included in the design of educational interventions intended for them, which results in inadequate and insufficient information, poorly aligned with their actual needs and capabilities. These disparities are further deepened by the fact that standard health education models often fail to recognise and adapt to the specific cognitive and communication needs of this population [13,9]. Overcoming these barriers requires the development of accessible educational models that use plain language, visual aids, and learning supports [14]. To address these challenges systematically, the COST Action 21123 CUPID project, Cancer Understanding, Prevention, and Inclusion for Disabilities, [15] has launched several initiatives aimed at addressing barriers that limit cancer prevention access for PWIDD. The project is focused on involving PWIDD, their families, and professionals from the health and education sectors, promoting health literacy and education. In doing so, it aims to directly respond to challenges and gaps in health education by developing inclusive, participatory, and sustainable educational frameworks.

This discussion paper provides insights from the CUPID Training School (TS) held in Prague in 2024, an initiative that brought together participants from across Europe to develop sustainable and accessible educational materials grounded in co-creation, equality, inclusion, and professional collaboration. This paper focuses on how education can be designed and implemented to meet the needs of PWIDD better, and particularly health education.

The primary objective of the CUPID TS was to enhance awareness and empower PWIDD, their support persons, and health professionals by delivering accessible and inclusive resources aligned with the World Health Organisation's Guidelines for Cancer Prevention [16]. Drawing on experiences from the CUPID TS, this paper provides an application of a framework for inclusive education. It analyses the processes of co-creating educational content involving PWIDD, their families, healthcare providers, educators, and researchers. Through collaborative work, participants experienced the meaning and principles of inclusive education, which emphasised the importance of accessible information, health literacy, and pedagogical approaches that incorporate multimodality, phased learning, and social interaction.

Methods

Inclusive Education

The CUPID TS was developed using constructivist approaches, based on the principles of active, inclusive and experiential learning and education. This approach aligns with the principles of Universal Design for Learning (UDL), which reinforces constructivist and inclusive pedagogy through three core pillars: Multiple Means of Engagement, Representation, and Action and Expression [17]. UDL ensures that educational content is flexible and tailored to the diverse cognitive and communication abilities of people with intellectual and developmental disabilities, thereby enabling their full inclusion and active participation in the learning process.

In addition, it is important to recognise that people with intellectual and developmental disabilities may also experience co-occurring or intersecting disabilities, including sensory (e.g. vision or hearing impairment) and physical or mobility-related impairments. These intersecting needs can create additional barriers to accessing and engaging with health education. UDL framework is particularly suited to addressing such complexity, as it promotes the provision of multiple means of engagement, representation, and expression. Within the CUPID TS, this was operationalised through the use of multimodal materials (e.g. visual, auditory, and tactile resources), flexible delivery formats, and adaptable communication strategies, enabling participants with diverse and overlapping accessibility needs to engage meaningfully with the content.

Research has demonstrated that inclusive educational environments can significantly enhance essential skills among PWIDD, including social, emotional, and communication skills [18-21]. Furthermore, these environments contribute to a reduction in stigma and discrimination among peers, fostering a culture of acceptance and understanding [22].

Educational frameworks, such as Universal Design for Learning (UDL), offer adaptable pathways tailored to diverse learner needs, which allows for a more personalised and responsive educational experience [23]. In addition to enhancing academic outcomes, inclusive settings bolster broader determinants of health by promoting empowerment, self-advocacy, and active participation in community life.

Nevertheless, the implementation of inclusive education remains uneven across different educational systems and jurisdictions. Educators frequently confront structural obstacles, including inadequate access to specialist support, insufficient resources, and inflexible curricula that do not recognise the unique needs of learners [24]. Recent advancements in educational technology and artificial intelligence (AI) have introduced innovative tools designed to support and enhance inclusion. Research indicates that mobile applications, augmented reality, and adaptive learning platforms can improve both accessibility and engagement for PWIDD, enabling a more integrative learning experience [25]. Additionally, AI-driven systems can offer personalised feedback and communication support tailored to individual learning needs. However, concerns continue about equity issues, potential biases within AI algorithms, and the necessity of involving PWIDD in participatory design processes to ensure adequate consideration of their perspectives and needs [26].

