

Dedicated to the memory of Mackenzie Galbraith

Abstract

This paper describes a collaboration between archaeological researchers and an archaeological illustrator, with narratives from both perspectives, to create educational materials for an elementary school in a rural Belizean community. Intended to facilitate access to information for students to learn about a little-known archaeological site within their multi-ethnic neighborhood, the result was a set of visually stimulating materials that allowed for active engagement. This co-created project demonstrates that high-quality teaching materials are not dependent on expensive resources nor the latest digital technologies, but can be achieved through careful planning and intentional pedagogical approaches. This model can be adapted for other rural or under-resourced communities, especially by educators who are looking to create bespoke materials. It also demonstrates that smaller archaeological research projects can contribute meaningfully to outreach that includes student learning and engagement.

Background and Rationale

The multi-ethnic community living in the small village of Indian Church in the Orange Walk district of Northwest Belize (population 236 as of 2022)¹ is no stranger to archaeology. Living in the shadow of the famous ancient Maya site of Lamanai, and adjacent to a scattering of smaller archaeological sites, the community has seen many researchers and tourists come and go over the years. The name ‘Indian Church’ itself is a reference to the sixteenth century churches constructed by Spanish colonizers at Lamanai (McLellan, 2020:37), where the village was originally established. With the earliest archaeological evidence for human settlement dating back at least 11,000 years (Lohse et al., 2006:209), Belize is well-known as a country with ancient Maya heritage. Tourism to Maya sites plays an important role in the country’s economy (Ramsey and Everitt, 2008), with images of archaeological temples being utilized to attract people to visit the country. However, the rich heritage of Belize includes a diversity of ethnicities, with the most recent census data indicating a population that includes Caucasian, Chinese, Creole (also known as Kriol), East Indian, Garifuna, Maya, Mennonite, Mestizo, and Taiwanese.² Indigenous Maya communities make up a little over 10% of the country’s population of more than 400,000 people,³ meaning that the majority of Belizeans have ethnicities not directly related to ancient sites; these histories also need to be addressed and shared in archaeological narratives.⁴

As Hoggarth and her colleagues (2020:714) have explained, Belize has adopted a ‘multi-ethnic’ stewardship of its heritage which “promotes the concept that no single

ethnic group solely owns any part or parcel of the nation's cultural resources, and that all Belizeans, regardless of their ethnicity, are responsible for the protection and preservation of all the country's heritage." Similarly, based on her research in Northern Belize (where communities with no ancestral nor ethnic affiliation to the ancient Maya live), Oland (2012:471) argues that "non-descendant communities have as much right to engage with archaeological heritage as an ancestral or indigenous community." In the village of Indian Church, where McLellan and Tremain were based while conducting research at the site of Coco Chan (Figures 1, 2), the community has largely no ancestral affiliation to the archaeological sites in their neighbourhood.

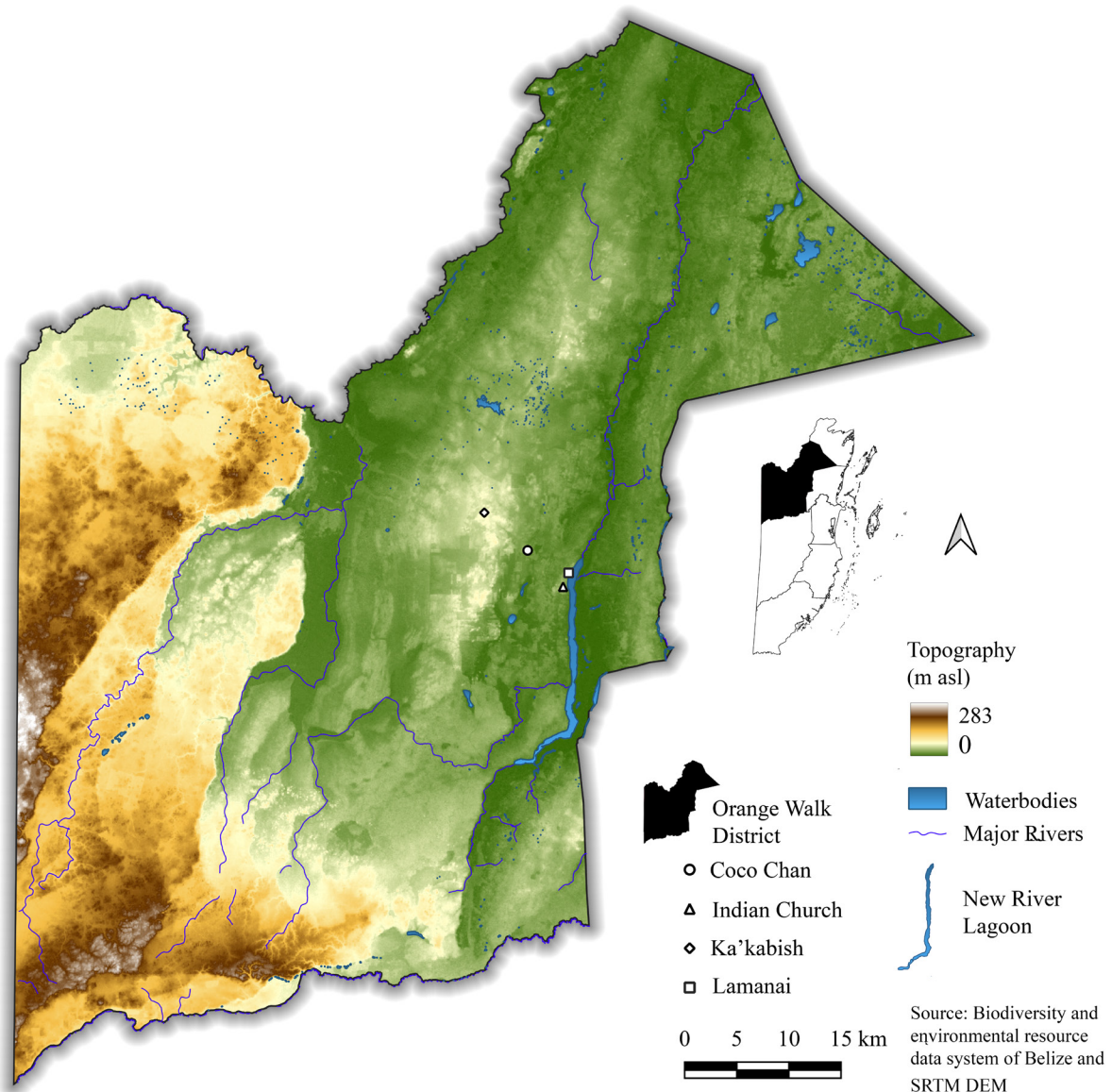


Figure 1. Location of Indian Church village and neighboring archaeological sites in the Orange Walk district of Belize. Figure by Alec McLellan.

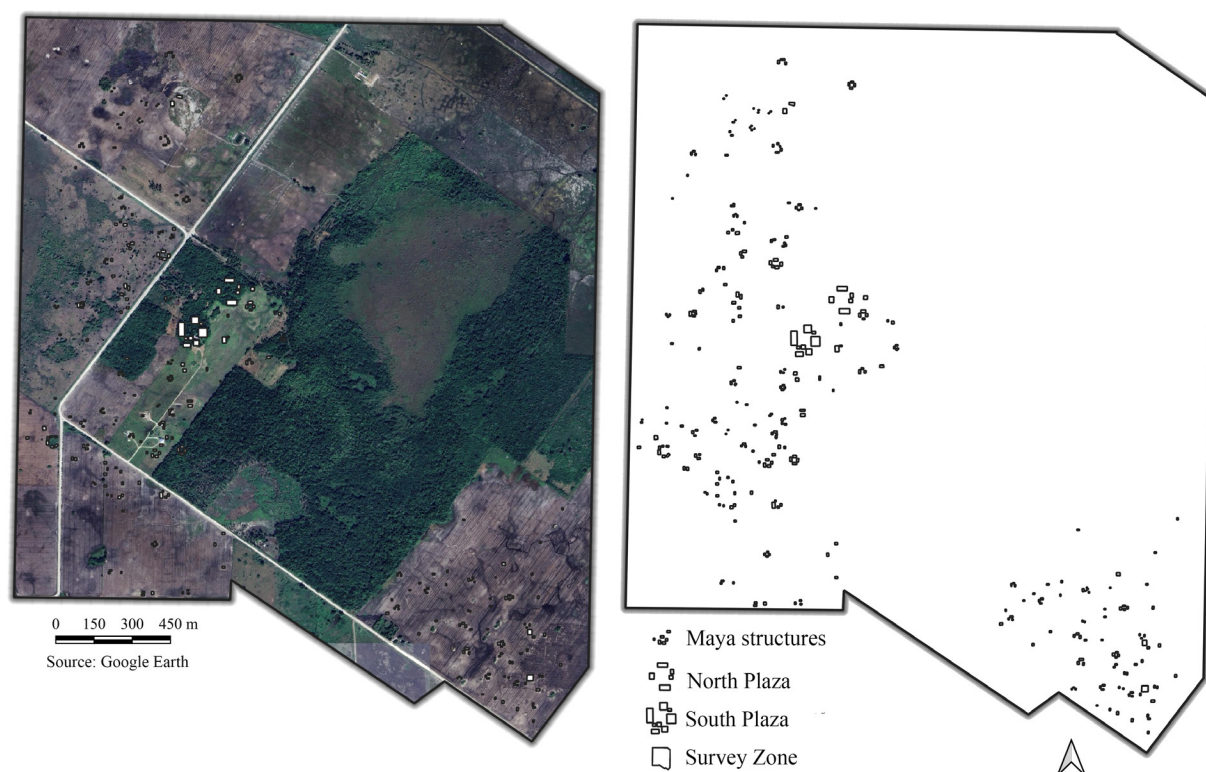


Figure 2. Map of Coco Chan, with structures surveyed. Figure by Alec McLellan.

This paper describes the ways in which our team worked collaboratively to design educational materials for students from this non-descendant community. McLellan and Tremain have had a relationship with the residents since 2010, when they began their M.A. research (McLellan, 2012; Tremain, 2011) at the neighbouring site of Ka’Kabish (see location in Figure 1). Over the years, they have both stayed in Indian Church for several weeks during the summer months, and McLellan has had a particularly sustained relationship due to his Ph.D. research (2020).⁵ They provided Herrick, the illustrator for the project, information about life in the village and community connections to the landscape of surrounding archaeological sites. This allowed her to contextualize the project and understand which resources would be community-appropriate.

The intention was to create engaging and accessible materials to make a local but relatively unknown archaeological site more familiar to the students; the outcome was paper-based materials with a variety of visuals and activities. While the modality may have been simple, visual representations in archaeology can communicate complex concepts; as Gheorghiu (2016:116) explains, visual images can be created to “augment...the reality of the archaeological record, while at the same time making invisible archaeological data visible.” Thus, collaborating with an illustrator (who

is well versed in archaeology) was wholly appropriate for this project and enabled the information about Coco Chan to be communicated in a novel way. Others have discussed the benefits of artistic practices and representations for archaeology, and ways in which collaborations between the two fields bring positive changes to understanding the past (Bailey 2013, 2017; Renfrew et al., 2004).

