

Making an Ancient Egyptian Contraceptive: Learning from experiment and experience

**Rosalind Janssen
UCL Institute of Education**

It is a great pleasure to dedicate this article to Professor Rosalie David as an educator who has been at the forefront of university adult education. Having single-handedly set up her innovative Certificate in Egyptology at the University of Manchester, she then ran a consistently oversubscribed course for over twenty-five years, enabling successive cohorts of locally-based adult learners to study Egyptology seriously for the first time. I was privileged to be involved as the programme's external examiner for several years during the 1990s, and witnessed several completers subsequently publish their dissertations; I was particularly delighted to be asked to append the foreword to that by Peter Phillips (2002). It is a testament to her inspirational teaching that several of Rosalie's students subsequently went on to make a considerable mark on our discipline – I think particularly of the late Bob Partridge in this regard. Others are still actively involved in adult education with the editing of publications such as *Ancient Egypt* magazine, in the running of their own, now longstanding, Egyptology societies, and as sought after lecturers at conferences both at home and abroad. It is those firm foundations laid by Professor David as an educator and the resultant reputation of the University of Manchester as a provider of Egyptology for adult learners that has enabled the current Egyptology Online distance learning courses, run by Joyce Tyldesley and Glenn Godenho from the Faculty of Life Sciences, to prove equally popular to a now global audience. This is particularly significant when we have in recent years witnessed the sad demise of adult learning provision in the United Kingdom with the amalgamation or, in most cases, the complete closure of several long-established University departments of continuing education.

The aim of this article is to describe and discuss one recent experimental learning session of my own which involved the recreation of an Ancient Egyptian contraceptive. Links to a similar prescription in the Kahun Gynaecological Papyrus mean that it stands as a further acknowledgement to Professor David's outstanding contribution to both the study of Egyptian medicine, and to her seminal inception of the Kahun Project with its in-depth analysis by experts of the pottery, metals, and textile evidence from the site (David 1986). In my current role as a Lecturer in Education, I finally come full circle from those early days when Rosalie and I worked together on her Certificate to explore what recent educational theory has to tell us about the value of learning from experiment and experience.

The Context

The session in question formed part of a ten-week course conducted for the University of Oxford's Department for Continuing Education (OUDCE) during the Michaelmas Term of 2013 under the title 'A Day in the Life of an Ancient Egyptian Village'. Six female learners signed up for the course, all of whom were in the retired age category. The aim was to draw on archaeological and textual information from the surviving workmen's villages at Giza, Lahun, Amarna, and Deir el-Medina to critically assess various work activities and daily life pursuits by tangibly recreating them within a classroom setting. Work activities such as farming and gardening, furniture making, stone working, writing and painting, and food and beer preparation, were set alongside various leisure pursuits: personal hygiene, music and musical instruments, and the world of play.

The practical craft making drew its inspiration from the University of Swansea's *Experiment and Experience: Ancient Egypt in the Present* Conference (10th – 12th May 2010), which was made available to a wider audience by streaming the proceedings online.

Participants were encouraged to include physical demonstrations to support their papers, and further reference will be made below to my own textile demonstration at this conference.

Meanwhile, the learning objectives of the OUDCE course were firstly to enable students to learn how to recreate and critically experience the reality of work activities and leisure pursuits, and, secondly, to assess the similarities and differences between daily life in ancient and modern Egyptian villages. Thus, as shown in Plate X, students worked in pairs

[Plate X \[3478\] near here](#)

attempting to recreate figured ostraca by drawing on broken flower pots from a garden shed using reed brushes sourced from a neglected ornamental grass growing in the university car park. The pigments comprised brick dust laboriously ground down by the son of one of the students, made soluble in egg white. Figure X [3480] shows an attempt to replicate the fine monkey scratching a girl's nose ostrakon housed in the Petrie Museum (UC. 15946), as illustrated on the front cover of Page's book on the Petrie ostraca (1983). Even more

[Figure X \[3480\] near here](#)

fundamental was the in-depth discussion that took place immediately after each experiment as evidenced by the conclusions drawn from the ostraca activity which I wrote up on the whiteboard as an *aide memoire* (Figure X [3483]).

[Figure X \[3483\] near here](#)

The Experiment

The making the contraceptive activity took place during week 5 as the practical element of the personal hygiene topic. We followed the prescription from Ebers 783 as translated by Nunn (1996: 196):

Beginning of the prescriptions prepared for women/wives (*hemut*) to allow a woman (*set*) to cease conceiving (*iur*) for one year, two years or three years; *qaa* part of acacia, carob (*djaret*), dates; grind with one *henu* (450 ml) of honey, lint is moistened with it and placed in her belly (*iuf*).

The week before, the six students were instructed to liaise with their partner to source a pestle and mortar, a measure, dates, honey, and lint as their contribution to the experiment. In turn, I sourced acacia gum capsules as the cheapest form of this product available on the internet, together with natural carob drops, the more readily available powder not fulfilling the ‘grind’ of the prescription and the more realistic chips being prohibitively expensive.

On the day itself the students worked in their pairs to grind the roughly measured and proportioned acacia, carob, and dates with the carefully measured honey. Following some vigorous grinding, carried out over a ten minute period, the end results were examined (Figure X [5299] shows this taking place when the experiment was later re-run with a group of students from the City Lit). It was quickly discovered that the consistency of the products

[Figure X \[5299\] near here](#)

in the three mortars varied considerably dependent on whether the pairs had interpreted the honey as runny or set. Since the former produced a liquid gooey mess when placed on the lint, it was quickly determined that the honey used by the Ancient Egyptians must have been of the considerably more practical firmly set variety. It is noteworthy that honey similarly features in Kahun 22 which specifies ‘a *hin* (450 ml) of honey, sprinkle over her vagina [*kat*], this to be done on a natron bed’ (as quoted in Szpakowska 2008: 213), leading Nunn (1986: 196) to comment that this ‘might be spermicidal by means of its osmotic effect’.