Global initiatives, such as UNICEF's comprehensive early childhood development programmes, emphasise the critical importance of initiating inclusion early in childhood for PWIDD [27]. From the vantage point of health education, inclusive education is multifaceted, addressing both pedagogical approaches and ensuring equitable access to vital health-related knowledge and skills. PWIDD who experience education in inclusive settings are significantly more likely to receive comprehensive health education similar to their peers, which lays the groundwork for developing health literacy, informed decision-making capabilities, and effective self-advocacy throughout their lives [12]. For practitioners, educators, and policymakers, these findings underscore the urgent necessity to integrate inclusive educational practices with effective health promotion strategies. This integration vitally ensures that PWIDD actively participate in both educational and healthcare contexts, instead of only being seen as beneficiaries of educational systems. While the discourse surrounding inclusive education for PWIDD is of paramount importance, it remains an ongoing and complex discussion.

Results

A Framework for Inclusive Education

To achieve inclusive education within the CUPID Training School, a framework was developed to address the diverse needs of PWIDD by promoting equitable access to educational resources, fostering an inclusive learning environment, and implementing tailored instructional strategies that catered to varying abilities and backgrounds.

The TS framework for inclusive health education using UDL is presented in Figure 1. The concepts underlying this framework will be discussed in the following sections.

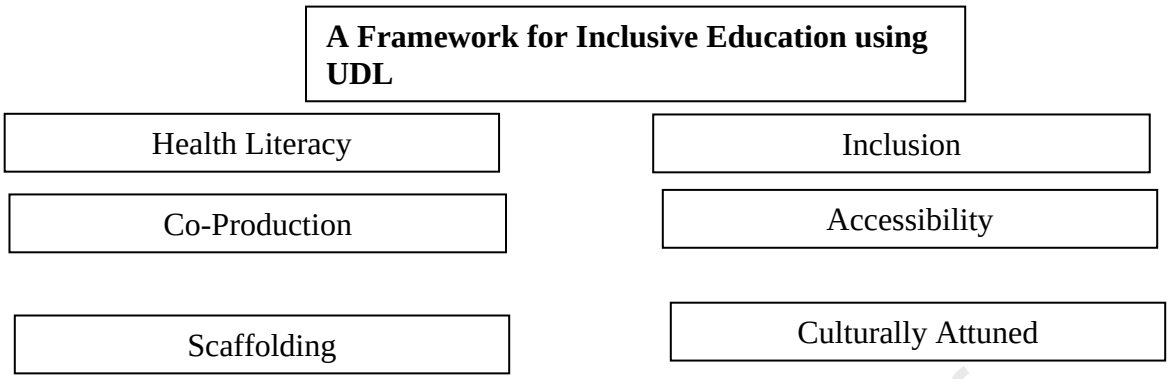

Figure 1: Framework for inclusive education

Health literacy

Health literacy is defined by [28] as:

> *"People's knowledge, motivation, and competences to access, understand, appraise, and apply health information to make judgements and decisions in everyday life concerning healthcare, disease prevention, and health promotion to maintain or improve quality of life during the life course."* p.3

Health literacy necessitates inclusive and equitable access, which is pivotal for the transformation of health systems to provide quality, person-centred, and equitable care for all [2]. A wide range of societal factors shapes health literacy and is not the sole responsibility of anyone to develop and maintain. Addressing the health literacy requirements of the most underserved and marginalised communities has the potential to expedite advancements in diminishing health disparities and related fields.

For people with intellectual disability and their carers, information providers, including government, civil society and health services, should enable access to trustworthy information in a form that is understandable and actionable for all people. Health literacy is essential for empowering people by enhancing their access to clear and reliable health information and improving their ability to use this information effectively. Such empowerment enables people to make informed decisions regarding their personal health and encourages their engagement in collective efforts to promote health and address its underlying determinants. The TS sought to ensure that the health literacy needs of those attending were considered. As the TS includes a range of participants, it had to consider both the personal health literacy needs of those attending, be they people with ID, carers, or health professionals, whilst also considering the professionals attending and how the TS could support professional health literacy.

