



**RESEARCH MASTER'S
PROGRAMME**

ARCHAEOLOGY

FACULTY OF ARCHAEOLOGY

LEIDEN UNIVERSITY

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This report was finalised on 26 July 2021

REPORT ON THE RESEARCH MASTER'S PROGRAMME ARCHAEOLOGY OF LEIDEN UNIVERSITY

This report makes use of the NVAO's *Assessment Framework for the Higher Education Accreditation System of the Netherlands* (September 2018) and the *Specification of Additional Criteria for Research Master's Programmes* (May 2016). It takes the criteria for limited programme assessments as its starting point, supplemented by the additional aspects for research master's programmes.

ADMINISTRATIVE DATA REGARDING THE PROGRAMME

Research master's programme Archaeology

Name of the programme:	Archeologie (research)
International name:	Archaeology (research)
CROHO number:	60133
Level of the programme:	master's level
Orientation of the programme:	academic research master
Number of credits:	120 EC
Specialisations:	none
Location:	Leiden
Mode of study:	full time
Language of instruction:	English
Submission deadline NVAO:	01/11/2020, extension submission date until 31/10/2021 due to legislation WHW art. 5.16 lid 4

The online assessment of the research master's programme Archaeology of Leiden University took place on 3-5 February 2021.

ADMINISTRATIVE DATA REGARDING THE INSTITUTION

Name of the institution:	Leiden University
Status of the institution:	subsidised
Result institutional quality assurance assessment:	positive

COMPOSITION OF THE ASSESSMENT PANEL

The NVAO has approved the composition of the panel on 2 June 2020. The panel that assessed the research master's programme Archaeology consisted of:

- Prof. dr. K. (Kristoffel) Dempo, professor Ancient Greek Literature at Ghent University (Belgium) [panel chair Vrije Universiteit Amsterdam and Leiden University];
- Em. prof. dr. J.F. (John) Healey, emeritus professor in Semitic Studies at the University of Manchester (United Kingdom);
- Em. prof. dr. phil. J.U. (Jens-Uwe) Hartmann, professor Indian and Iranian Studies at the Ludwig-Maximilians-Universität in München (Germany);

- Prof. dr. T. (Thomas) Meier, professor for Pre- and Protohistory and director of the Käte Hamburger Center for Apocalyptic and Post-Apocalyptic Studies at Heidelberg University (Germany);
- Prof. dr. E.H.M. (Helena) Houvenaghel, professor Spanish Language and Culture at Utrecht University;
- Dr. G. (Gerhard) Anders, senior lecturer African Studies and International Development at the Centre of African Studies of the University of Edinburgh (United Kingdom);
- Y.P. (Yannick) de Raaff, MA, recent graduate research master Archaeology at the University of Groningen [student member].

The panel was supported by Dr. E. (Els) Schröder, who acted as secretary and project coordinator. Dr. I. (Irene) Conradie and V. (Victor) van Kleef MA supported the panel and secretary as notulists during the site visit.

WORKING METHOD OF THE ASSESSMENT PANEL

The online site visit to the research master's programme Archaeology at the Faculty of Archaeology of Leiden University was part of the cluster assessment Archaeology, Classics and Ancient Civilizations and Region Studies. The following universities participated in this cluster assessment: University of Groningen, University of Amsterdam, Leiden University and Vrije Universiteit Amsterdam.

On behalf of the participating universities, quality assurance agency Qanu was responsible for logistical support, panel guidance and the production of the reports. Dr. E. (Els) Schröder was project coordinator for Qanu. Dr. E. (Els) Schröder (Leiden University, University of Groningen and Vrije Universiteit Amsterdam) and V. (Victor) van Kleef MA, (University of Amsterdam) acted as secretaries in the cluster assessment. Dr. I. (Irene) Conradie acted as notulists during the site visit at Leiden University.

The nine programmes of the four universities were scheduled to be assessed between April 2020 and June 2020. Unfortunately, the COVID-19 outbreak made site visits impossible, and all assessments, except that of the Vrije Universiteit Amsterdam, were rescheduled for more suitable dates in the second half of 2020 and 2021. The project coordinator and the representatives of the programmes agreed to schedule digital assessments.

Panel members

The members of the assessment panel were selected based on their expertise, availability and independence. The panel consisted of the following members:

- Prof. J. (Jacqueline) Mulville, professor in Bioarchaeology and Director of Research and Impact at the School of History, Archaeology and Religion of Cardiff University (United Kingdom) [panel chair University of Amsterdam and University of Groningen];
- Prof. dr. K. (Kristoffel) Demoen, professor Ancient Greek Literature at Ghent University (Belgium) [panel chair Vrije Universiteit Amsterdam and Leiden University];
- Dr. G. (Gerhard) Anders, senior lecturer African Studies and International Development at the Centre of African Studies of the University of Edinburgh (United Kingdom);
- Dr. K. (Kim) Beerden, University Lecturer at the Institute for History of Leiden University;
- Prof. dr. M.B.H. (Martin) Everaert, professor Linguistics at Utrecht University;
- Em. prof. dr. phil. J.U. (Jens-Uwe) Hartmann, professor Indian and Iranian Studies at the Ludwig-Maximilians-Universität in München (Germany);
- Prof. dr. J. (Johannes) Haubold, professor of Classics at Princeton University (United States);
- Em. prof. dr. J.F. (John) Healey, emeritus professor in Semitic Studies at the University of Manchester (United Kingdom);
- Prof. D. (Dan) Hicks, professor of Contemporary Archaeology at Oxford University (United Kingdom);
- Prof. dr. E.H.M. (Helena) Houvenaghel, professor Spanish Language and Culture at Utrecht University;

- Prof. dr. T. (Thomas) Meier, professor for Pre- and Protohistory and director of the Käte Hamburger Center for Apocalyptic and Post-Apocalyptic Studies at Heidelberg University (Germany);
- Prof. dr. E.M. (Eric) Moormann, professor of Classical Archaeology at Radboud University;
- Prof. dr. J. (Jeroen) Poblome, professor Classical Archaeology and director of the Sagalassos Archaeological Research Project (Belgium);
- Y.P. (Yannick) de Raaff, MA, recent graduate research master Archaeology at the University of Groningen [student member].
- R. (Rory) Granleese, BA, research master student Archaeology at Leiden University [student member].

Preparation

Planning for the cluster assessment started in October 2019. On 13 March 2020, Prof. dr. K. Demoen was briefed by Qanu on his role as panel chair, the assessment framework, the working method, and the planning of the site visits and reports. Prior to the assessment, the panel members received instructions on the use of the assessment framework and the planning of the (online) site visits and reports.

Before the online site visit to the Leiden University, Qanu received the self-evaluation report of the programme and sent it to the panel. In January 2020, the panel received a report on the measures taken to assure the quality of teaching and assessment during the Covid-19 pandemic. The thesis selection consisted of fifteen theses and their assessment forms for the programme, based on a provided list of graduates between 2016 and 2019. In addition, the panel studied two theses that were completed in 2020.

Online assessment

At the end of March 2020, it became clear that due to COVID-19, all universities would be closed until further notice. Leiden University indicated an interest in organising a digital site visit. The project coordinator asked the panel chair, Prof. dr. K. Demoen, whether he would be willing to lead a digital assessment. He consented to chairing a digital assessment on 3 April 2020. The panel members involved also confirmed their consent in partaking in a digital assessment. Their messages of consent have been archived by Qanu and can be provided upon request.

For Leiden University, it was decided that the online assessment of the programme would take place on 3, 4 and 5 February 2021, but only if the panel chair confirmed that no hindrances were found in the documentation that would require an actual site visit based on the study of existing documents, a so-called 'go/no go-decision'. After studying the existing documentation, the panel chair communicated a 'go' to the project coordinator/secretary on 1 December 2020.

After studying the self-evaluation report, theses and assessment forms, the panel members formulated their preliminary findings and questions. The project coordinator/secretary collected all initial questions and remarks and distributed them amongst all panel members. Two preparatory panel meetings were organised. A first on 10 December 2020, a second on 18 January 2021. During these meetings, the panel discussed its initial findings based on the self-evaluation report and the theses, as well as the division of tasks during the site visit.