Our project was unique for the community, since it brought information about a relatively unknown site in a format that was primarily visual. However, the process of archaeological outreach in Belize is certainly not novel (Beardall, 2021). For example, several presentations for the 2025 Heritage Education Network Belize KULCHA symposium demonstrated that archaeological projects operating throughout the country are making efforts to connect their research to stakeholders.⁶ Likewise, Mayfield and Simmons (2018) have discussed the benefits of welcoming community to archaeological excavations and emphasized the importance of designing outreach specifically for school-age children. Other examples of archaeologists connecting with community include the co-development of the Crooked Tree Museum (Harrison-Buck et al., 2020), and the development of a learning garden to facilitate connections to aspects of health, environment, and science (Ford and Topsey, 2019). Researchers such as McGill (2012) and Ducady (2019) have also been involved in gathering feedback from students and residents across Belize to gain insight into their opinions about archaeology. A final example – pertinent to the development of materials for schools – is the Toledo Environmental and Cultural Heritage Alliance, who (with the input of community members, archaeologists, and teachers) created a workbook about heritage that aligns with Belizean learning standards (Baines and Zarger, 2023).

Part of the Belizean curriculum includes the ancient and modern Maya, specifically as part of Key Learning Area 6 ‘Civic Education and History’.⁷ While the Indian Church school is therefore able to provide students with insight into the ancient past through the curriculum, and other archaeological projects in the area have at times supplemented this with outreach work (Simmons and Howard, 2003:69), information about Coco Chan hasn’t been shared because of the lack of previous archaeological work. The site was first recorded by archaeologists more than three decades ago (Baker, 1995), but no sustained archaeological research has taken place at the site until recently. While a number of community members, especially those who farm the parcels of land in and around its main core (owned by both Belizean and Mennonite agriculturalists), likely have known about the site for some time, Coco Chan is largely invisible today owing to the bulldozing of smaller structures for farming and development and larger structures being covered by the jungle canopy (Figure 3).⁸

Though a small site,⁹ Coco Chan is thought to have helped to facilitate a trade relationship between its neighbours Lamanai and Ka’Kabish (McLellan and Haines, 2023:352). The former is the largest site in the region and receives thousands of tourists every year,¹⁰ most of whom arrive at the site by boat along the adjacent New



Figure 3. Aerial photograph captured southeast of the main core of Coco Chan. The road leading into Indian Church village runs diagonally across the bottom left of the photograph. The core of the site sits between the two roads that lead north, under a small patch of jungle canopy. Scattered limestone debris, representing Maya stone foundations, can be seen in the plowed agricultural fields. Photograph by Alec McLellan using a DJI Mavic 3 drone, June 2023.

River Lagoon and thus do not encounter the nearby village of Indian Church. Lamanai (located 5 kilometers away; see Figure 1) is credited as an “excellent example” of the success of the ‘multi-ethnic stewardship’ approach, since most of the staff who work at the site are Mestizo (Hoggarth et al., 2020:714). Tourism to neighboring sites is almost non-existent, even though long-term projects such as that operating at Ka’Kabish (which operates the permit for research at Coco Chan) have been running in the area for two decades (Haines, 2006).

The limited number of contemporary settlers in the area around Indian Church is related to the history of isolation; for many years, the area lacked a road linking it to other communities and could only be accessed by water (Palacio, 1990:26). Although the initial settlers who came in 1977 were El Salvadorian, the majority of later families settling at the reserve had fled the civil war in Guatemala (Békési, 2017:25).

In 1991, those living at Lamanai were relocated one mile south, in a newly established settlement provided by the government (Békési, 2017:26). Over time, the community has diversified to include families from other areas of Belize and only a small number identify as Indigenous Maya (Békési, 2017:39). While English is the official language of Belize, the majority of residents speak Spanish as a primary language.

Archaeological research in Belize predominately focuses on areas of ancient Maya settlement, the most prominent of which are designated as official ‘reserves’ by the Belizean National Institute of Culture and History (NICH). Fourteen reserves are associated with the ancient Maya (which includes Lamanai), while another is associated with colonial settlement (National Institute of Culture and History, 2025). Lamanai, while being a famous ancient Maya site with occupation spanning over 3000 years, is also a site that received colonial attention. Belize became a Spanish province in the sixteenth century, and Lamanai is recorded as a *congregación* center whereby colonizers redistributed families and built churches to facilitate conversion to Christianity (Graham, 2011:192, 208). Later in time, the British settled in Belize to develop the timber industry, leading to the establishment of the colony of British Honduras in 1862 (Dobson, 1973:126, 212–213).¹¹ At Lamanai, British settlers in the nineteenth century established a sugar plantation and later built a sugar mill (Mayfield, 2015).

Though it lacks the scale and grandeur of Lamanai’s structures, many of which are postcard-worthy and used to attract tourists to Belize, Coco Chan is nevertheless an important part of the region’s history. Despite the damage it has sustained due to agricultural practices and looting, it still holds important clues about the past and is worthy of archaeological investigation. To bring attention to the site, especially since it has often been overlooked in regional heritage narratives, McLellan and Tremain made efforts to connect their work to the local community during their 2023 field season. One method included posting regular updates to the project’s Instagram account, in both English and Spanish,¹² and displaying a bilingual notice about the account in the village library to encourage residents to follow their updates. Many residents had internet access through cell phones at this time, and were active on social media, even though the village lacked infrastructure for providing electricity to homes.¹³ McLellan and Tremain also arranged for their research team to speak to the students at the village school,¹⁴ to share information about investigations at the site.¹⁵ Considering that Ducady’s (2019) research survey demonstrated that the majority of respondents reported learning about Belize’s past at school, taking archaeological information directly to the school in an outreach session provided our team an important avenue for supplementing the existing educational resources about the country’s heritage.

School Outreach

The research team’s visit to the school in 2023 consisted of a show-and-tell presentation of the work they were doing at Coco Chan and what they had found

during investigations. In addition to bringing some (sturdy) diagnostic artefacts, the team also brought their drone and iPad to demonstrate the process of collecting digital information.¹⁶ The Belizean Institute of Archaeology had provided McLellan and Tremain with posters about cultural heritage protection, which they presented to the school as additional resources. The undergraduate students on the research team were directly involved in talking with the class, assisting them in handling artefacts, and teaching them how to operate the iPad's scanning function. The students were particularly captivated by the digital technologies, especially the opportunity to create 3D scans of one another, and to observe the drone in action (Figures 4 and 5).

The school provides education for students beginning at 'Infant' (usually age 5) until 'Standard 6' (usually age 12) (UNESCO 2023), and, as such, there is a mixed-age range in one classroom. Usually, there are less than 50 students enrolled at any one time. To further their education upon graduation, they must travel outside the village (free public school in Belize does not include high school, and the closest high school is over an hour away by bus).¹⁷ In recent years, the diversity of the classroom has increased with the addition of children from Mennonite families who have moved into the village. The nearby Mennonite settlement of Shipyard is a large conservative community, where modern conveniences have been traditionally shunned (Roessing and Bovenberg, 2016). The students of Indian Church school are therefore representative of a multi-ethnic community not directly affiliated by ancestry to nearby archaeological sites. The team's outreach session at the school demonstrated student interest in Coco Chan, despite a lack of ancestral connection. Informal discussions that McLellan and Tremain had with some of the parents of students in the village also



Figure 4. Alec McLellan stands at the front of the Indian Church Government school classroom, demonstrating a DJI Mavic 3 drone to the students. To his left is Mackenzie Galbraith, then an undergraduate student enrolled at Langara College. Photograph by Cara Tremain, June 2023.

made it clear that efforts to share archaeological research with the school was deeply appreciated. With positive results from the community, future outreach was deemed important.

The opportunity to continue outreach came in 2025, when McLellan returned to Belize for further research. Several months prior to his trip, Tremain initiated the co-creation of educational materials with Herrick (a Ph.D. candidate in the same department as Tremain). As an archaeological illustrator with prior experience creating educational materials (2020), Herrick was commissioned to create bespoke resources about the Coco Chan research project. To cater to the school realities, where computer use is not part of the day-to-day student experience, digital resources were considered not viable and, thus, the materials would be paper-based. The booklet's text was to be written in English, to match the English instruction students receive at the school.

To begin, Tremain provided Herrick with an overview of the work at Coco Chan, and the site's relationship to Lamanai and Indian Church village. Subsequently, they discussed the nature of the resources and ways in which they might be useful within the context of the school's classroom. Though the 36 students enrolled at the school during the time of McLellan's visit would be the principal audience, the desire to create materials that could be re-used in future years also guided the decision-making process. The agreed-upon best option was to move forward with the creation of a colourful poster (with little to no text) that could be displayed in the classroom, with engaging visuals in a youthful style (Figure 6). To accompany the poster, booklets were also



Figure 5. Wing Yuet-Tang, then an undergraduate student at Langara College, demonstrates the process of 3D scanning using an iPad to students of the Indian Church Government school. Artifacts from the team's 2023 excavations at Coco Chan can be seen on the table. Photograph by Giannie Mai, June 2023.

to be created with colouring pages and other activities (the majority of which were printed in black and white to be cost-effective, see Appendix).

The materials were intended to illustrate the methods used to investigate the site of Coco Chan as a means of showing the variety of techniques – both ‘traditional’ and ‘modern’ – that are associated with archaeology. They were also intended to demonstrate that, through archaeology, the connection not only to the ancient Maya but also to the Spanish colonial and British historic periods has been revealed. With an “overt emphasis on Ancient Maya history and culture” in official archaeological heritage discourse in Belize (McGill, 2021:143), offering a more diverse story about Coco Chan was a key deliverable of the project.

To tell these diverse stories, attention was focused on the artefacts recovered at Coco Chan, dating to the colonial and historic periods. The former period is represented by ceramic fragments that likely date to the sixteenth century, and the latter is represented by fragments of clay tobacco pipe that likely date to the nineteenth century.¹⁸ The ceramics suggest a small but remnant population of ancient Maya at the site, perhaps associated with the Spanish presence at Lamanai. The pieces of tobacco pipe are most likely associated with logging operations in the area, which were overseen by British settlers and supported by Creole laborers (Harrison-Buck et al., 2019).¹⁹ While the pipe may have belonged to a British supervisor of a logging operation, Harrison-Buck and colleagues (2019:183–184) note that clay pipe smoking was usually associated with lower socioeconomic status (i.e. Creole laborers).