There is still a deficit-oriented perspective on health literacy when considering people with intellectual disabilities. Rather than adopting this approach, for the TS, a resource-oriented perspective was incorporated as suggested by [12], where, taking a co-production approach,

resources were developed and reviewed by all attending the TS and the feedback from all participants was utilised to inform the materials, using the expertise and lived experience.
Vetter et al. [29] point out that it is often assumed that health literacy in PWIDD is sometimes limited to a functional level, depending on the level of disability. Consequently, social and communicative skills are frequently overlooked, despite being essential for PWIDD to make autonomous health-related decisions. It is noteworthy that an exclusive focus on functional abilities may lead to the inaccurate assumption that their health literacy is lower than it is [12]. Therefore, the TS team enabled a strengths-oriented perspective to ensure the engagement of PWIDD in the TS [30].

In practice, this strengths-oriented perspective was operationalised by actively recognising and building on the existing knowledge, experiences, and communication preferences of PWIDD. Participants were supported to share their lived experiences of healthcare and cancer prevention, which informed the co-development and refinement of educational materials throughout the TS. Easy-read resources were reviewed collaboratively, and feedback from PWIDD directly shaped the language, format, and content of materials. Facilitators also adopted flexible communication approaches, including visual supports, storytelling, and peer discussion, to enable participants to contribute in ways that reflected their strengths rather than perceived deficits.

Inclusion

People with intellectual and developmental disabilities are often excluded from health education and cancer prevention programs due to inaccessible information and inadequate educational approaches. This exclusion is not a consequence of disability itself, but of systemically constructed barriers within healthcare systems. Many healthcare systems still treat inclusion as a secondary obligation rather than as a core element of health equity.

Empirical research shows that PWIDD face several difficulties in their attempts to live healthily, but one way to overcome these challenges is by providing appropriately tailored information that aligns with their abilities, preferences, and motivations [31]. UDL framework offers a structure through which cancer prevention information becomes more accessible to people with ID, thereby strengthening their health literacy, autonomy, and participation in decision-making. Within the CUPID TS, this framework was applied to enable participants to engage more deeply and meaningfully with health-related topics, including those related to cancer prevention.

Inclusion was manifested prior to the TS through ensuring that PWIDD were supported to become members of the COST Action, similar to all other attendees at the TS. This inclusion was also achieved through each person with ID having a dedicated support person of their choosing to attend the TS. During the TS, PWIDD, were supported to introduce and co-deliver sessions and to participate in all discussion sessions, using a range of methods, verbal and non-verbal, to get their views.

Co-Production

Co-production is a collaborative process where service users, including PWIDD, work in equal partnership with professionals to design, deliver, and evaluate services or research that affect their lives. By breaking down traditional hierarchies, co-production can ensure that research or services

are more responsive to real-world challenges and better aligned with the needs of communities, organisations, and policymakers [32]. This ethos was important to the TS.PWIDD participated on an equal level in the TS along with professionals (medical doctors, nurses, special needs educators and psychologists) and support persons (family and paid carers). Other than one session each day, all sessions were designed to enable the full participation of PWIDD. To ensure that this was not just tokenistic, as Needham and Carr [33], warn that co-production must move beyond tokenistic involvement, the TS organisers linked with the PWIDD and their carers prior to the TS to help us in planning for the training school. We asked them to complete a short questionnaire, prepared in easy-read format, on what they hoped to learn during the training school in relation to cancer prevention. We then worked with all session presenters to prepare easy-read material for each session, and this material was sent to the PWIDD and their carers prior to the TS. We also undertook a daily evaluation, available in both easy-read and non-easy-read format, to enable the TS organisers to both learn what had worked and plan to address any issues identified on the following day, and to use the learnings also to plan for any follow-on training schools/ education events.

From our experience during the TS and the evaluations completed, including a final evaluation, we found, in line with Molnar et al. [34], that PWIDD can successfully become co-researchers and co-contributors to education programmes and shape the results they want from services with co-production recognising their expertise and experiences. One learning however, is that we would involve PWIDD in the organising committee.