The project coordinator/secretary composed a schedule for the online assessment in consultation with the policy officers of the Faculty of Humanities and the Faculty of Archaeology at Leiden University and the panel chair. Prior to the assessment, the Programme Board selected representative partners for the various interviews. See Appendix 3 for the final schedule. Also, a digital protocol was drawn up by Leiden University with input from the project coordinator/secretary and panel chair. This protocol discussed the ways in which communication during the interviews would be organised to guarantee that all interviewees and panel members would be able to speak freely and add whatever seemed important to the conversation. Leiden University provided the necessary software to enable a digital site visit and development dialogue, including a fall-back option in case the digital environment malfunctioned. This fall-up option was never used.

Site visit

The site visit to Leiden University took place on 3, 4 and 5 February 2021 by digital means. Before and during the site visit, the panel studied the additional documents provided by the programme. An overview of these materials can be found in Appendix 4. The panel conducted interviews with representatives of the programme: students and staff members, the programme's Board, alumni and representatives of the Board of Examiners and Faculty. It also offered students and staff members an opportunity for a confidential discussion during a consultation hour ahead of the digital site visit. Qanu stipulated a digital environment for this meeting in order to guarantee privacy. No requests for a private consultation were received. The panel used the final part of the site visit to discuss its findings in an internal meeting. Afterwards, the panel chair presented its preliminary findings and general observations. This last digital time slot could be accessed by anyone wishing to attend.

Development dialogues

Five digital development dialogues were scheduled at the following dates:

- 2 March 2021: research master's programme African Studies;
- 3 March 2021: research master's programmes Middle Eastern Studies and Asian Studies (combined);
- 8 March 2021: research master's programme Latin American Studies;
- 18 March 2021: research master's programmes Classics and Archaeology (separate discussions).

For the dialogues, the programmes at Leiden University prepared an agenda. At least three representatives of the panel took part in each dialogue. The outcomes of the development dialogue have been drawn up separately, and confirmed by the panel representatives. These documents are not part of the application for accreditation.

Consistency and calibration

In order to ensure the consistency of assessment within the cluster, various measures were taken:

1. The panel composition ensured regular attendance of key panel members, including the chairs;
2. The coordinator was present at the start of all site visits as well as at the panel discussion leading to the preliminary findings for all site visits within the cluster assessment;
3. Calibration meetings were scheduled on 25 September 2020 and 17 December 2020, in which the two chairs discussed the approach to digital assessment and how to reach conclusions regarding the quality of the assessed programmes.

Working method during site visit

For Qanu, a team of NVAO-accredited secretaries was appointed to take notes during the site visit in parallel sessions. Involved were: Dr. I. (Irene) Conradie (notulist during the site visit), V. (Victor) van Kleef, MA (notulist during the site visit) and Dr. E. (Els) Schröder (project coordinator/secretary). The notulists attended the preparatory meetings (December 2020/January 2021). During the site visit, the notulists and secretary attended the relevant panel discussions and the presentation of the findings. The meetings of the various interviews were shared, prior to writing the reports. The project coordinator acted as active secretary, assuring overview during the site visit. She is also the secretary of all six reports. For a division of task, see the programme for the site visit (Appendix 3).

Report

After the site visit, the project coordinator/secretary wrote a draft report based on the panel's findings and submitted it to a colleague at Qanu for peer assessment. Subsequently, she sent the report to the panel. After processing the panel members' feedback, the project coordinator/secretary sent the draft report to the Faculty in order to have it checked for factual irregularities. The project coordinator/secretary discussed the ensuing comments with the panel chair and changes were implemented accordingly. The report was then finalised and sent to the Faculty and University Board.

Definition of judgement standards

In accordance with the NVAO's *Assessment Framework for the Higher Education Accreditation System of the Netherlands* (September 2018) for limited programme assessments, the panel used the following definitions for the assessment of the standards:

Generic quality

The quality that, from an international perspective, may reasonably be expected from a higher education Associate Degree, Bachelor's or Master's programme.

Meets the standard

The programme meets the generic quality standard.

Partially meets the standard

The programme meets the generic quality standard to a significant extent, but improvements are required in order to fully meet the standard.

Does not meet the standard

The programme does not meet the generic quality standard.

The panel used the following definitions for the assessment of the programme as a whole:

Positive

The programme meets all the standards.

Conditionally positive

The programme meets Standard 1 and partially meets a maximum of two standards, with the imposition of conditions being recommended by the panel.

Negative

In the following situations:

- The programme fails to meet one or more standards;
- The programme partially meets Standard 1;
- The programme partially meets one or two standards, without the imposition of conditions being recommended by the panel;
- The programme partially meets three or more standards.

For research master's programmes, the aspects as listed in the *Specification of Additional Criteria for Research Master's Programmes* (May 2016) are considered as supplementary to the criteria in this framework and are assessed accordingly.

SUMMARY JUDGEMENT

The research master's programme Archaeology offers a two-year research-oriented programme of 120 EC. The Faculty of Archaeology and its research form the stimulating research environment in which the research master students receive their training. In 2018, the Faculty was reviewed according to the Standard Evaluation Protocol and was scored 'very good' (2) on all criteria. For research quality, the overall quality of the research falling within its remit qualifies as 2 (the research unit conducts very good, internationally recognised research) with clear elements of 1 (the research unit has been shown to be one of the most influential research groups in the world in its particular field). The panel finds that the organisational embedding of the programme in the Faculty with its very strong reputation for research is clearly beneficial to the setup of the programme, connecting students with a research environment that in many areas should be considered world-leading. It recommends that the Faculty of Archaeology explores whether extended collaboration between some of the Leiden University research master's programmes that engage with the past and material culture could be beneficial to their students' education.

Standard 1

The research master's programme in Archaeology at Leiden University stands out because of its broad coverage on the one hand, and its specific focus reflected by its thematic specialisations on the other, many of which are unique in continental Europe. One of the programme's assets is its clear transdisciplinary and multidisciplinary aims, which are an integral part of its profile and substantiated in its intended learning outcomes (ILOs). The programme combines these transdisciplinary and multidisciplinary aims with a substantive focus on theory, skills training, methodology and pays attention to the societal context and ethical-social aspects that are connected to archaeological research. In this way, the students receive a solid theoretical training and acquire relevant transferable skills to become capable and dedicated researchers and reflexive professionals. According to the panel, the ILOs are a very good representation of the programme's profile and aims. They demonstrate the research orientation that can be expected of a research master's degree programme, and represent the level aimed for in the Dublin descriptors for the master's degree level. The panel suggests formulating an ILO that includes publishability of all or parts of the thesis as a programme goal.

The education offered is closely connected to the research of the Faculty of Archaeology, which is at the heart of many of the developments that the field of Archaeology is currently undergoing. As a result, the students receive an up-to-date education. To continue following upcoming trends, the panel recommends adding to the current orientation a more explicit focus on social and economic inequality, power relations and suppression, as well as discontinuities like collapse, disaster and extinction. The panel wants to commend the research master's explicit orientation towards societal responsibility, and its clear presentation of the transferable skills attained upon graduation. These should offer the graduates a good connection to the expectations of the professional and academic field and at the same time will help them articulate to prospective employers what skills they have acquired along with their discipline-related knowledge. Based on its findings, the panel considers graduates of the research master's programme well-equipped for a future career, both within archaeological research and outside academia, that requires the analytical, research and communication skills offered by the research master's programme.

Standard 2

Based on its findings, the panel concluded that the research master's programme Archaeology offers its students a high-quality research environment with excellent facilities and good access to resources and staff. In its opinion, it seems that research master students fully benefit from the excellent facilities available and make use of them in an appropriate way to conduct research. The panel verified that the old curriculum was of the required level and that the transition from the old to the new curriculum was duly monitored and adequately organised. The new curriculum introduced in 2018 is of the required standard for a research master's degree programme: it offers a coherent design, and the contents pay attention to interdisciplinary and transdisciplinary approaches, including recent trends in the research field. According to the panel, the programme's curriculum strikes a good balance between individual freedom of choice and directed learning that is in line with the requirements of a research master's degree with this

design. Ethics, methodology and skills training are incorporated as integral parts of the students' training and also appropriately addressed in the relevant laboratory settings and in preparation for fieldwork, if applicable. The students complete a fully independent research cycle in their thesis trajectories.