McLellan visited the school in June 2025 to deliver the materials that Tremain and Herrick co-created (Figure 7). Not wanting to make the students the focus of study, and indeed not having the research ethics in place to do so, McLellan did not conduct formal interviews with

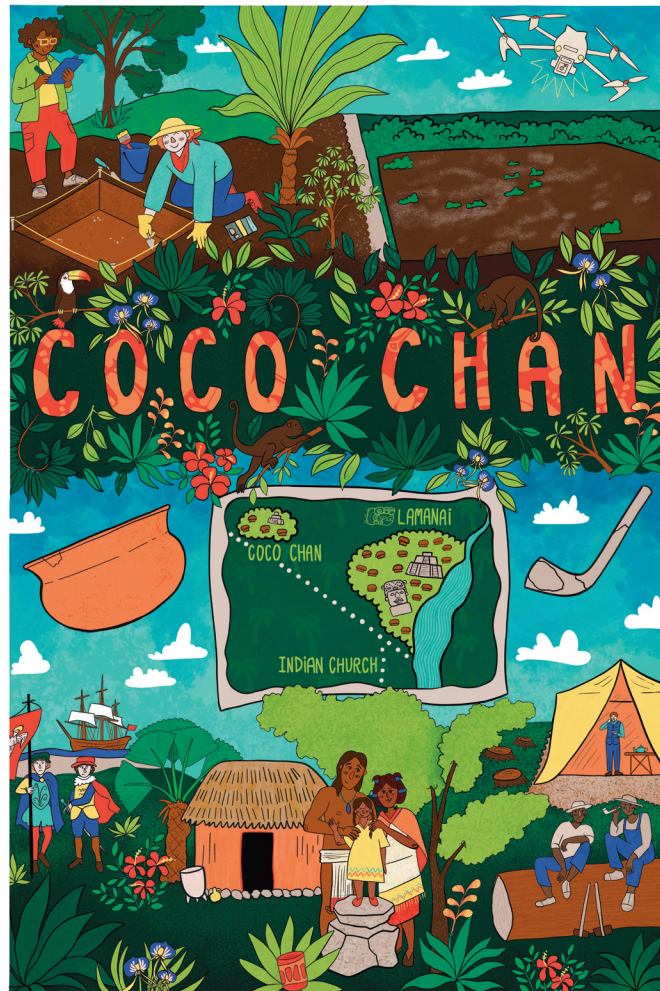


Figure 6. The poster co-created by Cara Tremain and Hannah Herrick for the Indian Church Government school.

students or teachers. Thus, at this time no research data has been collected to judge the effectiveness of the materials. However, based on McLellan's informal personal observations, there was an overwhelmingly positive reaction from the students to the range of multi-modal activities in the booklet.²⁰ The school principal talked with McLellan about the importance of the materials, and their visual representation of some of the core topics in the school curriculum such as Maya heritage and the impact of colonialism. The poster was also greatly appreciated, to the point that the principal commented on her desire to frame it.²¹

The following section is Herrick's perspective as an archaeological illustrator, describing the process of her work co-creating the materials alongside Tremain. A collective conclusion is offered in the final section of the paper.

An Artist's Perspective

Over the past five years working as an ad-hoc outreach materials illustrator for museums and archaeological projects, alongside taking part in archaeological excavations and research, I have developed a uniquely informed perspective for creating educational outreach materials. In addition to co-creating an illustration-based archaeological education project called *Dig Doodles* (2020), I have also used my artistic skills in the creation of educational materials for museums and science centres (Figure 8). I do so to help increase the profile and potential of artist-made illustrations as an integral aspect of the public outreach process.

Part of an illustrator's responsibility in creating educational materials is to transform the client's ideas of the past into imagery. Illustrations are always impacted by the knowledge and experiences of their creator, as well as their personal creative style. I often employ a whimsical style for my illustrations – especially for younger audiences – to create eye-catching and visually appealing results that bring the past to life. Stylized educational illustrations like these are powerful tools for inviting viewers to understand the past using modern aesthetic familiarity. They allow non-experts to circumvent the visual vocabulary of an unfamiliar way of life (and often unfamiliar artistic conventions) of past cultures and connect with more recognizable iterations of the past. In short,



Figure 7. Alec McLellan delivering the poster and activity books to the Indian Church Government School, June 2025. Photograph by Jaime Yanes.

illustrations can breathe new life and excitement into learning about the past.

In my own experience, archaeologists or professionals in the heritage sector sometimes anticipate my educational illustrations to act as complete facsimiles to their subject. While the accurate recording of archaeological objects and sites is critical for the pursuit of research integrity, in public outreach the same replication is (or should be) secondary to the fostering of accessible learning. In pursuit of creating educational materials with effective and accessible visuals, illustrators like myself must find the balance between desired artistic style and faithful representation of our subjects. One particularly salient example of the intellectual tug-of-war between accuracy and accessible stylistic representation comes from my experiences illustrating and co-creating *Coloring Ancient Egypt*,²² a free colouring and activity book made in collaboration with staff from the Harvard Art Museums (HAM) in 2020.

One object illustrated in the book is from the Egyptian Old Kingdom (ca. 2323–2150 BCE)

(Figure 9). My initial draft (Figure 10, left) included elements of my somewhat whimsical illustration style. My collaborators at HAM expressed discomfort with these stylistic choices (which included blushed cheeks and the addition of pupils for both the cow and man, not part of the ancient stone relief), opposing too much deviation from the original artwork. While their preference for adhering to the appearance of the actual object is understandable, I respectfully defended my illustrative style and advocated for the inclusion of these decorative elements (arguing they appropriately enlivened an ancient stone carving). In the end my colleagues and I compromised, and though the linework became more uniform the man and cow were able to keep their pupils and

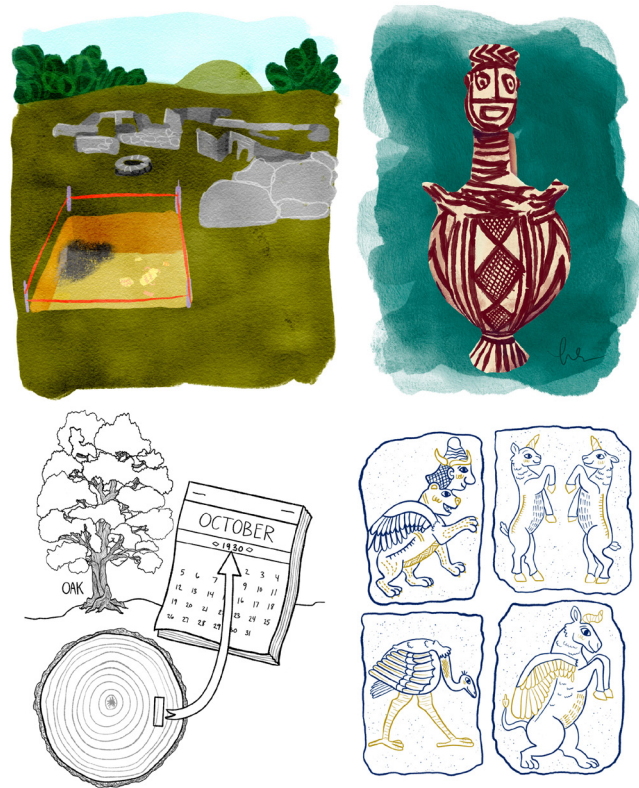


Figure 8. Clockwise from upper left: watercolour-style illustration of a fictional archaeological site for the Dig Doodles project; painterly coloured illustration of a now-lost Bronze Age jug from Cyprus, based on a black and white photograph; two-colour linework illustration of four orthostats from the palace at Tell Halaf (Syria) now in the Vorderasiatisches Museum; colouring page from a dendrochronology activity book made in collaboration with the Laboratory of Tree-Ring Research at the University of Arizona. All illustrations by Hannah Herrick.

smiles (Figure 10, right). For the Coco Chan project, I intended to enliven the archaeological process and recovered artifacts in a similar manner.

As an archaeologist specializing in cultures and materials other than the ancient Maya, I began this project with only a basic cursory knowledge of the wider archaeological context at Coco Chan. Tremain provided me with a document detailing work at the site, life in the local village, and the team's 2023 visit to the village school. Initially, the idea of a cartoon strip was proposed to me as a means of communicating information to school students. Well-researched cartoon strips can be successful vehicles of archaeological education (see, for example, the illustrated comics of archaeologist John Swogger).²³

However, the strength of storytelling inherent to comic strips and graphic novels is often reliant on dialogue and narrative text; these forms of communication are thus only effective for individuals with sufficient reading skills in the targeted language. In the case of Coco Chan, the intended audience (a multilingual group of school-aged children across several grade levels) would be better served by materials which did not heavily rely on text as a primary means of communication.

Creating the Coco Chan Materials: Content

Among the many criteria that I consider when illustrating educational materials, one of the most important for my process is creating a narrative into which the viewer can place themselves. Building that narrative begins with understanding what the intended audience knows, and what they are still curious about (as recommended by Minor et al., 2020). I was informed that the team noticed during their previous visit to the school that the children were less interested in the physical artefacts, compared to the methods and activities used during the fieldwork. The outreach materials, then, would need to focus on *the stories* that the excavated objects could tell us. In learning about the village and its multicultural heritage, especially its closeness to Coco Chan and Lamanai, I was interested in representing both the modern village and the ancient sites. I suggested we focus on the theme of “our neighborhood”, by emphasizing the geographic connection



Figure 9. Relief fragment from the tomb of Niankhnesut: Man holding a cow by a rope, Harvard Art Museums/Arthur M. Sackler Museum, Gift of Grenville L. Winthrop, Class of 1886, Photo © President and Fellows of Harvard College, 1934.17. Courtesy of Harvard Art Museums.

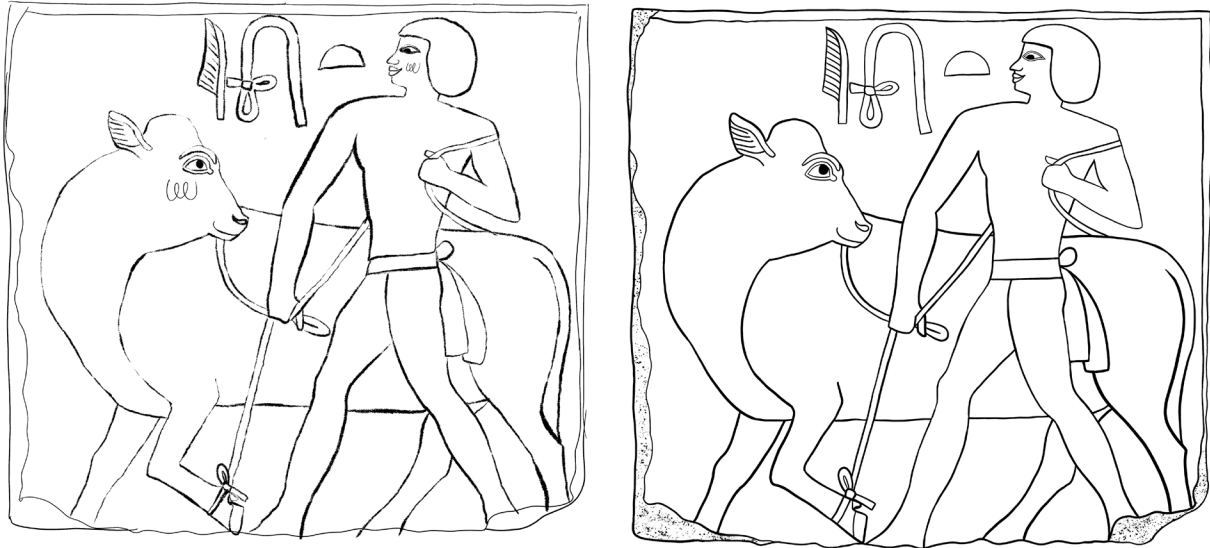


Figure 10. Left: First draft of tomb relief fragment. Illustration by and image courtesy of Hannah Herrick. Right: Drawing of Relief fragment from the tomb of Niankhnesut: Man holding a cow by a rope, featured in “Coloring Ancient Egypt”, Drawing by Hannah Herrick, Photo ©President and Fellows of Harvard College, 1934.17. Courtesy of Harvard Art Museums.

between them with the inclusion of a stylized map to contextualize the surrounding landscape and modern roads. The map includes simplified icons representing still-visible (and likely familiar) structures at Lamanai, as well as the buildings that may have existed at Coco Chan (Figure 6). I placed this map at the centre of the poster, flanked by archaeological objects of interest (discussed below), and topped with stylized, bold text.

Collaboratively, Tremain and I decided to represent as many different types of people associated with Coco Chan’s past as possible. This seemed especially relevant given Belize’s multi-ethnic composition and heritage management policy. Although the long-term negative impacts of colonialism and resource exploitation on local Maya populations and landscapes should not be ignored in the wider context of Belize’s history, I felt these topics should be tackled thoughtfully in materials meant for schoolchildren. Educational illustrations help build narratives, and part of my own ethos is to create opportunities for learners to connect with people from the past in a respectful and empathetic way. Consequently, I felt strongly about depicting individuals in a neutral manner rather than depicting certain individuals as an ‘enemy’ or ‘villain’.

