

VISUAL IMPAIRMENT and archaeological engagement

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Archaeology and heritage studies are engaging disciplines that reach wide and diverse audiences in a manner which many subjects cannot; they are simultaneously educational and relatable.

Archaeology in particular is generally considered a visually based discipline, although experienced excavators often discuss tactile aspects and 'feel' to act as indicators when moving between contexts. This belief unintentionally impedes the engagement and inclusion of visually impaired (VI) individuals in archaeology, resulting in the loss of alternative perspectives that can enhance archaeological and heritage interpretations.

Visual impairment is not confined to the contemporary world as individuals from all periods of archaeological interest may have experienced such impairment. Therefore, gaining different perspectives about lived experiences today will enable a more comprehensive understanding of the past.



What does an image show? For visually impaired individuals, the inclusion of imagery in narratives may have little additional benefit. Other manners of description should be used. This article is deliberately light on imagery to act as a thought prompt. Credit: S Bohling & J King

Higher Education (HE) can encourage VI individuals to participate in archaeological and heritage studies. Good pedagogic practice and conformity with the Equality Act (2010) should encourage the creation of curricula and learning opportunities that are accessible to all, although these may require adaptation of HE expectations regarding learning and teaching.

Adapting teaching practice

Institutions should utilise current practice guides from the Royal National Institute of Blind People (2014) for working with and supporting VI students. Sector experience may provide different perspectives on how to support VI students, incorporating practical examples of potential barriers that students may face

during their time in HE (eg University of Leicester 2017).

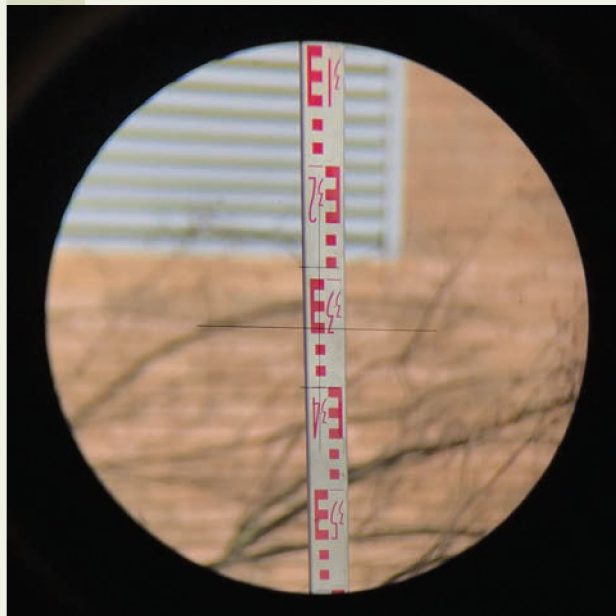
Studying archaeology at HE level requires students to access a wide variety of text-based sources for use in lectures, seminars and assessments. Some VI students may find accessing such resources difficult and therefore communication with the student(s) is necessary to ensure the ability to access resources with assistive technology and participate in learning activities. To support VI students in accessing resources, it is vital to establish a positive relationship with library services. Librarians who are aware of a student's specific needs can identify appropriate accessible resources; for example, the electronic version of a textbook or scanned sources transferred into screen-reader-compatible formats. Additionally, lecturers teaching VI students must ensure that sources are electronically available. If a

specific source is not available in electronic format, a common occurrence with archaeology texts, a comparable alternative accessible source must be identified.

Furthermore, in a lecture/seminar setting it is important to be conscious of the types of materials presented. Images may not be accessible to VI students, and alternative description is required, and will likely benefit the entire audience. As a creative solution, the incorporation of props can also be useful in allowing VI students to grasp new concepts. For example, stacking several books on top of one another can provide a tactile representation of a basic stratigraphic sequence. Such solutions should always be discussed with the student before being developed, so that the aim of the activity can be properly contextualised. JISC has a breakdown of considerations to be aware of when teaching students with disabilities, including VI (JISC 2017a, b). One of the key messages emphasises that communication between student and staff is essential.