In practice, achieving this requires structured and intentional approaches to inclusion from the outset. Based on our experience, several key considerations can support the meaningful involvement of PWIDD in organising committees. First, early engagement is essential, with PWIDD invited to participate in planning stages rather than being consulted retrospectively. Second, accessible communication methods, including easy-read materials and supported discussions, are necessary to enable informed participation in decision-making processes. Third, the provision of appropriate supports, such as trusted support persons and flexible meeting formats, can facilitate sustained engagement. Fourth, clearly defined roles and expectations help ensure that participation is meaningful rather than symbolic. Finally, allocating sufficient time and resources to co-production processes is critical, as meaningful inclusion requires additional planning, coordination, and flexibility. These considerations highlight that while involving PWIDD in organising structures can be challenging, it is both feasible and essential for avoiding tokenistic approaches. The CUPID TS exemplified the application of a UDL framework through interconnected practices that promote health equity for PWIDD

Scaffolding

Vygotsky [35], highlighted the essential role of social interaction in cognitive development, introducing the concept of the Zone of Proximal Development (ZPD). The ZPD represents the difference between an individual's current developmental level and their potential level, which can be attained through collaboration with more knowledgeable peers. The ZBD offers crucial opportunities for substantial learning, facilitated by effective instruction. Cognitive transformation occurs within the ZPD as learners synthesise their existing knowledge with new experiences [36]. During the TS, we intentionally designed structured opportunities for participants to engage within their ZPDs by creating scaffolded and interactive learning sessions. For example, a diverse range of methodologies, such as storytelling, facilitated group discussions, and interactive role-play,

allowed participants to engage meaningfully with culturally relevant tools, such as the stories or lived experiences of PWIDD. These tools served as powerful vehicles to co-construct an understanding of cancer prevention and management initiatives.

Specifically, scaffolding was supported through a combination of structured activities and practical tools, including storytelling, role-play scenarios, facilitated group discussions, and the use of tangible resources such as anatomical models and screening kits. These approaches allowed participants to engage progressively with complex concepts, linking new information to prior knowledge in a supportive environment. In addition, facilitators provided step-by-step guidance and repeated key messages across different formats to reinforce learning and build confidence. Emerging technologies, including AI-generated chatbots, represent a potential future opportunity to enhance scaffolding by offering personalised, accessible, and on-demand support for PWIDD, although their application requires careful consideration of accessibility, usability, and ethical implications.

Facilitators assumed the role of more knowledgeable peers, offering essential guidance and support as learners collaborated to apply newly acquired knowledge in ways that were relevant and meaningful to their specific contexts. The reflective exercises on cancer prevention, collaboratively developed and feedback materials, functioned not merely as instructional strategies, but as pivotal mediational tools that encouraged deeper insights and enriched understanding of cancer prevention. As a result, the TS exemplified the practical application of Vygotsky's constructivist theory[35]. Learning emerged as a dynamic process rooted in social interaction and collaborative meaning-making, enabling all participants at the TS to internalise complex concepts related to cancer prevention for PWIDD. This approach not only enhanced participants' knowledge but also empowered them to apply these insights in real-world scenarios, thereby promoting future positive health outcomes within their communities related to cancer prevention.

Accessibility

Accessible education is essential for the equitable participation of PWIDD in health promotion and cancer screening. However, many health resources are overly complex and medicalised, limiting PwIDD’s ability to understand and act on critical health information [37]. At the CUPID WG1 TS, accessibility was integrated throughout the learning experience. Sessions were designed and delivered using inclusive, multimodal strategies that combined simple slides, spoken explanations, and visual supports, such as posters, alongside tactile tools (e.g., anatomy models, screening kits), and interactive activities like role-play [38]. These methods reflect principles of explicit instruction and multimodal learning, which are effective among learners with IDD [39].

Additionally, workshops were organised, allowing participants to interact with real materials such as colorectal screening kits and silicone breast models, making abstract information tangible and memorable. This approach aligns with constructivist learning theories, which emphasise active engagement and reflection. To further support understanding and retention, content was introduced gradually (phasing), scaffolded to build on prior knowledge, and reinforced through repetition across multiple formats. This strategy recognises diverse learning preferences and enhances memory [38,14]. Accessibility was not treated as an add-on but as a guiding principle in the design and implementation of the TS. By integrating accessibility into all layers, from content and

delivery to the physical environment, the programme empowered PWIDD, caregivers, and professionals to engage with cancer prevention in meaningful and actionable ways.