I chose to depict members of each cultural group in settings or with objects that connected to their wider role in Belizean history, as visual elements that might open age-appropriate discussions about topics like colonization and racism. For example, on the left side of the poster, the two Spaniards carry a sword and a banner, indicating their militaristic function as explorers and conquerors for their monarchs. The representative British figure on the right of the poster is under the shade of a tent, drinking tea amidst a grove of tree stumps to signal their role supervising forest exploitation. In

the foreground, Creole laborers sit on a felled tree alongside their axes while taking a break from logging. The Maya family near the centre of the poster were drawn next to a house, indicating that Coco Chan was primarily their permanent home (rather than a place they had come to work). We chose to represent this family as the largest visual group, in the centre of the poster, to emphasize the culture that was associated with the site for the longest period of time (Figure 11). Although the individual identities of those who lived at Coco Chan are unknown, we chose to base the appearances of the figures on imagery from ancient Maya ceramics and codices (bark-painted books).

We also intended to represent the activities of archaeologists at Coco Chan as a component of the poster. We identified two key “scenes” to include: archaeologists excavating a small unit, and an image of the drone. Illustrating the drone was the more straightforward of the two scenes, as I was able to combine a stylized iteration of an actual aerial photo taken at Coco Chan with a depiction of the drone itself (Figure 6, top right). One unique addition was the inclusion of a serrated “flash” line, meant to signal the rays of a camera flash, giving a visual reference to the drone’s photographic mission. By showing the drone capturing images of the faint outlines of the stone bases of Maya structures in the fields, the students learn that non-destructive methods of archaeological investigation are just as important as excavation for gathering data about the past. It also encourages them to think more broadly about how archaeological sites have been – and continue to be – affected by development.

In creating an image of an excavation unit, I felt strongly about including an archaeologist recording information to emphasize the importance of record-keeping and provide a more realistic view of the practice of research-driven fieldwork. It also encourages discussion about *what* the archaeologist may be writing down, and *why* they are recording it. We were intentional in our efforts not to reinforce colonialist narratives still so often present in the practice of doing archaeology: that of the white (usually male) archaeologist directing the research, while local (often Black or Indigenous) community members play a supporting role or act solely as labor. Although the archaeologists associated with the excavation unit are performing equally important duties, we were aware that the standing archaeologist might be perceived as a supervisor of the excavating archaeologist (Figure 6, top left). We therefore decided that the former should not be represented as Caucasian. We wanted the archaeologists to represent the coming together of different people to investigate the past, and implying that the standing archaeologist is Belizean (referencing one of the team members of the Coco Chan excavations) helps to counter the frequently depicted trope of white archaeologists holding the power. I also opted to present the archaeologists as androgynous, allowing children of all genders to imagine themselves participating in the scene.

As well as depicting the people associated with Coco Chan and the archaeological methods of the research project, select artifacts recovered from the 2023 field season were also to be included in the educational materials. The limited

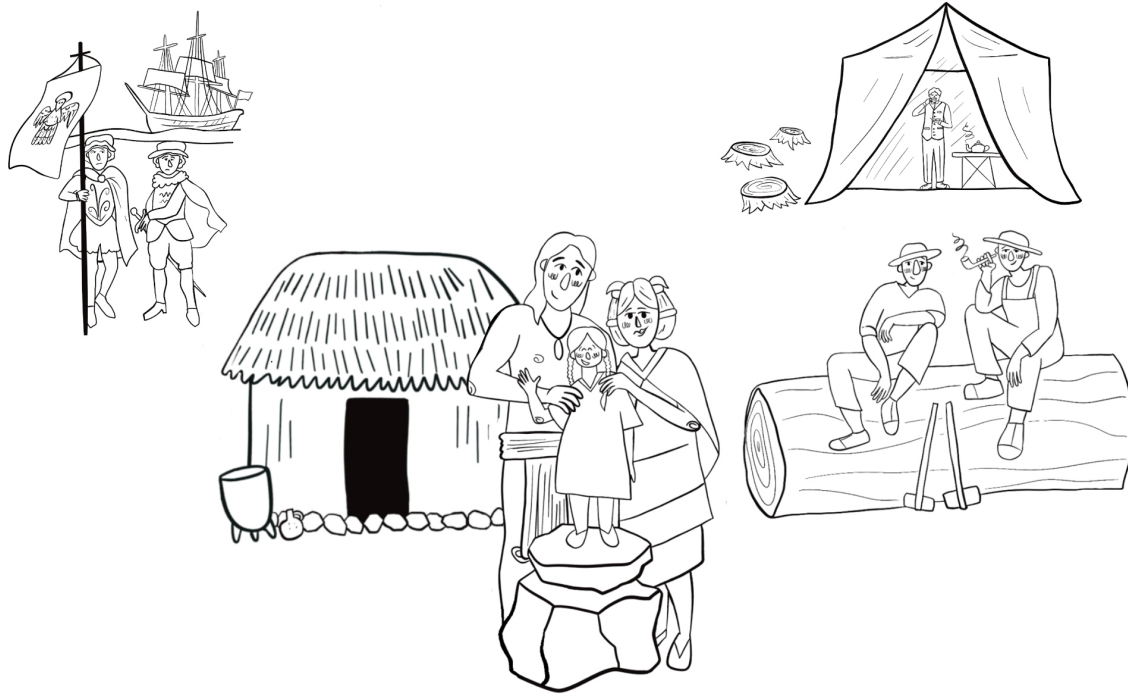


Figure 11. Imagined people associated with Coco Chan, as drawn and arranged in the bottom third of the poster. Illustration by Hannah Herrick.

excavation history of the site was advantageous, since it enabled us to narrow our focus on two specific objects: a small ceramic sherd and fragments of a clay smoking pipe. Since these artifacts connect the modern archaeological research (positioned at the top of the poster) to the site's past occupants (positioned at the bottom of the poster), I decided to place these objects in the center of the poster. In doing so, the illustrations become a visual bridge from past to present. In rendering the artifacts, it was important to express their small and fragmentary nature while connecting them to (more visually understandable) complete objects. To visually demonstrate this, I drew the fragments within a reconstruction of what they might have looked like when whole (Figure 12). I used the reference images provided, to help imagine their original forms. As a complement to these illustrations, the activity book included a detailed, life-sized illustration of the excavated ceramic sherd (see Appendix). This helps the students appreciate what the archaeological record often looks like, as compared to how we use that record to interpret and understand the past.

In the process of drafting and discussing the poster and activity book, we also identified our own questions or curiosities that emerged as the project developed. We used these questions as opportunities to address gaps in the archaeological data through the illustrated educational materials, and vice versa. In some cases, we used texts and prompts in the activity book to encourage the audience to think about what they imagined regarding the unknown aspects of Coco Chan's past. One question that I formed early in the process was regarding the site's ancient name, which is presently

unknown. The discussion of the site's name led us to transform this unknown into an opportunity for the schoolchildren to consider how we understand Maya place names, and to use their creativity and imagination while interacting with Maya glyphs.

One page in our activity book therefore discusses the Maya glyph for Lamanai ("submerged crocodile") and explains that the

Maya name for Coco Chan is unknown. We offer a selection of different glyphs for local animals, and encourage the schoolchildren to use them to imagine and create the site's ancient name (see Appendix).

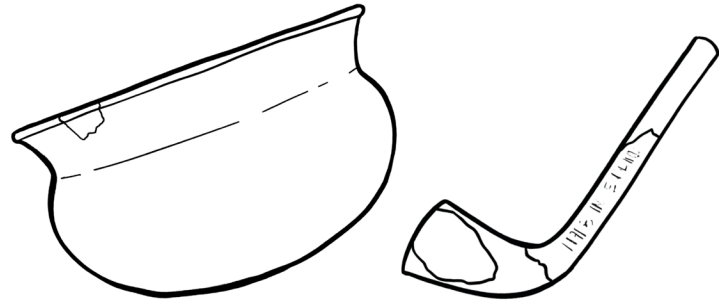


Figure 12. Reconstructed ceramic vessel and reconstructed clay pipe, with the excavated fragments of each object outlined. Illustrations by Hannah Herrick.

Creating the Coco Chan Materials: Design Principles

In planning the materials, I spent time looking at examples of ancient Maya art, and this influenced the colour palette I chose. I incorporated a selection of shades reminiscent of those I saw in decorated Maya ceramics and in Mesoamerican codices, supplemented with additional blue and green tones. This vibrant palette was accented with several subtle textures, adding dimension, visual interest, a sense of movement, and an organic feeling to the illustrations on both the small and large scale. The planned size of the poster (24 x 36 inches) allowed for many different details and scenes to be represented, but to create visual cohesion between each vignette I opted for a limited but bright palette of colours.

Because the theme of "our neighborhood" was the general focus for this project, I felt it was important to create a unifying sense of place throughout the poster. Each vignette was placed on a landscape, and those landscapes needed to connect to one other. To solidify the connections between Coco Chan in the past and present, local plants and animals were added to unify the scenes and create the impression of an overall singular landscape (Figure 6). These elements act as geographical indicators, as well as familiar reference points for the local children who have seen most of the plants and animals in their neighborhood. I filled the spaces between each vignette with palms, palmettos, red hibiscus, orange heliconia blooms, black orchids, crêpe ginger vines, croton, logwood, mahogany trees, and other tropical foliage. I also included a few species of fauna climbing in branches: a pair of howler monkeys, and a keel-billed toucan.

Although it is possible that these colourful additions could distract students from the archaeological and historical information, they may also serve as points of interest to catch the attention of children who may not initially feel intrigued by archaeology. Using non-archaeological elements to create initial interest for reluctant learners was a strategy we employed in the accompanying activity book as well. Strategies included alternating between site-based information and different types of activities, such as drawing prompts, a word search, and a ceramic reconstruction puzzle. Each activity served to draw attention to the imagery on the poster, foster critical thinking and imagination skills, or familiarity with the subject matter.

Illustrations are, of course, always impacted by the knowledge and experiences of their creator. Although illustrators with backgrounds in archaeology or art history are not always readily available for projects, their participation brings an added level of knowledge and experience-based collaboration. In this case, when choosing *how* to illustrate the content, I was able to draw from my own experiences in archaeology for inspiration. For example, the poster's archaeologists wear clothing similar to what I might wear in the field. Numerous additional elements in the poster were included based on my own knowledge of the archaeological process, as well as the questions or curiosities that emerged as I created the illustrations.

Discussion and Conclusion

The collaborative approach used for this project resulted in impactful educational resources for the Indian Church school. As the archaeological project directors, McLellan and Tremain were able to bring knowledge of the research and their lived experiences with the community. As the illustrator, Herrick was able to provide critical input about the visual appearance of educational materials including optimizing the layout for clarity and using colour and style to evoke a certain atmosphere. Having received contextual information about the project and its purpose, and drawing on her own experiences of archaeology, she was also able to raise questions about the content and brainstorm appropriate ideas. Even though Herrick's own research specialty concerns another time and place entirely, as an archaeological-illustrator she had the knowledge and skills to materialize a depiction of Coco Chan's past. We encourage other archaeologists, who are interested in similar collaborations, to provide reference materials to the creative personnel they will be working with ahead of the drafting process to ensure they can meaningfully participate in designing materials (it will also help avoid expending time on re-doing earlier work if certain drafts miss the mark).