The panel concluded that the programme responded adequately to the recommendations of the 2015 panel, notably with respect to the concern raised regarding the time spent on the thesis trajectory. Deadlines and guidelines have been introduced alongside raising awareness amongst staff and students of the need to complete it within the set time constraints. It met a dedicated team of staff members and teachers, who all take continuous improvement of its curriculum very seriously and work together with students to do so. The panel ascertained that the programme rose to the challenges presented by the Covid-19 pandemic. It met a positive attitude and 'can do' mentality among the students and staff members in reaction to the situation, which it found a credit to the programme.

The existing selection and admittance criteria strike the right balance. They aim to attract candidates with a strong academic record while also allowing for diversification of the intake. To the panel, diversity of intake is key for the creation of a rich teaching-learning environment. Hence, the choice of English as the language of instruction and an English programme name are considered appropriate and of added value. The staff members are adequately trained, in terms of both their teaching qualifications and language skills, to provide the necessary quality for establishing such a multicultural and international teaching-learning environment. The programme also benefits from their up-to-date research expertise and experience. The staff's diverse multidisciplinary and interdisciplinary research projects and interests feed into the curriculum and offer a challenging environment for students to realise the intended learning outcomes. The staff members are highly committed and easily accessible for students, offering valuable guidance and good support throughout their studies. The panel appreciates the clear signs of investment in the development of the staff's teaching practices. It wants to encourage the programme to continue diversifying its teaching staff in line with the quick developments in the field of Archaeology, including the involvement of young researchers alongside established senior members of staff. This would widen the intellectual, thematic and methodological scope of the programme and help to cover new trends in the quickly developing field of archaeology.

The panel verified that the programme is feasible for students starting in September or February. Good guidance and study planning lie at the heart of this success. The panel was pleased to hear that the Admissions Committee is trying to identify students wishing to go abroad, allowing for an integral planning and taking the students' wishes with respect to exchange seriously. Semi-formal collaborations with like-minded and research-oriented programmes, within both the Netherlands and Europe, may also be a good step forward to create an additional exchange of ideas and would help the programme to keep up with the trend towards specialisation and diversification in archaeology. To cater to collaborations like these, the programme schedule may need to offer some added flexibility to the students. The panel wants to offer two additional points of advice. First, the students commented on a frail sense of community amongst some of them. At the moment, it is unclear whether these unconnected students form a recognizable group (for example, international students or the February intake). The panel is convinced the programme tries to form a lively and supportive research community and noted many good initiatives to try to create and maintain a sense of community. It may be helpful to map those falling off the radar better in order to improve communication or target those groups. Second, the panel recommends listing publications based on thesis research to make the achieved level of publishability more visible.

Standard 3

Over the period of assessment, the Faculty of Archaeology professionalised in terms of its system of assessment and assessment practices. In this process the Faculty adopted guidelines, namely the 'Tips for Testing' manual, provided by the Faculty of Humanities, a sharing of information that indicates a raised awareness of the need for a shared quality culture within the university. The Board of Examiners has been key in taking the lead in the professionalisation of the assessment culture at the Faculty. The panel verified that the BoE fulfils its role in the

DESCRIPTION OF THE STANDARDS FROM THE ASSESSMENT FRAMEWORK FOR LIMITED FRAMEWORK ASSESSMENTS

Standard 1: Intended learning outcomes

The intended learning outcomes tie in with the level and orientation of the programme; they are geared to the expectations of the professional field, the discipline, and international requirements.

Findings

The research master's programme Archaeology at Leiden University aims to educate and deliver independent specialists, able to develop innovative inter- or transdisciplinary research projects relevant to present-day societal issues. Within the programme, the students learn to formulate original research questions, and collect and process a diverse array of data from a variety of provenances. The panel considers these objectives fitting for a research-oriented degree within the field of Archaeology. The students develop the skills to carry out high-level research in the archaeological domain as dedicated researchers and reflexive professionals. The panel appreciates the clearly outlined academic and non-academic career path foreseen by the programme for its graduates, which is also reflected in a focus on transferable skills in the programme's intended learning outcomes (ILOs).

The students receive their education at the Faculty of Archaeology, one of the largest archaeological institutes in the world. At the Faculty of Archaeology, the discipline is studied using perspectives from all major domains: humanities, social sciences and natural sciences. This combination of different approaches and interdisciplinarity forms the core of the Faculty's research programmes, which are closely linked to the Faculty's education programmes. The panel considers the aims and profile of the research master programme distinctive. Within the Netherlands, the Faculty of Archaeology is unique in terms of its size, scope and organisation. Due to its size, the Faculty offers a broad range of area and thematic specialisations, many of which are unique in continental Europe. The panel considers the broad coverage crucial for the leading international position of the Faculty. It is also impressed by the clear transdisciplinary and multidisciplinary aims, as communicated in the programme's profile and substantiated in its ILOs.

According to the self-evaluation report, the programme specifically aims to connect its students to the rapid developments within the field of Archaeology (under the influence of developments in the theoretical debates); methodical innovations in the field of natural sciences (such as in the field of isotope and ancient DNA studies); archaeological field research (such as the application of drones and geophysical techniques); and current societal issues (such as sustainability, human-induced climate changes, and identity in times of globalisation and global migration). Hence, the research and education provided by the research master's programme closely connect to the research themes formulated by the Faculty, which embody research that is at the heart of many of these developments.

The research themes are: 1) Human Niche Construction; 2) The Human Body; 3) Urban Pasts: Managing Diversity and Inequality; 4) Interaction and Identity; and 5) Crafting Societies in the Past and Present. These themes have been chosen for their transversal character, cross-cutting research through all departments of the Faculty and combining disciplines by employing multidisciplinary, interdisciplinary and transdisciplinary approaches. As a result, the students encounter different approaches during their studies and are trained to combine archaeological data with data from other disciplines such as historical data, anthropological data, chemical analysis, geological and ecological data, a-DNA and isotope analysis. The programme offers a solid theoretical training, and attention is paid to reflexivity on the ethical and social aspects of research in archaeology.

The panel considers the five thematic foci very much in line with current international debates in Archaeology and concludes that the programme is on top of international trends. Hence, the students receive an excellent start for their further careers. To continue following upcoming trends triggered by current societal problems all over the globe, the panel recommends adding a more explicit focus on social and economic inequality, power relations and suppression, as well as discontinuities like collapse, disaster and extinction.

Intended learning outcomes

The panel studied the ILOs, which have been revised and updated (see Appendix 1). The relation to the Dublin Descriptors is implied rather than clearly outlined. The panel concluded, however, that all competences in the ILOs are defined at the required master's degree level and that the ILOs are thus in line with international requirements. They explicitly refer to the additional learning outcomes for research master students in comparison to master students. Hence, the differences in positioning of the two master degrees offered by the Faculty of Archaeology are very transparent, with the research master's programme clearly research-oriented in character. This is partly reflected in the outcomes formulated for the attainment of skills. Research master students are expected to be able to critically reflect on the work of others, take a position in debates, formulate recommendations for further research, present to a specialised audience and function independently within research teams and networks. The expected level of English proficiency is also explicitly outlined. The panel considers this explicit set of skills appropriate and in line with the expectations of the professional and academic field in which the graduates will be expected to continue their careers. It wants to praise the transparent way in which the ILOs referring to the attainment of transferable skills are formulated.

The research-oriented nature of the research master's degree is also substantiated in the ILOs referring to the attainment level in theoretical context and social orientation. For example, one ILO states that graduates of the research master's programme are 'capable of applying theories and methods in a broader discipline-transcending academic framework and in new, multidisciplinary contexts'. Another example is the attention paid to ethics as part of the research master's ILOs. A research master graduate is expected to be 'capable of reflecting on the ethical-social aspects of Archaeology and able to debate the latest archaeological developments and their significance to society, the field of Archaeology and their own research, and can communicate and discuss this from an international globalizing perspective'. The panel heard from staff members during the site visit that publishability of all or parts of the thesis is, indeed, one of the aims for the thesis. It may therefore be a good idea to substantiate this aim in the ILOs, which it recommends. In its view, the explicit orientation towards societal responsibility, as concretised in the ILOs, is a rare asset for a research master's programme.

Considerations

From the panel's perspective, the research master's programme in Archaeology at Leiden University stands out because of its broad coverage on the one hand, and its specific focus reflected by its thematic specialisations on the other, many of which are unique in continental Europe. The education offered is closely connected to the research of the Faculty of Archaeology, which is at the heart of many of the developments that the field of Archaeology is currently undergoing. As a result, the students receive an up-to-date education. To continue following upcoming trends, the panel recommends adding to the current orientation a more explicit focus on social and economic inequality, power relations and suppression, as well as discontinuities like collapse, disaster and extinction.