Laboratory exercises are commonly used in HE for learning and teaching. Again, good communication is essential, and can allow for a VI student to have a productive learning experience. For example, some aspects of osteology may seem problematic at first to a VI student. With communication, experimentation and experience in handling human remains, the student can develop skills in tactile analysis of objects and remains, and can sometimes be better able to identify specific features than their non-VI peers. Specific laboratory assistance for the VI student is a reasonable adaptation, as a lecturer may not be able to provide sufficient one-on-one teaching for the student in larger classes. Technologically adapted teaching activities can also be appropriate, for instance, the use of a handheld digital microscope to project images onto a large computer screen (eg to analyse cranial suture closure as an age estimation technique). Adjustments relying on digital projection are entirely dependent on the individual's impairment, and a 'large screen' could mean 50" or greater.

A core component in HE archaeology courses is excavation experience. It is important to note that when a VI student is on excavation, good coordination and organisation is paramount. When entering a new environment, some VI individuals develop a spatial awareness that includes navigating the



This simple adaptation to fieldwork practicals demonstrates the need to converse with individuals when considering adjustments, and consider each person's specific impairments. While it was not possible for the visually impaired person to use a dumpy level, through discussion and conversation it became apparent that the adjustment of using mobile phone camera to take a picture through the dumpy level eye-piece, capturing the graticule and E-staff reading, would allow the individual to zoom in on the image to a high degree and take the measurement. This also benefitted non-VI persons in allowing the demonstration of correct adjustment to see the target cross hair and stadia, and with older models allows rotation of the image to allow for easy calculation of the level and stadia readings. No adaptors were used in the capture of this image, and the smartphone camera lens was simply held directly adjacent to the dumpy level eye-piece. Credit: S Bohling & J King

environment using the same routes regularly. Ensuring routes are hazard free is extremely important, therefore all excavators need to be aware of where and how they place materials. When approaching excavation, it must be acknowledged that not all students will be able to access the same tasks as others, depending on the level of their impairment. A period of self-evaluation by the student can be extremely useful to assess what they may find difficult, especially for their first experience of archaeological excavation. Phillips et al (2007) further outline self-evaluation techniques, giving a broader description of potential approaches to excavation for a wide variety of disabilities.

Considerations for learning, teaching and practice

The suggestions presented arise from the teaching and learning experiences of a VI

undergraduate archaeology student and teaching staff. Three key messages for creating teaching and learning activities that are accessible to VI persons are:

- 1** Discuss with the student any adjustments to existing teaching and learning practice and/or the development of new practices to ensure that these are appropriate and attainable. Good communication is crucial
- 2** Everyone is individual, and visual impairment can range from slight to severe: adjustments which work for one person may not work for another. Flexibility and willingness to adapt is key
- 3** Developing teaching and learning practice for VI students will benefit all students. Increased accessibility leads to benefits for all

HE is only one route into archaeological professions and is only the beginning of a career. Based on the roles and experiences of the authors, this discussion has focused on teaching archaeology in HE, but similar considerations should be made within wider professional archaeological and heritage settings. Insights from VI persons offer the opportunity to develop teaching and learning practices, and also offer new perspectives on, for example, artefact and osteological studies, and the development of accessible information and outreach activities.

Fundamentally, archaeology tells stories to our audience, stories of human and social developments, and past lives. Understanding, engaging and incorporating the experiences of VI persons today within archaeological practice can not only increase our understanding of how individuals in the past may have lived with impairment, but also enhance our archaeological knowledge and ability to create holistic narratives of past societies.

References

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James graduated from the University of Bradford in 2020. At the age of 12, he was diagnosed with macular dystrophy and his sight deteriorated sporadically until around the age of 16, when he was told that his vision had seemingly stabilised. James received a BA First Class Honours degree in Archaeology and throughout his time at the University worked closely with the department to make archaeology more accessible for those with visual impairments. He is continuing to do so as he is now enrolled on an MA course in Archaeology and Identity at the University of Bradford.



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