Coco Chan was an ideal site for targeted educational resources, because it is a relatively unknown site in comparison to its larger neighbours. It also demonstrates that even sites with few research seasons can contribute to student learning and engagement. By bringing Coco Chan to the community's attention, the project demonstrated that small and seemingly insignificant archaeological sites are important

for Belize's heritage. Facilitating student access to information about local heritage signifies to the community that archaeological sites, of all shapes and sizes, have an important role to play in revealing a diversity of past stories about Belize. Though generally not directly affiliated by ancestry to the archaeological sites around their village, the students nonetheless should be given the opportunity to connect with them and take pride in the heritage of their country. As the previous Director of NICH's Institute of Archaeology has explained, "archaeology within the school curriculum [can]...give people a sense of who we are, that we are this mixed group of people with a rich heritage" (McGill, 2021:151). The resources created for the Indian Church school help the students learn about this heritage, within the context of their present and past neighborhoods, by revealing a diversity of stories about the people who likely interacted with the archaeological site of Coco Chan in the past.

In an age of increasing use of generative artificial intelligence (GenAI) tools to create visual images, which is associated with concerning ethical and environmental impacts (Luccioni et al., 2024; Uddagiri and Isunuri, 2024), as well as negative effects on livelihoods (Brewer et al., 2025), collaborating with archaeological illustrators is essential. While some archaeologists have enthusiastically turned to GenAI, arguing that it allows them to circumvent the cost of hiring an illustrator and is an example of democratizing the visualization of the past (Magnani and Clindaniel, 2023:452), others are more critical about this technology and its potential to create misleading and inappropriate versions of the past (Morgan, 2025).

The materials created for the present and future students of Indian Church school are an example to the schoolchildren, who have somewhat limited means to access digital equipment and technologies such as GenAI (at least not yet, with sustained electricity access being still somewhat new for the village), that the physical act of human creativity – often visible through tangible heritage recovered by archaeology – remain important aspects of society. The project itself, by connecting young learners to archaeological knowledge through specialized artistic skills, also demonstrates the value that such skills have in an era when 'free' (although we must question at what societal costs) and fast-paced alternatives are becoming omnipresent in our society.

Just as the successes of the project are important to discuss, so too are areas for improvement. In hindsight, the creation of the resources were carried out in isolation from the community. As Oland (2012:471) has recognized upon critical reflection of her own archaeological outreach work in Belize, her methods 'fell short' due to her not asking enough questions about what the local residents wanted to know. Upon reflection, we realized that this project too was created through a one-way delivery of information (that the authors considered interesting and useful for the students to know). While it was not possible to be physically present in Belize ahead of creating the resources in 2025, there were of course alternative solutions that could have been explored to integrate the schoolteacher and/or schoolchildren into their planning and

design. This approach will be prioritized for future outreach, as will the collection of formal feedback to better assess the effectiveness of materials.

In conclusion, as a first collective foray into creating archaeological educational materials for a school classroom, the project was a success and contributed to student learning and engagement without high-tech (and expensive) resources. The site of Coco Chan, while small, relatively unknown, and highly disturbed by looting and agricultural development, is now a discernable part of the community's neighbourhood. We demonstrate that, when a carefully designed pedagogical and creative approach is taken, archaeological sites of any kind can attract the attention of students and lead to an improved comprehension of cultural heritage. This is especially important in a non-descendant community such as Indian Church village. The primarily visual format of the outreach materials was especially effective at representing the range of past stories and connections at Coco Chan, in an accessible way for students of mixed ages and ethnicities.

Acknowledgments

McLellan and Tremain are very grateful to have worked at Coco Chan under the archaeological permit of Dr. Helen Haines, director of the Ka'Kabish Archaeological Research Project. McLellan and Tremain also appreciate the assistance of Dr. Kerry Sagebiel in ceramic identification. During our field season, we received the help of many residents of Indian Church, but special thanks must go to the family of Jaime and Maribel Yanes who welcomed us into their home on a daily basis. We are of course extremely grateful for Indian Church Government School staff and students for allowing us to visit and for engaging with us. We also extend our thanks to Jen Thum and Susanne Ebinghaus at Harvard Art Museums for graciously allowing Herrick to include 'behind-the-scenes' discussions about *Coloring Ancient Egypt*. Finally, the comments of three reviewers and the editor significantly improved the organization of the article and we appreciate the time they took to offer sound suggestions for improvement. Funding for this project was received from the Social Sciences and Humanities Research Council of Canada (application 430-2022-00796).

Notes

1. Based on the 2022 Census data in the 'Population by City/Town/Village/Community and Sex' table. <https://sib.org.bz/census/2022-census/>, accessed July 23, 2025.
2. Based on the 2022 Census data in Table 8: Population by Ethnicity, District, and Sex, part of the 'General Characteristics Tables'. <https://sib.org.bz/census/2022-census/>, accessed July 22, 2025.
3. ibid
4. As one Belizean resident revealed to Ducady (2019: 178) during her survey of attitudes towards archaeology and heritage, "Everything is Maya, Maya, Maya" and expressed a desire to instead learn about the archaeology of other ethnicities.
5. McLellan has surveyed the 'corridor' between Ka'Kabish and Lamanai (2020) and helped to identify evidence of extensive ancient occupation in the region (Haines et al. 2023; McLellan and Haines 2023).
6. <https://www.youtube.com/playlist?list=PLhWlsjJDfmQs8jU4NCz9zegybfRydRtpg>, accessed 16 January 2025.
7. <https://www.moecst.gov.bz/wp-content/uploads/2022/07/National-Curriculum-Framework.pdf>
8. At the time of writing, 264 structures have been identified at Coco Chan. Many were for secular use (such as habitation) but others clearly had a sacred function, such as the temple pyramid more than 20 meters tall in the southern plaza.
9. Coco Chan covers an area no more than four sq. kilometers.
10. While recent tourism numbers are not publicly available for Lamanai, an older report on the site revealed that between 2008 and 2013, more than 212,800 people visited the site (University College London 2014). Another reference to tourism at the site stated that visitation has ranged anywhere from 40-120 people per day depending on the season (Békési 2017:20).
11. The colony name stems from not only British settlement, but its relation to the earlier explorations in the Bay of Honduras.
12. @coco.chan.archaeology. The Spanish translations were written by a student at Galen University in Belize.
13. Residents have traditionally been able to charge electronic devices and equipment using solar panels and generators. In 2024, as part of a larger initiative to provide electricity to rural areas, the Government of Belize allocated funding to provide access to electricity for Indian Church and nearby communities (Love FM 2024). At the time of writing, electricity grids were beginning to be connected to the village.

14. The school was established in 1992 with funds from the United Nations and Peace Corps (Békési 2017:26).
15. The research team consisted primarily of McLellan and Tremain, and three undergraduate students (Giannie Mai from Galen University in Belize, Mackenzie Galbraith and Wing Yuet Tang, both from Langara College in Canada). In the field, two local residents primarily assisted the team. At times, other individuals including students and crew from the Ka'Kabish Archaeological Research Project also assisted.
16. We used the iPad to record unit excavations (in the south plaza at Coco Chan) in 3D using the LiDAR function through the Polycam app, and a DJI Mavic 3 Drone to record information about the settlement zone surrounding the site core.
17. The high school scholarship program began in 2003, with the assistance of Karen Pierce who worked for the Lamanai Archaeological Project, to assist families from the village in paying for the fees associated with sending their children to high school. www.karenpierce.com/, accessed September 19, 2025.
18. The colonial ceramics were identified as such with the assistance of ceramic specialist Kerry Sagebiel, co-director and lab manager of the Ka'Kabish Archaeological Research Project. While measuring the diameter of the pipe stem bore is a method of dating pipes from the seventeenth and eighteenth centuries (Deetz 1996:28), different diameters were often manufactured during any given period and it has been found to be unreliable as a method for pipes that postdate the 1760s (Bradley 2000:119). Thus, the date of the pipe is based on known British settlement at Lamanai (Mayfield et al. 2019:149).
19. Other sites in Belize, including Lamanai, have yielded evidence of such pipes (Bonorden and Houk 2016; Mayfield and Simmons 2019).
20. As McLellan discussed in the discussion period after the 2025 Heritage Education Network Belize KULCHA Symposium session 'Community Engagement and Cultural Heritage Preservation in the Periphery of Lamanai, Belize', see timestamp 3:27:07 – 3:30:53. <https://www.youtube.com/watch?v=ZBz0aIFadzC&list=PLhWIsjJDfmQs8jU4NCz9zegybfRydRtpg&index=41>, accessed 12 January 2026.
21. Though the poster was laminated, intended to withstand use by students, preserving the poster was still a concern of the teacher.
22. <https://harvardartmuseums.org/article/coloring-ancient-egypt-an-activity-book-for-kids-of-all-ages>, accessed September 19, 2025.
23. <https://johnsgswogger.wordpress.com/comics-archaeology/>, accessed September 19, 2025.

References Cited

Bailey, Doug

- 2013 Art//Archaeology//Art: Letting-Go Beyond. In *Art and Archaeology*, edited by I. A. Russell and A. Cochrane, pp. 231- 250. Springer, New York.
- 2017 Art/Archaeology: What Value Artistic-Archaeological Collaboration? *Journal of Contemporary Archaeology* 4.2:246-256.

Baker, Robert

- 1995 No Postclassic Here: A Reconnaissance Survey of the Lamanai-Kakabish Corridor. In *Archaeological Research at Blue Creek, Belize. Progress Report of the Third (1994) Field Season*, edited by Thomas Guderjan and W. David Driver, pp. 105–118. Maya Research Program, San Antonio.

Baines, Kristina, and Rebecca Zarger

- 2023 Negotiating Heritage Through Practice: Community Engagement at the Intersection of Ethnography and Archaeology. *Practicing Anthropology* 45(4):9–16.

Beardall, Antonio

- 2021 Public Archaeology and Cultural Heritage Management in Belize: Successes and Shortcomings. M.A. Thesis, Department of Anthropology, Northern Arizona University.

Békési, Ella Erzsébet

- 2017 Engaging with Non-Descendant Communities: The Relationship between the Small Village of Indian Church and the Government Supervised Archaeological Reserve of Lamanai. MA Thesis, Cultural Heritage Studies, University College London.

Bonorden, Brooke, and Brett A. Houk

- 2016 Archaeological Investigations at Kaxil Uinic and Qualm Hill, Two Colonial Period Sites in Northwestern Belize. In *Settlement and Landscape Archaeology: Social Organization and Political Boundaries of the Ancient Maya*, edited by John Morris, Melissa Badillo, Sylvia Batty, and George Thompson, pp. 337–347. Research Reports in Belizean Archaeology. Papers of the 2015 Belizean Archaeology Symposium, National Institute of Culture and History, Belmopan, Belize.

Bradley, Charles S.

- 2000 Smoking Pipes for the Archaeologist. In *Studies in Material Culture Research*, edited by Karlis Karklins, pp. 104–133. The Society for Historical Archaeology, Pennsylvania.

Brewer, Paul R., Liam Cuddy, Wyatt Dawson, and Robert Stise

- 2025 Artists or Art Thieves? Media Use, Media Messages, and Public Opinion about Artificial Intelligence Image Generators. *AI & SOCIETY* 40(1):77–87.

Deetz, James

- 1996 *In Small Things Forgotten: An Archaeology of Early American Life*. Anchor Books, New York.

Dobson, Narda

- 1973 *A History of Belize*. Longman Caribbean.