One of the programme's assets is its clear transdisciplinary and multidisciplinary aims, which are an integral part of its profile and substantiated in its ILOs. The programme combines these transdisciplinary and multidisciplinary aims with a substantive focus on theory, skills training, methodology and pays attention to the societal context and ethical-social aspects that are connected to archaeological research. In this way, the students receive a solid theoretical training and acquire relevant transferable skills to become capable and dedicated researchers and reflexive professionals. According to the panel, the ILOs are a very good representation of the programme's profile and aims. They demonstrate the research orientation that can be expected of a research master's degree

programme, and represent the level aimed for in the Dublin descriptors for the master's degree level. The panel suggests formulating an ILO that includes publishability of all or parts of the thesis as a programme goal.

The panel wants to commend the research master's explicit orientation towards societal responsibility, and its clear presentation of the transferable skills attained upon graduation. These should offer the graduates a good connection to the expectations of the professional and academic field and at the same time will help them articulate to prospective employers what skills they have acquired along with their discipline-related knowledge. Based on its findings, the panel considers graduates of the research master's programme well-equipped for a future career, both within archaeological research and outside academia, that requires the analytical, research and communication skills offered by the research master's programme.

Conclusion

Research master's programme Archaeology: the panel assesses Standard 1 as 'meets the standard'.

Standard 2: Teaching-learning environment

The curriculum, the teaching-learning environment and the quality of the teaching staff enable the incoming students to achieve the intended learning outcomes.

Findings

Admission, intake and programme language

The panel found that the research master's programme Archaeology has a good selection procedure in place that should be able to admit suitable candidates. Students with a bachelor's degree equivalent to European standards in Archaeology or an equivalent programme that includes archaeological courses (such as History, Classics, Heritage Studies or Natural Sciences) can request admission to the Research Master's programme. Applications are evaluated by the Admissions Committee, consisting of two staff members, assisted by a secretary. Motivation, proven English proficiency and study results are all taken into account. The required English proficiency level is an IELTS score of at least 7.0 and/or a TOEFL internet-based score of 100 and/or the acquisition of a Cambridge English: Advanced (CAE)/ Cambridge English: Proficiency (CPE) certificate with a score of 185. Prospective students should have an average grade of 7.5 (Dutch grading system) for their second and third bachelor's year; their thesis should be awarded at least an 8.0 (Dutch grading system) or the applicant should send in a research proposal of excellent quality.

The Admissions Committee bases its decision on these formal quality requirements and on its evaluation of a student's motivation letter, two reference letters, and either an interview or a supporting statement from the proposed supervisor, in those cases in which an applicant has already discussed his/her application prior to sending it in. If a supervisor has not yet been approached or identified, the Committee uses the motivation letter, reference letters and supervisor choice form to make the best possible match between a candidate and a supervisor prior to setting a date for an admission interview. If the preferred expertise is not present within the faculty, and no other match can be made, the candidate might be rejected. Occasionally, students who have already started on the one-year master's programme request a switch to the research master's programme, usually after having been "headhunted" by professors who identify a special talent. These applications are carefully considered and checked. If accepted, the courses already completed as part of the one-year master's programme can be included as electives in their research master's programme to a certain extent, to avoid unnecessary delay. When this option is considered, the Board of Examiners is always involved to check whether a student's individual study path still meets the requirements of the research master's ILOs.

According to the panel, the programme's admission procedures are in order. It appreciates that these procedures also leave some allowance for the Admissions Committee to sometimes look beyond just a good study record. In particular, the option to send in a very strong and promising research proposal combined with an interview allows students an option to demonstrate their potential that may not have been fully developed during their bachelor's degree programme. The students also appreciated this openness of the programme and the option to change between the two master's programmes of the Faculty of Archaeology, if appropriate. They felt, however, that these allowances could be better communicated, in particular in the information provided to students coming from degree programmes outside Leiden University. They considered the programme's admission procedure to be fair and clear. In particular, they appreciated the chance to discuss their application and research ideas with a proposed supervisor prior to being selected, allowing them to see whether they considered themselves a good fit as well.

The programme offers two enrolment moments: a September and a February start. Numbers fluctuate from year to year, with between 8 and 19 admissions per year for the period of assessment. Generally, the group of students starting in September is larger than that starting in February. At both starting moments, the Faculty organises an introduction period to familiarise the new students with the community and opportunities available. The research master's programme has an increasingly international intake. Students from a non-Dutch background, both EU and non-EU, rose from 21% of all admissions in 2015-2016 to 67% of all admissions in 2019-2020, averaging 43% of all admissions in the period of assessment. The programme clearly succeeds in attracting students from all over the world and could thus rightly claim to offer an international classroom to its student population, bringing the benefits of multicultural perspectives and multiple viewpoints.

This international classroom is facilitated by the programme's language policy. The research master's programme Archaeology adopted English as its language of instruction and carries an English programme name. This seems fully appropriate to the panel. Staff teaching in the programme often received their academic training outside of the Netherlands, or are of foreign nationality. To benefit from all expertise available in these fields of study, English seems a reasonable choice. The students may also reasonably expect to move abroad or work closely together with foreign colleagues in international collaborations, both during their studies and upon graduation. In academic research and archaeological fieldwork abroad, English is considered a *lingua franca* and widely used in daily communication. Many professional positions that graduates aim for upon graduation demand good communication and writing skills in English. Hence, the panel considers the programme's choice for English of added value for the quality of the teaching-learning environment and beneficial for the students' future career prospects.

Curriculum design and content

The research master programme is a two-year programme of 120 EC, which results in a research master's degree in Arts or Science; the appropriate degree is based on the candidate's personal programme and thesis research topic. This decision is left to the Board of Examiners, which carefully checks the individual study path of every student and determines the appropriate degree.

The programme's curriculum has been changed extensively since the previous assessment, the panel found. In recent years, research in Archaeology has changed considerably. The foci of the research debate have become more interdisciplinary, and the research master's programme embraced this new approach. To do justice to the Faculty's broad and rapidly evolving research, the programme abandoned its former fixed specialisations and introduced a new curriculum in 2018. In the assessment, the panel focussed on the new curriculum as this is now more relevant in terms of offering recommendations. It verified, however, that the old curriculum with the seven specialisations (namely: Transformation of the Roman World, Archaeological Heritage in a Globalising World, Religion and Society of Native American Cultures, Prehistoric Farming Communities in Northwest Europe, Bioarchaeology, Town and Country in the Mediterranean Region and the Near East, and Human Origins) was fit for the purpose, as also evidenced by the achievement level of the graduates (see Standard 4). The panel also found that the change of curriculum did not result in additional delays or connection problems for the students, as good guidance and guidelines were in place to help them to complete their studies during the transition period.

The new curriculum allows for a more personal study programme and also for changes to the curriculum being offered on an annual basis. The programme is able to include new research lines and projects more swiftly. As a result, the curriculum offers both a good grasp of the broad research expertise available at the Faculty of Archaeology and the option to push the boundaries of the available research in new directions within the Leiden research foci. The students can explore different fields of research, enabling them to acquire a completely new and interdisciplinary approach, leading to new insights and research niches that give them new opportunities to contribute to the body of knowledge. For example, they can immerse themselves in Classical and Mediterranean Archaeology, Prehistoric Archaeology, Heritage and Museum Studies, Computer-based Archaeology or Palaeobotany - or any combination of them. The panel approves of the new curriculum design; it seems particularly fitting for a research-oriented programme that tries to deliver the academics of tomorrow to closely follow and adapt to the changes in the research field.

The curriculum includes a general component, in which the main theoretical framework and skills are studied; and an individual specialisation, in which these skills are applied. The students follow four compulsory courses (25 EC in total), one of which is shared with students from the one-year master's programme. In addition, they follow a research seminar, which they choose out of a list of available options that reflect the Leiden research foci (10 EC). They also follow two electives (10 EC in total) and four modular courses (20 EC in total). Aside from these course-based components, they are required to take up two teaching assistantships (10 EC in total) and broaden their education by attending and participating in conferences and workshops (10 EC in total). The final curriculum component consists of the thesis trajectory (35 EC). The panel studied the curriculum and the wide offer of courses. It concludes that the curriculum delivers its aims: the students are offered specialisation, training in a set of relevant transferable skills, and engagement with various fields of archaeology, encountering and employing transdisciplinary and interdisciplinary approaches.