During the ensuing discussion (Figure X [5306] shows this happening after the City Lit experiment), considerable doubts were not surprisingly expressed as to the optimistic ‘up

Figure X [5306] near here

to three years' shelf life of the product. The students were all of the opinion that the only possible explanation could be that putting this concoction anywhere near the vagina would, to quote Szpakowska (2008: 213) in reference to the use of crocodile dung in the contraceptive prescription Kahun 21, 'quickly quench any amorous advances'.

Educational analysis

The literature on learning is understandably vast, but within the plethora it is possible to identify three major models of learning. These have been aptly summarized by three of my colleagues at University College London's Institute of Education (IoE), (Watkins *et al.* 2007) as comprising the reception, construction, and co-construction models. The reception model, most dominant during the Twentieth Century, can be defined as learning equating to being teacher-led, i.e., she taught me. The construction model is where learning comprises individual sense-making as a result of discussion, i.e., I made sense of. By contrast, the co-construction model develops higher order skills in that learning involves building knowledge with others through dialogue, i.e., we worked out that.

It can thus be seen as a collaborative learning product, which is very much what my interactive OUDCE course was all about. The students benefited in the manner described by eleven year old Annie: 'You learn more because if you explain to people what you do, you say things that you wouldn't say to yourself, really. So you learn things that you wouldn't know if you were just doing it by yourself' (Watkins *et al.* 2002: 5). Similarly, the OUDCE students worked together in a process of mutual problem-solving, such as when discussing the constituency of the honey, to create a joint product and understanding. Such collaborative

work is rated by school pupils as being twice as effective at promoting their learning compared with individual activities (Watkins *et al.* 2007).

Drawing on earlier seminal work headed by the IoE's then Reader in Education Chris Watkins (2001; 2002), he and his colleagues (Watkins *et al.* 2007: 19) further discuss the concept of effective learning which they define as 'an activity of *making* meaning – construction – not simply of receiving. The social dimension is always present, and in social contexts collaboration supports learning'. Once again, this conforms to the organization of the OUDCE course with its integral collaboration in the prior sourcing of materials. The social context was always strong taking us on a visit to the Petrie Museum and culminating in an end of term Deir el-Medina feast / Christmas party around a food and beer preparation theme.

As to the educational significance of this learning experience, a useful model is the adaptation by Chris Watkins and his colleagues (2002) of the classic experiential learning theory (ELT) of David Kolb (1984). Kolb's learning model comprises a four-stage cycle: Do, Review, Learn, Apply. As such it demands that time is taken for reflection on a learning activity, for, according to Kolb (1984: 38) '*Learning is the process whereby knowledge is created through the transformation of experience*' (author's italics). What has been learnt then feeds into future action (is applied), and then subsequent action is reviewed. Watkins *et al.* (2002) have incorporated an extra cycle in the reflection model which promotes learning about learning and thereby addresses the potential complexity of the process. Learning thus becomes the larger focus of their revised Do, Review, Learn, Apply cycle. The learner in this model becomes in fact a meta-learner, who is more versatile, and is able to apply new learning across a wider range of contexts.

Finally, it is useful to consider Malcolm Knowles (1973; 1980; 1984; 1989) and his theory of andragogy, which states that adults learn in fundamentally different ways to children (pedagogy). One of the six assumptions of the theory is that adults learn by experience, based on the premise that, as a person matures, s/he accumulates a growing reservoir of experience that can become an increasing resource for learning. Then we have the somewhat disputed geragogy, as first propounded by Lebel (1978). Focusing exclusively on the learning of older people, this envisages a search for meaning as a key educational activity. Thus Cusack (1991: 10) has emphasized lifelong education as ‘a process of making meaning from experience, from life experience and from the learning experiences provided’.

Two experiential learning situations illustrate the fundamental differences between andragogy and geragogy. The online stream from my textile demonstration at the Swansea *Experiment and Experience* Conference mentioned above shows a team of volunteers – in the guise of Swansea Egyptology students – attempting to create pleats using four replica boards. Working in pairs and urged on by their overseer of the laundry Jane, these young students attempt to push Second World War linen into the grooves of so-called pleating boards housed in the collections of Turin, Florence, and the British Museum. The end results are largely disappointing to the eye, to the extent that the plenary focuses on some fascinating alternative explanations for these ancient artefacts. Yet, when the experiment was subsequently recreated in 2013 with my OUDCE students using exactly the same boards and pieces of linen, perfect pleats were obtained. These Oxford students, all of whom it will be remembered were in the retired age group, provided their own explanation for their success: ‘we were taught dressmaking by our mothers and grandmothers, unlike young people today’.

There is no doubt that the making of the contraceptive was responsible for achieving one of the three learning outcomes of the course: ‘to explore the practical reconstruction of daily life activities through a critical contemporary lens’. It was also great fun at the time, a

never to be forgotten experience in which, looking back with hindsight and reflexivity, we all became meta-learners. Notwithstanding, at the time we all expressed considerable relief that we could not complete the Kolb experiential learning cycle in which the learner makes meaning out of the experience. None of us were of an age to test out the final product.

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