Ducady, Geralyn

- 2019 Gathering Public Opinions about Archaeology and Heritage in Belize: A Drive Toward Better Local Access and Programming. In *Public Engagement and Education: Developing and Fostering Stewardship for an Archaeological Future*, edited by Katherine M. Erdman, 157–85. Berghahn Books, New York.

Ford, Anabel, and Cynthia Ellis Topsey

- 2019 Learning from the Ancient Maya: Conservation of the Culture and Nature of the Maya Forest. In *Transforming Heritage Practice in the 21st Century: Contributions from Community Archaeology*, edited by John H. Jameson and Sergiu Musteață, pp. 113–123. Springer Nature Switzerland.

Gheorghiu, Dragoș

- 2016 Imagining and Illustrating The Archaeological Record: The Power of Evocation and Augmentation of Linear Drawing. In *Archaeology with Art*, edited by Helen Chittock and Joana Valdez-Tullett. Archaeopress, Oxford.

Graham, Elizabeth

- 2011 *Maya Christians and Their Churches in Sixteenth-Century Belize*. University Press of Florida, Gainesville.

Haines, Helen R.

- 2006 Report to the Institute of Archaeology, NICH, Belize of the June 2005 Reconnaissance of Ka'Kabish, Orange Walk District. https://www.kakabish.org/uploads/3/4/0/4/34046475/kakabish_2005_season_report.pdf, accessed September 27, 2025.

Haines, Helen R., Alec McLellan, and Kerry Sagebiel

- 2023 There Is Post-Classic Here!: A Reinvestigation of Coco Chan, a Curious Site in the Ka'Kabish-Lamanai Corridor, Belize. *Mexicon* 45(2):42–46.

Harrison-Buck, Eleanor, Brett A. Houk, Adam R. Kaeding, and Brooke Bonorden

- 2019 The Strange Bedfellows of Northern Belize: British Colonialists, Confederate Dreamers, Creole Loggers, and the Caste War Maya of the Late Nineteenth Century. *International Journal of Historical Archaeology* 23:172–203.

Harrison-Buck, Eleanor, and Sara Clarke-Vivier

- 2020 Making Space for Heritage: Collaboration, Sustainability, and Education in a Creole Community Archaeology Museum in Northern Belize. *Heritage* 3(2):412–435.

Herrick, Hannah

- 2020 Dig Doodles: Teaching Archaeology through Accessible Illustration. In *An Educator's Handbook for Teaching about the Ancient World*, edited by Pinar Durgan, pp. 37–45. Archaeopress Archaeology. <https://www.archaeopress.com/Archaeopress/Products/9781789697605>, accessed September 20, 2025.

Hoggarth, Julie, Jaime J. Awe, Claire E. Ebert, Rafael A. Guerra, Antonio Beardall, Tia B. Watkins, and John P. Walden

- 2020 Thirty-Two Years of Integrating Archaeology and Heritage Management in Belize: A Brief History of the Belize Valley Archaeological Reconnaissance (BVAR) Project's Engagement with the Public. *Heritage* 3(3):699–732.

Lohse, Jon C., Jaime Awe, Cameron Griffith, Robert M. Rosenswig, and Fred Valdez

- 2006 Preceramic Occupations in Belize: Updating the Paleoindian and Archaic Record. *Latin American Antiquity* 17(2):209–226.

Love FM

- 2024 \$1.9M Infrastructure Project Set to Light Up San Carlos Village. LoveFM, October 10, 2024. <https://lovefm.com/1-9m-infrastructure-project-set-to-light-up-san-carlos-village/>, accessed July 24, 2025.

Luccioni, Alexandra Sasha, Yacine Jernite, and Emma Strubell

- 2024 Power Hungry Processing: Watts Driving the Cost of AI Deployment? In *The 2024 ACM Conference on Fairness, Accountability, and Transparency*, pp. 85–99. <https://arxiv.org/abs/2311.16863>, accessed September 27, 2025.

Magnani, Matthew, and Jon Clindaniel

- 2023 Artificial Intelligence and Archaeological Illustration. *Advances in Archaeological Practice* 11(4):452–460.

Mayfield, Tracie D.

- 2015 The Nineteenth-Century British Plantation Settlement at Lamanai, Belize (1837–1868). Ph.D. Dissertation, School of Anthropology, The University of Arizona.

Mayfield, Tracie, Elizabeth Graham, and David Pendergast

- 2019 Cane and Consumerism: Nineteenth-Century Sugar-Growing at Lamanai, Belize. In *Technology and Tradition in Mesoamerica after the Spanish Invasion: Archaeological Perspectives*, edited by Rani T. Alexander, pp. 147–166. University of New Mexico Press.

Mayfield, Tracie, and Scott E. Simmons

- 2018 Why the Present Matters: The Importance of Community Outreach and Public Engagement in Archaeology. *Anthropology Now* 10(1):25–39.
- 2019 From the Canopy to the Caye: Two of Britain's Colonial Ventures in Nineteenth-Century Belize. In *Archaeologies of the British in Latin America*, edited by Charles E. Orser, pp. 121–156. Springer International Publishing.

McGill, Alicia Ebbitt

- 2012 Old Tings, Skelintans y Rooinz: Perspectivas de los Estudiantes de Belice Acerca del Estudio de Arqueología. *Chungará (Arica)* 44(3):475–485.
- 2021 Negotiating Heritage: Education and Archaeology in Belize. In *Negotiating Heritage Through Education and Archaeology*. University Press of Florida, Gainesville.

McLellan, Alec

- 2012 Settlement Patterns at Ka'Kabish, Belize. M.A. Thesis, Department of Anthropology, Trent University.
- 2020 From Lamanai to Ka'kabish: Human and Environment Interaction, Settlement Change, and Urbanism in Northern Belize. Ph.D. Dissertation, Institute of Archaeology, University College London.

McLellan, Alec, and Helen R. Haines

2023 Equality in the Periphery of Lamanai: Assessing a Maya Community in the 10th and 11th Centuries A.D. *Journal of Field Archaeology* 48(5):350–365.

Minor, E, S Schellinger, C Sevara, A. E. A. El-Hassan (Sokhari), and S.A.O Ahmed

2020 Laying the Groundwork: 2020 Survey Season Results and Community Outreach Programme at the Kerma Period Settlement Site Es-Selim R4 in the Northern Dongola Reach. *Bulletin of the Sudan Archaeological Research Society* 24:100–111.

Morgan, Colleen

2025 *How AI Imagery Could Be Used to Develop Fake Archaeology. The Conversation*, February 4. <http://theconversation.com/how-ai-imagery-could-be-used-to-develop-fake-archaeology-247838>, accessed February 7, 2025.

National Institute of Culture and History

2025 <https://nichbelize.org/institute-of-archaeology/>, accessed July 22, 2025.

Oland, Maxine

2012 Public and Postcolonial Practices in Latin American Archaeology: Engaging with Non-Descendant Communities in Northern Belize. *Chungará* 44(3):467–474.

Palacio, Joseph O.

1990 *Socioeconomic Integration of Central American Immigrants in Belize*. SPEAR, Mexico.

Ramsey, Doug, and John Everitt

2008 If You Dig It, They Will Come. *Tourism Management* 29(5):909–916.

Renfrew, Colin, Charles Gosden, and Elizabeth DeMarrais (editors)

2004 *Substance, Memory, Display: Archaeology and Art*. McDonald Institute for Archaeological Research, Cambridge.

Roessing, Carel, and Daniëlle Bovenberg

2016 No Sunday Business': Navigating Religious Rules and Business Opportunities in the Shipyard Mennonite Settlement, Belize. *Journal of Amish and Plan Anabaptist Studies* 4(2):133–148.

Simmons, Scott E., and Laura Howard

- 2003 Preliminary Report of the 2001-2002 Field Seasons at Lamanai, Belize: The Maya Archaeometallurgy Project and Lamanai Archaeological Project Field School. https://www.lamanai.org.uk/uploads/3/4/5/0/34505207/2001-2002_map_seasons_report_-_lamanai_belize_-libre.pdf, accessed September 27, 2025.

Tremain, Cara G.

- 2011 Investigations in Looters' Trenches at Ka'Kabish, Northern Belize: An Analysis of Ancient Maya Architecture and Construction Practices. Unpublished M.A. Thesis, Department of Anthropology, Trent University.

Uddagiri, Chandrasekhar, and Bala Venkateswarlu Isunuri

- 2024 Ethical and Privacy Challenges of Generative AI. In *Generative AI: Current Trends and Applications*, edited by Khalid Raza, Naeem Ahmad, and Deepak Singh, pp. 219–244. Springer Nature, Singapore.

UNESCO

- 2023 Belize Non-State Actors in Education. *UNESCO Profiles Enhancing Education Reviews (PEER)*. <https://education-profiles.org/latin-america-and-the-caribbean/belize/~non-state-actors-in-education>, accessed July 24, 2025.

University College London

- 2014 Supporting Tourism and Recognition of Maya Heritage at Lamanai and on Ambergris Caye. <https://impact.ref.ac.uk/casestudies/CaseStudy.aspx?Id=34494#:~:text=Summary%20of%20the%20impact,Maya%20heritage%20on%20the%20caye>, accessed September 11, 2025.

Appendix: Activity Book.

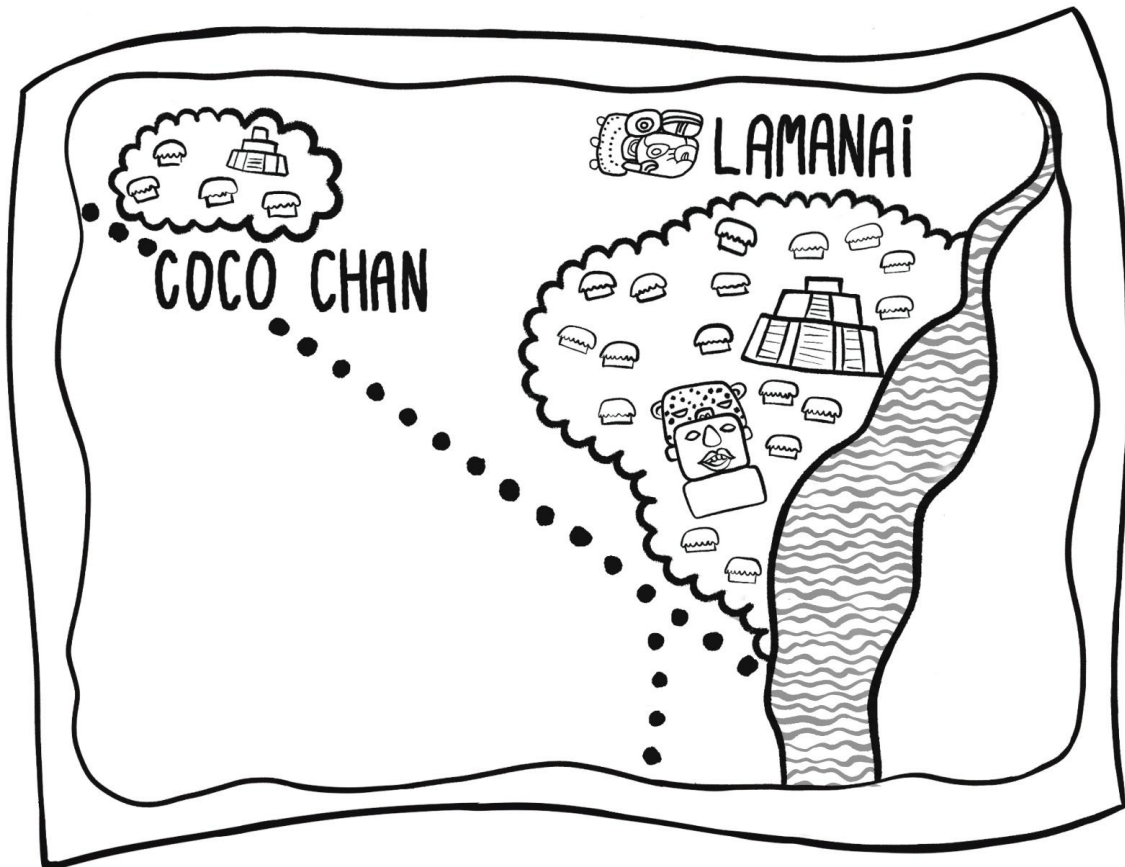
Name/ Nombre: _____



This activity book will help you to learn about archaeology at Coco Chan, a site where the ancient Maya neighbours of Lamanai once lived.