The compulsory courses teach a general theoretical framework and the skills to construct a research plan and research proposal. They also offer training in interdisciplinary approaches, theory and methods, which is included throughout the compulsory courses in an integrated manner. In the first year, the students learn to critically analyse and evaluate theories and methods in the *Advanced Archaeological Theory* course (5 EC). This course is taught to all master students at the Faculty from both the one-year and research master's programmes. In this way, cohort-building takes place while also making sure that all students obtain their respective degrees with a relevant and up-to-date theoretical framework. The ILOs and assessment for this shared course are tailored to the different needs of the two programmes. In addition to gaining knowledge about models and theory, research master students are expected to apply the taught models in broader contexts or to develop new models. The other compulsory courses are taught exclusively to research master students. They include the first-year thematic course *Advanced Themes in Archaeology* (5 EC), in which a global theme is discussed in different contexts and by different lecturers. In the second year, the students pay attention to more science-philosophical debates in the compulsory *Epistemology of Archaeology* course (5 EC). The panel found these compulsory modules fitting in terms of content, level and orientation, and appreciated the way in which theory, methodology and changes in the discourse of Archaeology were combined to give students a solid grounding in recent trends and insights into the field.

The students follow two research seminars during their two-year programme. In the first year, they all attend a general research seminar in which they work together on a joint project proposal, encouraging a more interdisciplinary perspective (10 EC). In the second year, they split up into smaller groups. They pick a research seminar out of a list of available options and work on a highly specialised topic, which may lead to an actual project proposal and eventually to funding. In this way, they are prepared for the competitive academic funding culture that also asks for valorisation of the research. The panel appreciates this setup, which allows them to practise writing proposals and papers while also engaging in group work and peer-feedback practices. This enhances cooperative skills and an interdisciplinary attitude, and urges them to reflect on what the value of their research is to society. It seems an excellent preparation for what lies ahead of those students who want to enter the academic job market and also teaches valuable transferable skills to those entering a career outside academia.

Alongside compulsory courses and the research seminar, the students follow four modular courses (20 EC in total) and two electives (10 EC in total). These modular and elective courses are open to both research master students and one-year master students. They allow for specialisation in a specific field of expertise, contribute to the students' understanding of current research and methodologies in different specialisms, and offer focused skills training related to their intended field of study. The difference between the two types of courses is found in the course objectives and assessment. The ILOs and assessments of the modular courses differ for the two groups of students. For research master students, these course ILOs specifically aim to incorporate an interdisciplinary and research-oriented element. Assessment is more directed towards the testing of analytical and comparative skills. Elective courses have shared ILOs and assessment for both master programmes and tend to be more directed towards a specific training, such as the training in lab skills. This is in line with the panel's expectations for a research master's degree. In its opinion, the programme strikes a good balance between individual freedom of choice and directed learning. If relevant to their individual study path, the students may also apply to take their electives elsewhere or to include an internship in their programme. When they opt for these alternatives to the regular Leiden courses, the alternative courses or assignments are carefully checked against the ILOs and the requirements of the degree level by the Board of Examiners.

The students confirmed that the ILOs for the research master's programme differed from those for the one-year master's course in both the *Advanced Archaeological Theory* course and the modular courses. They appreciated the chance to engage with students from the one-year master's programme, as it meant introducing new perspectives and approaches to spike their interests and fuel discussions. They also realised that by opening up modular courses to both student groups, more courses could be run simultaneously and a greater variety of topics offered. Nevertheless, they had some critical observations regarding the shared courses. At times, they felt that it was hard to get into courses of their choice as they had to compete with one-year master students for a place or that the difference in aims for the two master programmes was not transparent enough. In their view, *Advanced Archaeological Theory* that was now attended by all 80 master students of both the September and February intake of the two master programmes was too crowded for informed debate or interaction with the lecturer. The panel heard from staff members and the Programme Board that these concerns had also been raised internally and that they were currently looking into a good way to address them. The panel considers them, for now, as teething problems of a new curriculum.

The programme considers the acquisition of teaching skills a necessary preparation for an academic career, as many vacancies for academic staff cite teaching experience as a prerequisite. The panel concurs, but would define the usefulness of acquiring teaching skills more broadly. Teaching, as an experience and skill, is also relevant for a professional career: conveying knowledge in a didactic setting has its uses beyond the confines of the university. In the programme, each research master student must teach in at least two undergraduate courses. The first course is generally a first-year, undergraduate course, in which the research master student hosts the tutorials and gives feedback on assignments. They are coached by experienced PhD students in tandem with the lecturer. The second course may be picked by the student from a list, and should be more challenging; for instance, hosting a discussion session, developing a test or an assignment (and feedback), or giving a guest lecture. Again, they teach under the supervision of the course convenor.

The panel checked during the site visit with the students whether they felt sufficiently supported during their teaching assignments. They indicated that they were well-supported throughout the process. They were properly prepared and received instruction, training and feedback both during their teaching assignments and after finishing the assistantships. They considered their teaching assignments a challenging learning experience that some found easier to combine with other study obligations than others, as it is also a very personal learning journey. Bypassing personal talents in teaching, most felt that they were sufficiently coached and monitored. They also confirmed they knew whom to approach for help and objective advice when experiencing difficulties in their relationship with the course convenor or PhD student they worked with in a course. The panel concluded that the teaching assistantships are included in the programme with the aim of being a proper learning experience for the students. The

assistantships are also embedded in an institutional context that offers sufficient safeguards to facilitate the research students' own learning journey.

The requirement to attend and/or participate in workshops and conferences is considered a good way to develop academic and professional skills by the panel. The students choose their engagements individually and are advised by their supervisor. Their choices are then approved for credits by the Board of Examiners. The Archaeology Research School ARCHON offers an overview of optional workshops and conferences and encourages research master students to attend, and speak at, international conferences. The students can also attend workshops offered through the National Research School for Classical Studies in the Netherlands, OIKOS. They are strongly encouraged to attend international congresses in their field of expertise; funding is available for those presenting a paper or poster at an international conference. During the pandemic, many of these events were organised online. Attendance was thus still possible and encouraged by the programme, as it also offered an additional way for the students to interact with scholars and researchers since informal meetings at the Faculty had been reduced by the circumstances of the pandemic.

During the site visit, the panel also discussed an observation mentioned in the student chapter, namely that it is considered difficult to include an internship or to participate in an international exchange programme. Internships could now be included as part of the students' electives. In some cases, the Board of Examiners had agreed upon research internships. The panel confirmed that internships do not easily fit into the programme, however. This is considered partly a deliberate choice. The one-year master's programme offers a more directed allowance for internships, whereas the research master's programme is research-oriented first. The panel accepts this position.

With respect to international exchange, the Programme Board indicated that there are some collaborations with other programmes, for example with the University of Aarhus, that allow study abroad. In the last two years, the programme explicitly raised the possibility of going abroad during the admission interviews. This allowed the programme to identify early those students who hoped to go on exchange. Subsequently, individual study planning could take this wish directly into account. The students confirmed that going abroad was raised in the interviews, and this was considered very helpful. It also made them aware of the need to act upon the wish to go abroad at the start of their studies. To the panel, this seemed very helpful.

The Panel Board agreed, however, that it was a challenge to cater for international exchange within the research master's programme. The obvious route to go would be to build semi-formal exchange programmes with similar programmes and research institutes of international renown. The panel fully agrees and encourages steps in this direction, e.g., within the framework of the League of European Research Universities (LERU). It also favours the development of a network of semi-formal collaborations of mutual expertise not only with other faculties of Leiden University, but also with other universities in the Netherlands (for example, Delft University of Technology, the University of Amsterdam and the Vrije Universiteit Amsterdam seem to be especially suitable). Such collaborations would enhance the sustainability of the programme to keep up with future diversifying and specialising trends in Archaeology. To allow the students to benefit from such collaborations and opportunities, some rearrangement of the programme's schedule will be necessary to enable and encourage them to take courses at other faculties, other Dutch universities or abroad.