Culturally Attuned

Culturally attuned approaches are vital for promoting equitable cancer prevention for PwIDD throughout Europe. These approaches acknowledge that cultural identity, language, lived experiences, and community norms significantly influence how PWIDD access and interpret cancer health information [40, 2]. For PWIDD, culture encompasses not only ethnicity or nationality but also disability culture, communication preferences, and support networks [41]. Culture can be defined broadly as the collective beliefs, values, customs, behaviours, and artifacts that enable members of a group to navigate their environment and interact with one another. These cultural elements are transmitted across generations through processes of learning [42]. This definition is particularly relevant when working across diverse European contexts and with communities of PWIDD, who may hold distinctive cultural identities shaped by their lived experiences of disability, support systems, and interaction with health services.

The CUPID TS, which included participants from multiple European countries, was intentionally designed to be culturally sensitive. This was essential to ensure that the content on cancer prevention was both accessible and meaningful to the wide range of cultural and personal identities represented. Cultural sensitivity, in this context, refers to the awareness, understanding, and respect for cultural differences and similarities between people without assigning value judgments. It involves recognising that cultural differences exist and may influence how PWIDD interpret and respond to health-related information. It also entails understanding how cultural backgrounds shape people's perspectives, beliefs, and behaviours, and respecting and valuing the diversity of these cultural expressions and practices.

In the TS, cultural sensitivity further involved adapting and modifying language, pacing, and delivery to suit diverse needs and maintaining a non-judgmental stance that avoids placing positive or negative value on cultural differences. These principles were operationalised through a collaborative and inclusive learning environment that enabled participants to engage with cancer prevention education in ways that were affirming of their cultural and personal identities. Culturally relevant symbols, narratives, and activities were integrated into the sessions to reflect the diversity of experiences among participants from various European backgrounds. Facilitators worked closely with PWIDD to co-design and adjust the content, ensuring it was meaningful within their specific cultural and cognitive contexts (Taggart et al., 2023)[43].

This culturally attuned approach fostered shared learning and mutual understanding, enabling cancer prevention messages to be internalised rather than merely delivered. Such an approach is critical not only for enhancing participation in health education but also for affirming the rights, dignity, and autonomy of PWIDD [2]. By embedding cultural sensitivity at every stage, the TS supported more equitable, respectful, and effective engagement in cancer prevention across diverse settings.

Discussion

The CUPID TS provided a distinctive opportunity to identify and address critical gaps in cancer prevention education and provided convincing evidence that inclusive, co-produced cancer prevention education for PWIDD is both essential and attainable. Grounded in the principles of UDL, the TS promoted diverse methods of engagement, representation, and expression [17], ensuring that all participants, regardless of their cognitive or communication needs, could effectively access and understand cancer prevention information. This approach is also relevant for addressing intersectionality in disability, where individuals may experience multiple and overlapping impairments (e.g. intellectual, sensory, and physical). By incorporating flexibility and multimodal delivery, UDL provides a framework capable of responding to this complexity and supporting inclusive participation across diverse needs. These inclusive strategies directly address the well-documented disparities in cancer outcomes for PWIDD [4, 5] which are exacerbated by challenges such as inaccessible communication, diagnostic overshadowing, and systematic exclusion [6,2]. The co-production approach employed by the TS empowered PWIDD to actively influence their own learning experiences, aligning with research that indicates participatory design enhances the relevance and efficacy of health education [32,34] By involving all participants, attending the TS, in the planning, delivery, and evaluation processes, the TS effectively mitigated tokenism and fostered genuine collaboration, consistent with the recommendations of Needham and Carr [33].

Additionally, a resource-oriented perspective on health literacy [12,29] underscored the recognition of PwIDD's communicative and social capabilities, thereby challenging deficit-based assumptions and improving autonomy in health-related decision-making. Scaffolded learning opportunities, inspired by Vygotsky's concept of the ZPD [35] enabled participants to integrate prior knowledge with newly delivered content at the TS, using culturally relevant and interactive formats. This was further enhanced by a culturally sensitive approach that acknowledged disability as a cultural identity and tailored content to reflect diverse European contexts [41, 2]. While the TS successfully advanced the field of inclusive cancer prevention education, it also emphasised the necessity for earlier and more profound involvement of PWIDD in future event planning. Nonetheless, this initiative represents a scalable and ethically sound model for promoting equity, enhancing health literacy, and empowering PWIDD in cancer prevention across Europe.