You can add colours to the pictures, to have fun as you learn!

Can add your school to the map below?



Text by Cara Tremain | Illustrations by Hannah Herrick

Created in 2025 for Indian Church Government School

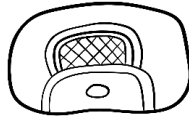
Did you know?

The ancient Maya had different names for colours, and each represented a different direction.

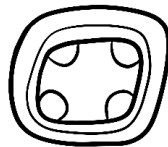
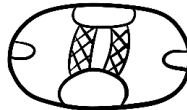
North = White (sak)



West = Black (ik')



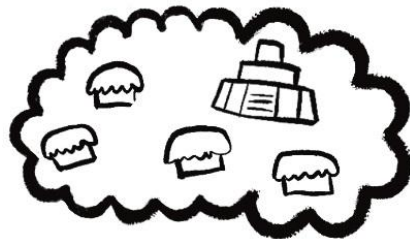
East = Red (chak)



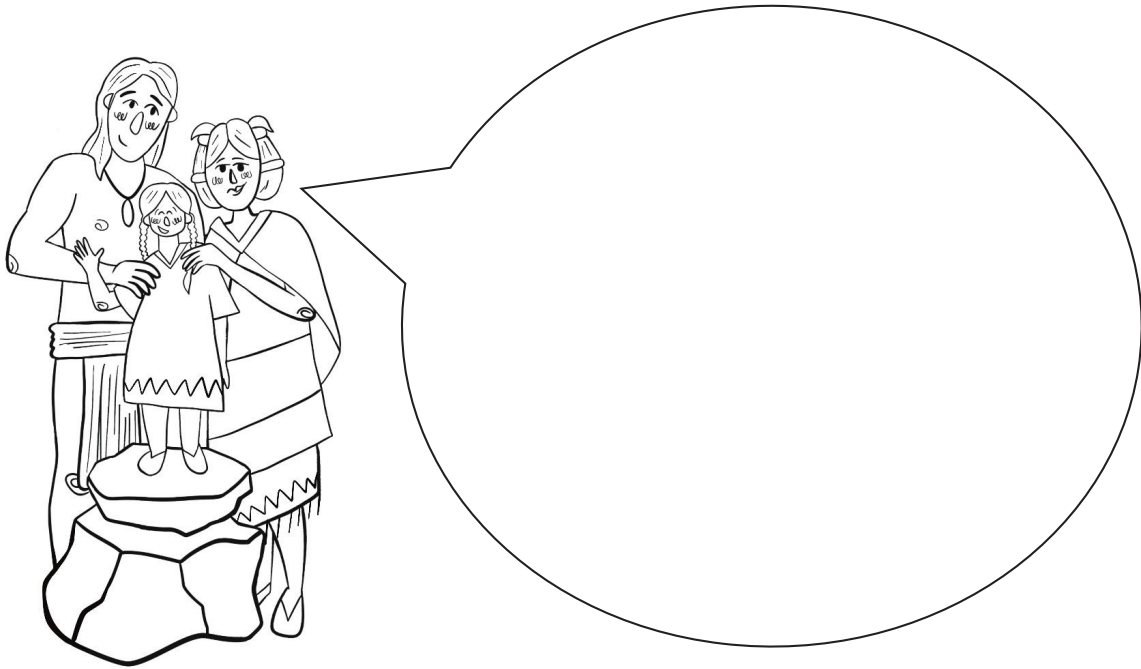
South = Yellow (k'an)

Look again at the map: what directions do you need to travel from Coco Chan to your school?

Use the colours of those directions to colour the site below!



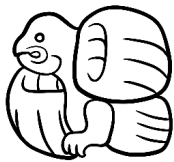
COCO CHAN



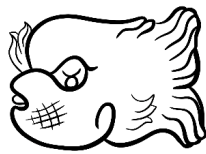
The ancient Maya name of Lamanai is “submerged crocodile” (**Lam’an’ain**).

We don’t know the ancient name of Coco Chan, because we haven’t found a Mayan glyph for the site. Do you think it was also named it after an animal?

Write an ancient name for the site, or draw a glyph for it, in the speech bubble next to the Maya family! Use your imagination or the Mayan animal words below.



Bird (muut)



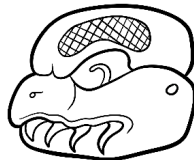
Fish (chay)



Howler Monkey (b’a ts’u)



Jaguar (bahlam)



Snake (kan)



Tapir (til)



Turtle (ahk)

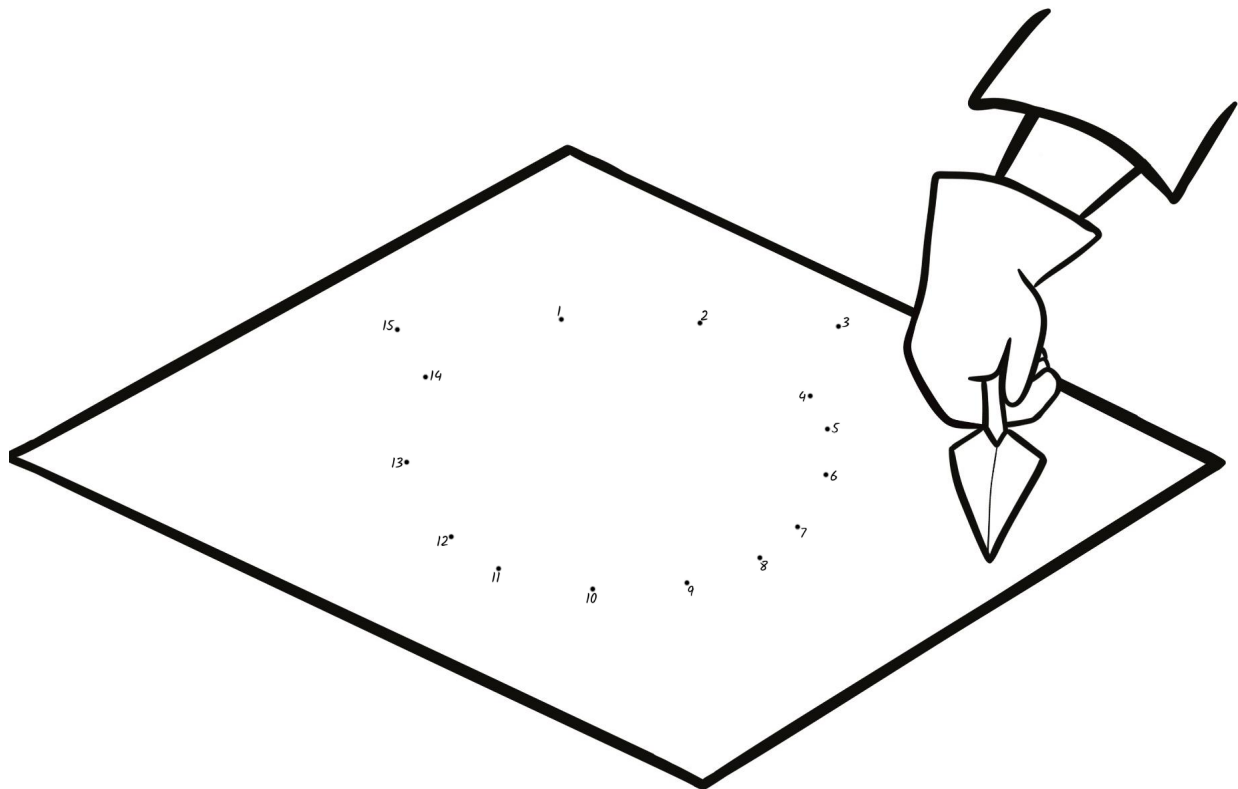
Archaeologists have studied Coco Chan to learn more about who lived there in the past, and what kinds of homes and buildings were at the site.



To explore the site, archaeologists have excavated some areas of Coco Chan. When they excavated, archaeologists carefully look for artefacts like ceramics and stone tools.

These objects tell stories about the ancient Maya and other people who visited the site in the past.

Can you join the dots below to help the archaeologist find the ceramic bowl?

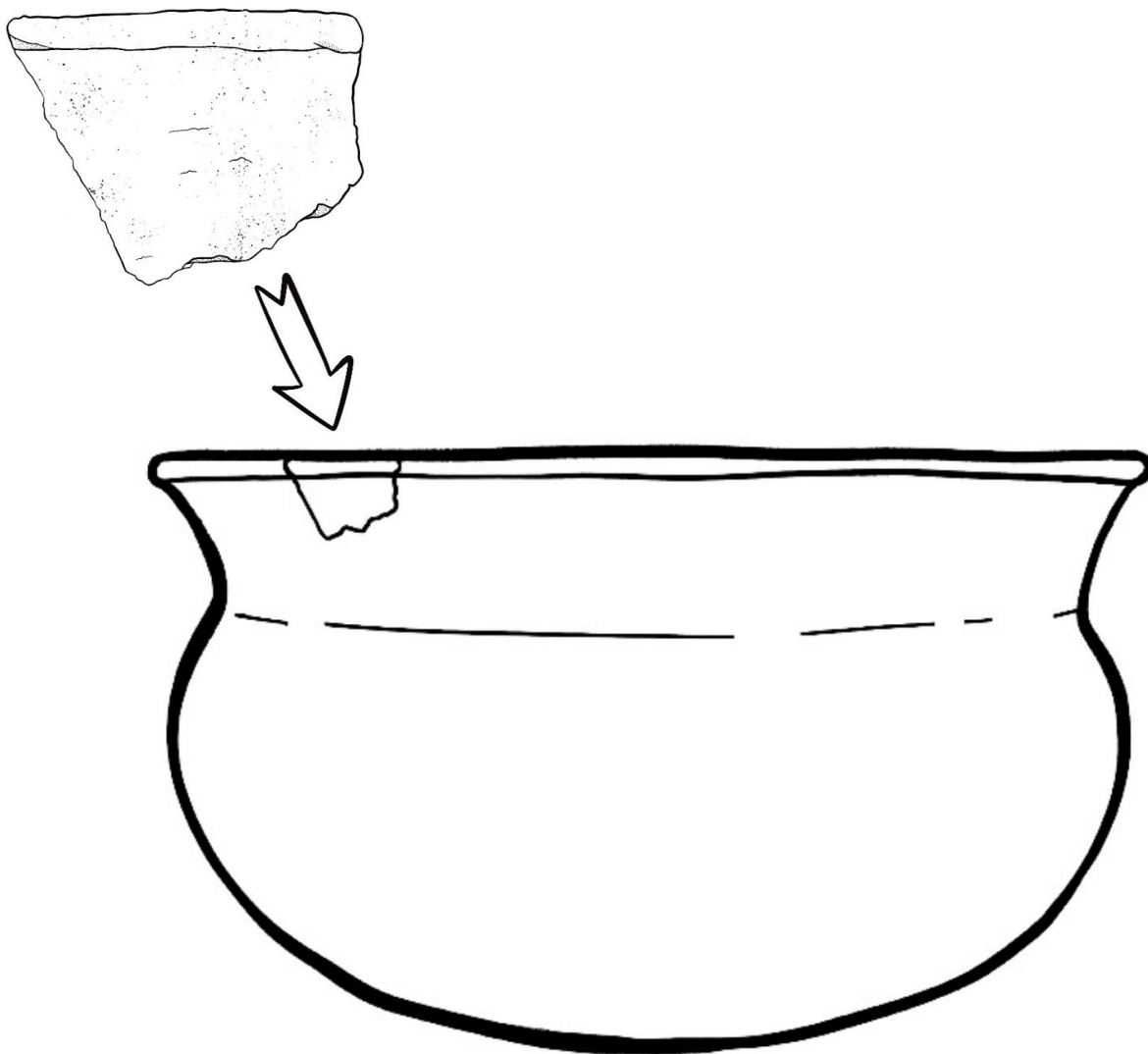


This small ceramic sherd was excavated at Coco Chan. It probably came from the rim of a bowl or jar.