The panel heard that guidance and support in creating an individual study path are considered crucial, both by staff members and students. This is particularly true in respect to planning. The panel noted the hands-on approach of the Admissions Board in this respect. It wondered whether those students starting in February encountered additional challenges to their schedules as the compulsory courses run only once a year. As a result, their schedules seem in some aspects less coherent than those of the September intake. According to the students whom the panel met, which included one student who had started in February, this was true to a certain extent. The programme of those starting in September had a more natural flow. Nevertheless, because of the attention to individual planning, it was not considered a hindrance to successful completion. It just needed careful consideration. Naturally, doubling

up courses would be ideal, the students confirmed. They also saw advantages to the current setup, though. As the intake of research master students was already relatively small, they preferred sharing their compulsory courses with both cohorts to maximise community building and exchange of ideas. These observations satisfied the panel with respect to the February intake. It therefore concludes that the programme is feasible for both cohorts.

Thesis trajectory and career preparation

The thesis trajectory starts in the first year. The students are required to write an in-depth research proposal for which they review the existing body of knowledge, identify suitable methods and approaches, and present a research design (15 EC). In the second year, they conduct the research and write up the thesis (20 EC). The research should contain innovative and critical analyses of complex data, lead to new theoretical or methodical approaches, and relate to a broad scientific debate. The thesis is based on data derived from material culture, fieldwork, laboratory research, or historical sources and additional academic literature. Due to the pandemic, the students were by and large unable to conduct international fieldwork for their thesis. Some students decided to delay their studies, but many searched for alternative options, such as engaging in Dutch fieldwork projects or laboratory research. The students were appreciative of the way in which their supervisors and advisory bodies at the programme, e.g. the study advisor and programme director, tried to find good alternatives for them. The panel was pleased to hear that the programme took its responsibility in this matter seriously and tried to tailor plans to the students' wishes to the best of its abilities, while respecting the necessity to acquire its ILOs. In its view, the decision to wait the pandemic out was a personal choice of those students who opted for it.

When starting on the thesis in their second year, the students draw up a plan for the thesis together with their supervisor. This plan specifies the frequency and manner of supervision. The individual supervision is usually based on a progress report, submitted text and/or analyses of data. Deadlines for thesis planning are outlined in the programme prospectus, giving firm deadlines for the submission of the draft and final thesis. The prospectus indicates that in general, five meetings in which progress and feedback are discussed are considered sufficient. Staff members told the panel during the site visit that co-publishing with research master students is part of the procedure, as it is an essential step towards a career in research. All supervisors try to encourage their students to get something out of the thesis: a small book, article or report. The panel was pleased to conclude that aiming for publishability is an integral part of the supervisory practice. It advises the programme to consistently monitor the results of these endeavours; currently, publications based on thesis work are not consistently collected.

The student chapter stated that research master students are satisfied, on the whole, with the thesis supervision they receive. They find their supervisors to be open, approachable and enthusiastic. A minority would like more supervision for the thesis, either one-to-one or through additional group tutorials. During the site visit, the students and alumni indicated that these observations are partly rooted in personal preferences, of both the student and supervisor. In some cases, it also depends on the nature of the research undertaken or the research group in which their thesis project is to be conducted. In general, they felt that the supervisors were available for advice, and also for a motivational chat if necessary. They agreed, however, that in some cases, increasing the contact time between supervisors and students could arguably improve the study success as it might reduce the chance of students extending their studies to complete their thesis.

The panel also discussed the extensions needed to complete the thesis with the Programme Board and staff members. Prior to the site visit, it received the internal report of the 'Study success' project team. This report, drafted in 2016, responded to comments by the 2015 assessment panel, which had been critical of the study success rate and the amount of time taken to complete the thesis trajectory. The panel found the recommendations offered in the internal report sound. They focused on improving student confidence by offering a better integration of academic skills in the course work and improving feedback practices amongst the staff. They also outlined the need for a shared approach to thesis supervision by the staff members and for the introduction of thesis planning and set deadlines.

The panel could verify that many of these recommendations had been implemented in the new curriculum, such as the integration of academic skills in regular courses and guidelines for the organisation and planning of the thesis, including the introduction of deadlines. The staff confirmed that during the curriculum overhaul, they also had discussed supervisory and feedback practices. The Programme Board has seen improvements in both the students' and supervisors' attitudes towards the need for a timely finish, but the circumstances of the pandemic slightly obscure these findings. To the panel, it seems that the internal mechanisms to respond to recommendations and the will to further improve practices are evident. It feels the programme responded adequately to the recommendations of the 2015 panel. It trusts the Programme Board to monitor the results of these implementations, continue to consult with staff and students regarding their success, and act upon the findings.

The panel appreciates the programme's attention to job market preparation. Already in the induction period, the programme organises sessions in which the students are encouraged to think about their future and reflect on the requirements of any chosen path and on the skills and talents they possess ('Dream & Do sessions'). The University Career Centre, in cooperation with the Faculty of Archaeology, informs students further. It offers Monthly Career Times, a walk-in consultancy on themes such as CV-building and how to improve a LinkedIn profile. In addition, the Faculty organises an annual Leiden Archaeological Network and Career Event (LANCE), in which approximately 20 companies, both archaeological and otherwise, present themselves and provide information on developments in the professional field. Workshops are organised during this event, and alumni may give tips on obtaining a PhD position, for example. ARCHON, the National Research School for Archaeology, also organises some workshops related to career building. In particular, the students mentioned its workshop 'How to become a PhD' in the student report.

Staff, classroom interaction and research environment

The panel verified that the academic and didactic expertise of the staff meet the needs of the curriculum and are in line with the research-oriented character of the programme. Only associate and full professors are eligible to supervise and teach courses taught exclusively to research master students. All other courses are taught by lecturers with doctoral degrees, who are actively engaged in research. This should allow for sufficient interaction with senior members of the research community at Leiden, in the panel's opinion. It wants to point out, however, that it is important for young researchers to continue to be engaged and active in the programme. The field of Archaeology is rapidly evolving, due to the use of new techniques and the application of new methods of research. Young researchers and their projects accelerate these developments with their innovative ideas and new approaches. As a result, contact with their cutting-edge research is of great importance for the careers of research master students. The panel encourages the programme to continue actively involving more junior researchers, e.g. lecturers and university lecturers. It would be wise to make use of the expertise of postdoctoral researchers with exciting projects to integrate research master students in innovative and creative research, as long as their teaching credentials and didactic skills can be assured. This would widen the intellectual, thematic and methodological scope of the programme and help to cover new trends in the quickly developing field of archaeology.

The teaching staff at the programme is also acknowledged for their research expertise; they have received prestigious prizes, for example the Spinoza Prize and Academy Professor Prize, and have been invited and admitted to various learned societies, such as the Society of Antiquaries in London, the Royal Netherlands Academy of Arts and Sciences, Royal Holland Society of Sciences and Humanities (KHMW) (2015) and Academia Europaea. In the panel's view, their research credentials and honours received confirm the status of the Faculty of Archaeology as one of the most prestigious institutes of research in Archaeology.

The staff's combined research expertise is wide-ranging and covers all the necessary fields and disciplines that fall under the programme's remit. The chairs in Archaeology boost specialism in Near Eastern Archaeology and neolithization; ancient technology, crafts and materials, related to monumental architecture and human ecology in Bronze Age Greece and the East Mediterranean; Archaeometry, focused on the exploitation and use in ancient times of industrial minerals and ores; Archaeological Material Culture and Artefact Studies, with emphasis on prehistoric

technology, microwear analysis, experimental archaeology and the reconstruction of the cultural biography of objects; Archaeology of the Americas, with an emphasis on the deep history of the Caribbean and adjacent areas, settlement archaeology, material culture studies, and community engagement; Archaeology of early Europe, with special attention to the Bronze Age and (early) Iron Age; Landscape Archaeology and Cultural Heritage; Hominin Diversity Archaeology, with emphasis on the Middle Paleolithic, the Early Upper Paleolithic, and application of archaeological sciences to Paleolithic archaeology; Classical and Mediterranean Archaeology, with emphasis on the cultural dynamics of the Hellenistic-Roman world and Medieval and Early Modern Eurasia, specialising in the material culture of the 7th to 19th centuries.