Though substantial evidence supports the numerous benefits of inclusive education, persistent structural and attitudinal barriers continue to obstruct its full realisation [22]. Moving forward, strategic efforts should prioritise education for PWIDD, secure systemic resources, and advance the development of inclusive technologies. It is equally essential to amplify the voices and experiences of PWIDD and their families in these initiatives. Inclusive education, by moving from tokenistic approaches to genuine participation, has the potential to enhance lifelong meaningful learning, thereby promoting equity in education for PWIDD in society.

The evaluation of the TS by all participants demonstrated strong participant satisfaction. Most respondents rated the sessions highly for clarity, relevance, and usefulness. Open-ended feedback was largely positive, highlighting engaging content and effective facilitation. Participants reported increased awareness of inclusive practices, improved understanding of cancer prevention, and strengthened communication skills. Suggestions for improvement were minor, focusing on

additional resources. Overall, participants found the TS valuable, with feedback indicating enthusiasm and constructive engagement.

A limitation of the CUPID TS was the extent of involvement of PWIDD in the organisation of the TS. While they were actively involved during the TS, future training schools and learning events with PWIDD should ensure they are involved in the planning for the event. Earlier engagement could have strengthened relevance and ownership. Additionally, findings are context-specific and may require adaptation for broader application across diverse healthcare and cultural systems Participants at the TS with an intellectual disability (ID) were at the level of mild to moderate ID. However, the TS did not include people with severe and profound ID and hence the usefulness of the Framework for this cohort has not been explored. With their support person, who was known to them, PWIDD were able to engage fully with the TS. Having to ensure each person with ID had a dedicated support person who is known and trusted within the TS created a resource requirement which may need to be considered in planning future inclusive education programmes.

The CUPID TS exemplified the application of a UDL framework through interconnected practices that promote health equity for PWIDD. Its focus on inclusion, accessibility, co-production, scaffolding, health literacy, and cultural responsiveness reflected UDL's core principles: multiple means of engagement, representation, and action/expression. All participants at the TS, PWIDD, caregivers, professionals, and presenters collaborated to co-create learning sessions, fostering a shared sense of ownership, belonging, and mutual respect. This strengths-based, participatory approach effectively challenged traditional power imbalances and addressed barriers to engagement. Information was delivered in multimodal, accessible formats, including plain language, pictograms, visual aids, and narrative accounts, which were tailored to PWIDDs cognitive and cultural contexts. Culturally responsive practices ensured content was not only understandable but also personally meaningful. Scaffolded learning provided opportunities for expression, reflection, and peer learning. Drawing on Vygotsky's ZPD, [35] facilitators used tailored strategies to build confidence, autonomy, and understanding at participants' own pace. Crucially, health literacy was treated as a shared, systemic responsibility rather than an individual deficit. By centring UDL as the structural foundation, the TS positioned all participants as active contributors. This TS illustrates how inclusive, co-produced education can meaningfully enhance health education for underserved populations like PWIDD, and the learnings from this TS can be easily applied to other areas of education.

Author Statements

Ethical approval

Ethical approval was not required as this study did not involve formal research procedures or the collection of identifiable personal data and was conducted as part of a training and educational initiative.

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Competing interests
The authors declare no competing interests.

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Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Ethical Statement

This paper draws on reflective accounts and group discussions from the CUPID WG1 Training School on cancer prevention for persons with intellectual and developmental disabilities. No identifiable personal or clinical data were collected. All contributors were informed of the purpose of the reflections and provided verbal or written consent for the use of anonymised insights in publications. The initiative followed the ethical principles of the Declaration of Helsinki and the COST Action guidelines for inclusive and participatory research. As this work represents a reflective educational initiative rather than formal human subjects research, formal institutional ethics approval was not required.

List of Abbreviations

AI: Artificial intelligence

CUPID: Cancer- Understanding prevention in intellectual disabilities

IDD: Intellectual and developmental disabilities

PWIDD: People with intellectual and developmental disabilities

TS: Training school

UDL: Universal Design for Learning

ZPD: Zone of Proximal Development

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