Based on the way it looks, it was probably made and used by the Maya hundreds of years ago when the Spanish first arrived in Belize.

What do you think the Maya put inside ceramic vessels like this?

Draw your idea in the bowl below!





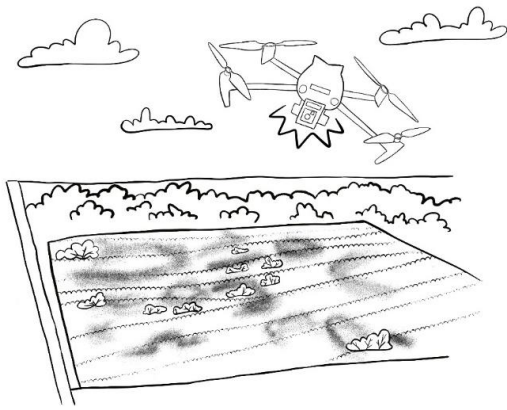
Did you know?

The Spanish first arrived at Lamanai more than 450 hundred years ago, around AD 1543-1544!

The Spanish brought many changes to the ancient Maya, including the Churches you have probably seen at Lamanai.

Archaeologists working at Coco Chan haven't found any Spanish objects yet, so we don't know if the ancient Maya at the site had any contact or trade with the Spanish.

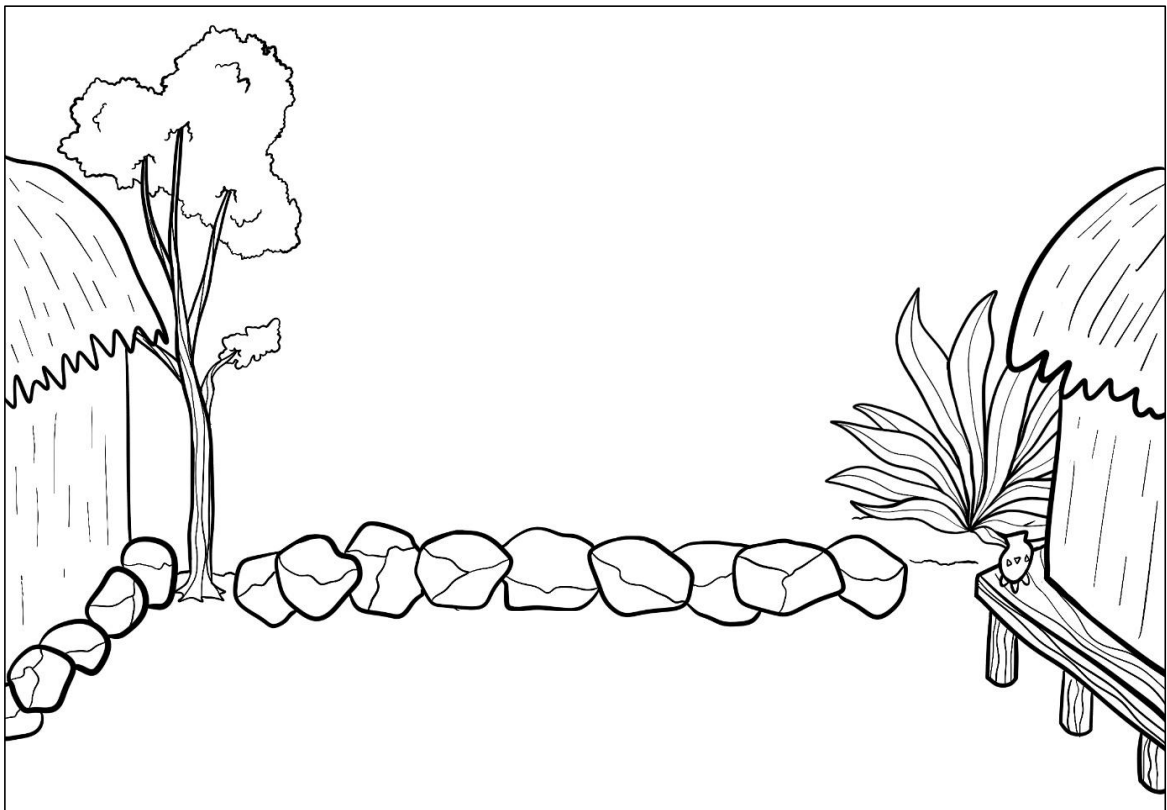
What kinds of objects do you think the Spanish might have brought to Coco Chan, if they visited the site? Write your ideas below!



Archaeologists have also explored Coco Chan by flying a drone high in the air, to take pictures and see where ancient homes used to be.

We can see the bases of ancient homes in the fields, because farming clears away plants and soils. This reveals the ancient stones underneath.

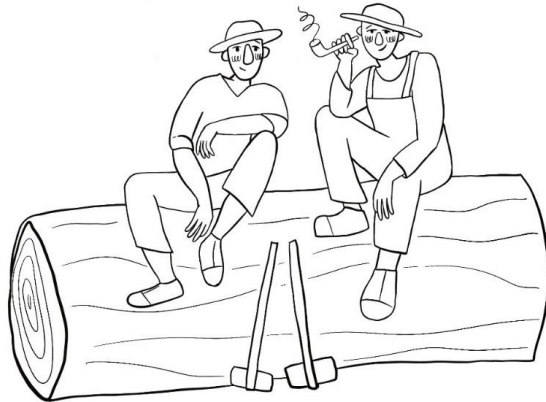
What do you think homes looked like at Coco Chan? Draw your idea below!



Archaeologists found pieces of a clay smoking pipe at Coco Chan.

The pipe probably belonged to someone who worked for a British logging company in the 19th century.

Many non-Maya people worked for logging companies, so the pipe may have belonged to a Creole person.



The pipe stem has some writing that probably tells us where it was made.

Which of the tools below could archaeologists use to look closely at the writing on the pipe?

Circle your answers!



Word Search

Circle the words you have learned about in this activity book!



Words to find

Archaeology

Ceramic

Coco Chan

Drone

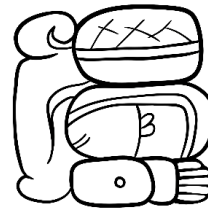
House

Logging

Maya

Pipe

Spanish



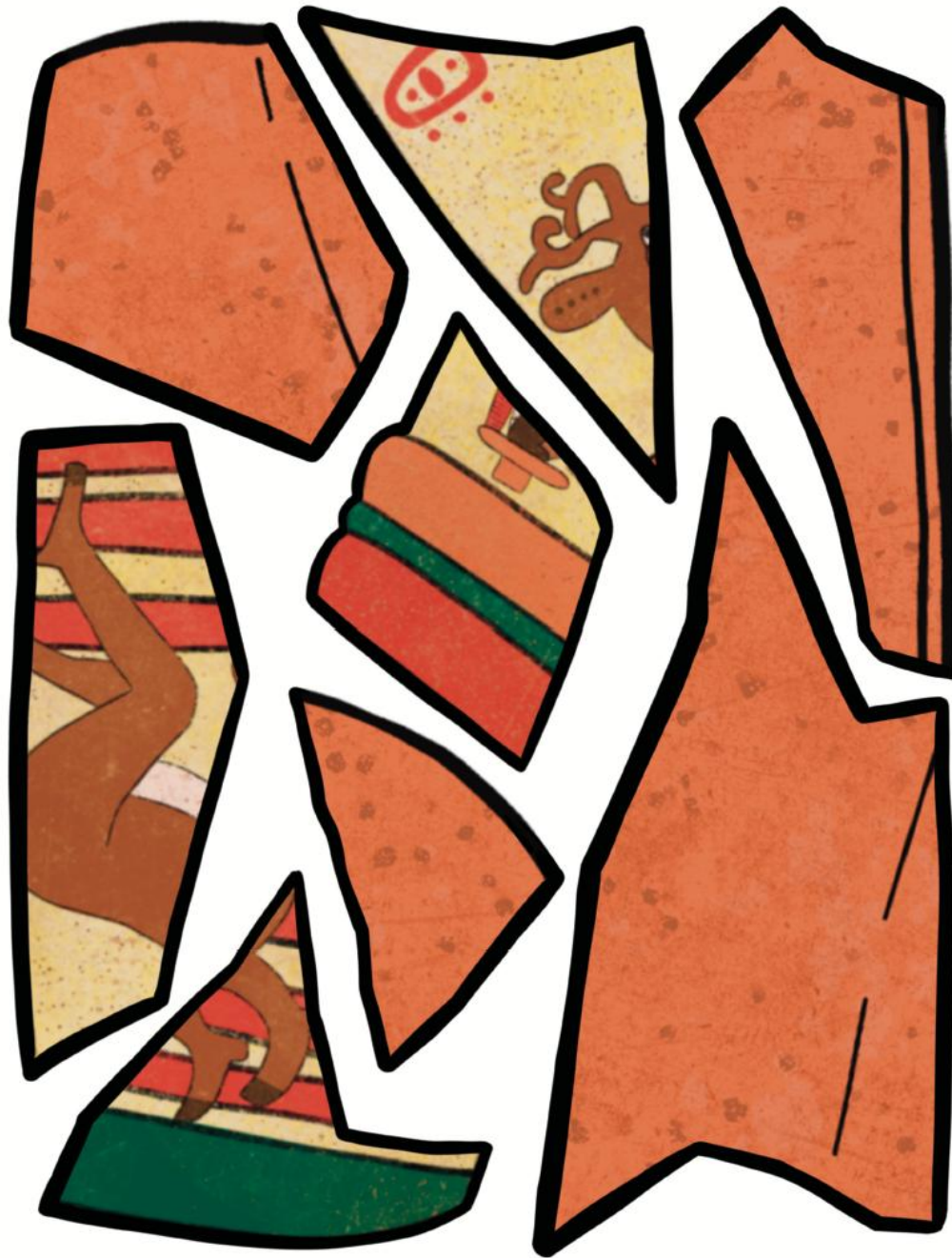
House (yo-otot-ti)



Ceramic (ja-yi)

Artefacts from Coco Chan are old and fragile, so when archaeologists find them they are usually broken.

Can you put the puzzle pieces together to repair the ceramics?



Detach this page from the booklet, so you can cut the shapes out!



Detach this page from the booklet, so you can cut the shapes out!