The staff members' didactic qualifications are in line with the requirements. All staff members teaching in the research master's programme have a Basic Teaching Qualification (Basiskwalificatie Onderwijs; BKO) certification. As well as didactic skills, this certificate indicates a sufficient level of English, which must be at least level C1. The staff members also invest in their teaching abilities. One member of staff obtained a Senior Teaching Qualification (Seniorkwalificatie Onderwijs; SKO) certification and is a member of the Leiden Teacher's Academy. Education management courses are offered by the university to staff who manage programmes or complex courses. Eight staff members have followed the Academic Leadership course. In addition, a Teaching Leadership Course is offered each year, in collaboration with Delft University of Technology and Erasmus University, and one of the staff has taken this course.

Staff members also make use of the small teaching grants offered by Leiden University to innovate their teaching practice. For example, three staff members have been awarded a joint grant to make the most vulnerable artefacts available for education, by scanning them in 3D. This allows for an active learning experience in class, while also opening up the unique Leiden collections; these artefacts can now be analysed by a large number of people at the same time, without the risk of damage. The panel appreciates these clear signs of investment in the development of the staff's teaching practices. This positive impression was confirmed during the site visit. The panel met with dedicated and enthusiastic staff members, who were willing to innovate and act upon recommendations.

The Faculty of Archaeology and its research form the stimulating research environment in which the research master students receive their training. In 2018, the Faculty was reviewed according to the Standard Evaluation Protocol and was scored 'very good' (2) on all criteria. For research quality, the overall quality of the research falling within its remit qualifies as 2 (the research unit conducts very good, internationally recognised research) with clear elements of 1 (the research unit has been shown to be one of the most influential research groups in the world in its particular field). The panel finds that the organisational embedding of the programme in the Faculty with its very strong reputation for research is clearly beneficial to the setup of the programme, connecting students with a research environment that in many areas should be considered world-leading. It recommends that the Faculty of Archaeology maintains a regular dialogue with the Faculty of Humanities in order to share good practices, and explores whether extended collaboration between some of the Leiden University research master's programmes that engage with the past and material culture could be beneficial to their students' education.

Classes at the research master's programme are taught in the bespoke building of the Faculty of Archaeology, which opened in 2014. Prior to the assessment, the panel was given a virtual tour of the building and facilities. According to the panel, the facilities for students are absolutely state-of-the-art. Library facilities in Leiden are excellent. For those engaged in digital archaeology, a room of computers with specialised software for 3D modelling or simulations and large digitising tablets is available. The Faculty also houses well-stocked reference collections. These collections include zoological and botanical material and reference collections for Roman and Medieval pottery, flint tools, European flint types, and common rock types, including the main Dutch erratics. For archaeological fieldwork (excavations, prospecting and surveying, drilling research), the Faculty has its own equipment such as total stations, dGPS, handheld GPS, coring sets, drones and excavation sets. Finds can be stored in a closed and conditioned depot. For the processing of material, there are four specialised laboratories which cover Human Osteology, Zooarchaeology, Archaeobotany and Artefact Studies. For isotope and a-DNA studies, the students make

use of the facilities of the Vrije Universiteit Amsterdam. All of these laboratories have specialised facilities, such as microscopes, fume cupboards, ovens and work facilities for student projects. There are also splendid, well-equipped spaces for collaboration and discussion amongst students for project and group work.

During the site visit, research master students explained how the various laboratories and collections were used for educational and research purposes. They were enthusiastic about the available options and considered their facilities excellent. They felt appropriately supported and trained, also technically. When asked, they also explained the way in which they were trained to deal with the ethical aspect of archaeological and lab research. Attention was paid to ethics in the reading materials and in class. Special awareness was raised about working with and in other societies/countries with ethical constructs which diverge from the western norms familiar to the students (i.e. native peoples), especially in the preparation of fieldwork. In the laboratories, they were reminded not to carelessly share pictures. To the panel, it seems that research master students fully benefit from the excellent facilities available and make use of them in an appropriate way to conduct research.

Under normal circumstances, the shared workspace at the Faculty of Archaeology creates ample opportunities for interaction and short lines of communication between the staff and students. During the pandemic, the research staff was asked to work from home as much as possible. As a result, the building was less of its usual beehive. Research master students still followed most of their contact hours in class due to their low numbers. In specific cases, hybrid teaching was introduced to meet personal circumstances and/or demands. During the site visit, the students indicated that the faculty members were still easily accessible by digital means, even more so in the pandemic circumstances. There were still plenty of opportunities to discuss informally with staff members, as many talks and events were now organised in a digital setting.

The classroom interaction was generally experienced as highly personal and direct, and the technical and practical support as helpful and accessible. The students felt that they always needed to be well-prepared and eager to contribute. They considered the teaching-learning environment challenging and tailored to their needs and interests. They found the international classroom setting an asset. In general, they found the programme challenging, stimulating, engaging and demanding yet doable, for both the September and February intake. They were generally appreciative of the guidance received in the programme, including from the study advisor and counsellor. They mentioned in the student chapter that access to counselling services was sometimes difficult and could be improved. This was confirmed by the Programme Board during the site visit. The panel heard that these issues are currently being addressed, for example by freeing up more fte for these essential services. During the site visit, the students indicated that they also felt that the Programme Board was responsive to suggestions.

The student chapter also commented on the importance of community. It indicated that half of the students feel part of a community, whether that is their research group, the study association L.A.S. Terra, the Faculty as a whole, a community outside the Faculty, or a combination of them. For others, there is a need to do more to engage with the different communities in the Faculty. The panel learnt that the Faculty tries to organise many events to engage students, ranging from the Introduction period held twice a year for students enrolling in September and February, career events, talks, informal meet-ups, etc. During the site visit, the students indicated that they generally felt very involved and engaged with the programme and the academic community. They added to the reflection in the student chapter that feelings of disconnection may partly be the result of a communication problem. They considered the programme's organisational communication occasionally flawed. The panel encourages the Programme Board to look into the matter of communication and follow-up. It also strongly advises taking the background into account of those students who expressed feeling disconnected, which is currently unknown. It heard that many attempts are undertaken to include the February cohort and international students in the academic community, but the panel would like to be assured that students starting later in the year or coming from abroad do not have a disadvantage compared to their peers in this respect.

The panel met a positive attitude and 'can do' mentality among students and staff members in reaction to the situation caused by the pandemic, which it considered a credit to the programme. Research master students may still use the laboratories and research facilities necessary to conduct their thesis research as much as possible. They sometimes needed to adjust parts of their research, but felt that they were encouraged and supported in trying to find fitting solutions that both matched their ambitions, honoured the restrictions and met the ILOs. One of the regrets was that under the restrictions due to the pandemic, it was less common to collaborate with other universities and specialised labs, especially medically. Practical courses are still being held. To facilitate the necessary distance rules, groups have been split up and doubled up. In the laboratories, the students are assigned their own microscopes to avoid contamination and limit mobility in class. They felt very pleased with these adjustment rules that still allowed them to get as much access as possible to the facilities needed. They praised their staff members, who went out of their way to double up courses. The panel shares their acclaim for the staff's extraordinary dedication to their students.

Considerations

Based on its findings, the panel concluded that the research master's programme Archaeology offers its students a high-quality research environment with excellent facilities and good access to resources and staff. In its opinion, it seems that research master students fully benefit from the excellent facilities available and make use of them in an appropriate way to conduct research. The new curriculum introduced in 2018 is of the required standard for a research master's degree programme: it offers a coherent design, and the contents pay attention to interdisciplinary and transdisciplinary approaches, including recent trends in the research field. According to the panel, the programme's curriculum strikes a good balance between individual freedom of choice and directed learning that is in line with the requirements of a research master's degree with this design. Ethics, methodology and skills training are incorporated as integral parts of the students' training and also appropriately addressed in the relevant laboratory settings and in preparation for fieldwork, if applicable. The students complete a fully independent research cycle in their thesis trajectories.

As with all completely revised curricula, some teething problems are apparent. The panel verified that the programme is aware of student concerns regarding shared courses and is in the process of addressing them. It fully trusts the programme to continue improving its curriculum, also based on its findings. In its opinion, it seems that the internal mechanisms to respond to recommendations and the will to change practices are evident. It feels the programme responded adequately to the recommendations of the 2015 panel, notably with respect to the concern raised regarding the time spent on the thesis trajectory. Deadlines and guidelines have been introduced alongside raising awareness amongst staff and students of the need to complete it within the set time constraints.

The panel thinks the existing selection and admittance criteria strike the right balance. They aim to attract candidates with a strong academic record while also allowing for diversification of the intake. To the panel, diversity of intake is key for the creation of a rich teaching-learning environment. Hence, the choice of English as the language of instruction and an English programme name are considered appropriate and of added value. The staff members are adequately trained, in terms of both their teaching qualifications and language skills, to provide the necessary quality for establishing such a multicultural and international teaching-learning environment. The programme also benefits from their up-to-date research expertise and experience. The staff's diverse multidisciplinary and interdisciplinary research projects and interests feed into the curriculum and offer a challenging environment for students to realise the intended learning outcomes. The staff members are highly committed and easily accessible for students, offering valuable guidance and good support throughout their studies.

The panel appreciates the clear signs of investment in the development of the staff's teaching practices. This positive impression was also confirmed during the site visit. The panel met with dedicated and enthusiastic staff members, who were also willing to innovate and act upon recommendations. It wants to encourage the programme to continue diversifying its teaching staff in line with the quick developments in the field of Archaeology, including the involvement of young researchers alongside established senior members of staff. This would widen the intellectual, thematic and methodological scope of the programme and help to cover new trends in the quickly developing field

of archaeology. The panel ascertained that the programme rose to the challenges presented by the Covid-19 pandemic. It met a positive attitude and 'can do' mentality among the students and staff members in reaction to the situation, which it found a credit to the programme.

The panel verified that the programme is feasible for students starting in September or February. Good guidance and study planning lie at the heart of this success. The panel was pleased to hear that the Admissions Committee is trying to identify students wishing to go abroad, allowing for an integral planning and taking the students' wishes with respect to exchange seriously. Semi-formal collaborations with like-minded and research-oriented programmes, within both the Netherlands and Europe, may also be a good step forward to create an additional exchange of ideas and would help the programme to keep up with the trend towards specialisation and diversification in archaeology. To cater to collaborations like these, the programme schedule may need to offer some added flexibility to the students. The panel wants to offer two additional points of advice. First, the students commented on a frail sense of community amongst some of them. At the moment, it is unclear whether these unconnected students form a recognizable group (for example, international students or the February intake). The panel is convinced the programme tries to form a lively and supportive research community and noted many good initiatives to try to create and maintain a sense of community. It may be helpful to map those falling off the radar better in order to improve communication or target those groups. Second, the panel recommends listing publications based on thesis research to make the achieved level of publishability more visible.

Conclusion

Research master's programme Archaeology: the panel assesses Standard 2 as 'meets the standard'.

Standard 3: Student assessment

The programme has an adequate system of student assessment in place.

Findings

Assessment at the research master's programme Archaeology is regulated by Faculty policy, which is formulated for all educational programmes offered at the Faculty of Archaeology. This policy complies with the Teaching and Examination Regulations and the Rules and Guidelines of the Board of Examiners for the programme and includes transparent rules on academic misconduct. The examination policy is elaborated in an assessment plan for the programme, and test matrices and model answers are available, where relevant.

The panel studied these documents, spoke to representatives of the programme staff and students and with the Board of Examiners. In general, it gained a positive impression of the way in which assessment and quality assurance of assessment within the programme are organised. At the course level, the teachers are assigned a central role in assuring the quality of assessment; as content experts, they know the requirements of the relevant fields. Assessment is based on some leading principles that guarantee that every module is assessed and tested using multiple assignments or exams, preferably with different assessment forms. The panel verified that constructive alignment is realised throughout the testing methods, at both the course and programme level.

The panel found that the scheduling of assessments, the circumstances under which retakes are allowed and assignment deadlines are well-regulated, monitored and observed, as are compensation practices (if applicable). The panel was told during the site visit with the BoE that no cases of academic misconduct were reported for the research master's programme in the period of assessment. It verified that the procedures for monitoring and addressing potential cases are in order and regularly updated. In this way, a point raised by the 2015 assessment panel has been adequately addressed.

A variety of testing methods is used, for example group work, written exams and papers. These testing methods are considered suitable for the various course objectives. The programme shares one compulsory course (5 EC), four modular courses (20 EC) and two electives (10 EC) with the one-year master's programme. Only the electives share their course ILOs and assessment method. ILOs and assessment methods for the other courses differ, taking into account the difference of orientation of the two master programmes. This seems appropriate to the panel. It verified that the testing methods honour the aims of a research master's programme: in addition to essays and reports, discussion and presentation are included as forms of testing, in which the students are asked to present and defend their findings, based on evidence-based arguments. These testing methods are fitting to test their academic and research skills level, while also giving them the opportunity to demonstrate their abilities to express themselves independently, to present original ideas and showcase their analytic research skills and critical attitude. During the Covid-19 pandemic, assessment and feedback practices at the programme did not fundamentally change due to the relatively small-scale nature of the programme. In some cases, alternative facilities needed to be sought or group presentations needed to be given in an online setting, but these changes did not fundamentally change the way in which the assignments were assessed.

Staff members share good practices, and assignments, tests and model answers are reviewed by multiple staff members prior to being set as an examination. A 'Tips for Testing' manual, developed by the Faculty of Humanities, is available to examiners within the Faculty of Archaeology to aid testing design. Calibration sessions are organised regularly throughout the year, and module assessment is structurally reviewed annually at the programme level. The students considered the assessment fair, the policies and regulations transparent, and the employed testing methods suitable. Communication regarding the testing methods is well organised: the e-study guide clearly outlines all course aims and testing methods. At the start of a new module, the teachers draw attention to the testing methods, assignments and deadlines. The students indicated that they are pleased with the oral and written feedback received. They praised the staff members for their constructive advice based on the submitted work.

Thesis assessment

The criteria for thesis assessment are transparent, the panel concluded. Assessment includes research and content-related criteria, formal aspects and the learning process. Content-related criteria are the research design, the methodology, the presentation of the data, the analysis and interpretation of findings, and the argumentation and conclusions. The formal aspects include the structure of the thesis, language proficiency and layout, including tables and figures. The learning process looks at the degree of the student's independence, the way in which comments and remarks are processed, and the time frame in which the student has written the thesis. These criteria form the basis of the assessment form that is used to grade the thesis. The Board of Examiners has developed benchmarks that weigh the various aspects of a thesis, ensuring consistency of practice.

Every thesis is assessed by two examiners independently. The first examiner is the student's supervisor. The second examiner is appointed by the Board of Examiners and is always based in a different research group from the first examiner. The second examiner is not involved during the thesis writing process. Both examiners fill in their respective forms independently from each other and have no contact whilst assessing the thesis. The secretary of the BoE collects these forms to create a record of the independent assessments. Afterwards, the examiners discuss their assessments and together decide upon the final assessment and thesis grade, which is reported on a third form. This third form is shared with the student and is the basis for an oral feedback session. According to the panel, these procedures ensure independence of assessment. The assessment forms reflect this pragmatic approach; they reflect all aspects and criteria and give a calibration scale, resulting in a final grade.

The panel concluded that in general, these criteria and procedures result in solid and reliable assessments in terms of the assigned final grade. Based on its evaluation of the thesis sample, it found that the final assessments were in line with its own assessments. The transparency of assessment was not always obvious, however. The panel noted that some assessments seemed to be based primarily on formal aspects, when qualitative feedback was scarce. In many cases the assessments of the first and second examiner differed, with usually the first examiner being more

positive. In some cases, there was a greater than 1.0 point grade difference; studying the full list of available theses for the period of assessment revealed that this was the case in 10 out of 42 theses. To the panel, this seemed a high number. The BoE is aware of this situation and told the panel that they always looked into grades that differed by more than 1.0 point. They explained that their investigation had shown that the difference was partly the result of the fact that the learning process was part of the assessment. As the second examiner was not involved in the thesis supervisory trajectory, (s)he would be unable to take this element truly into account in the assessment. This is also the reason why an informed discussion underlies the setting of the final grade, allowing the two examiners to divert from simple averaging of their individual assessments; the procedures allow the two examiners to compare notes and discuss the way in which the learning process affects the final assessment. To the BoE, the fact that the panel in its review for the assessment agreed with the final grades again confirms that the informed discussions between the examiners have the desired effect. The panel concurred with this observation.

In addition, the BoE said that the assessment practices had been extensively discussed over the last years, resulting in more and more shared practices amongst examiners and continuous adjustments to both the grading criteria and procedures. More detailed marking criteria had been created and calibration sessions organised in reaction to recommendations formulated by the 2015 assessment committee. According to the BoE, the effects were visible, and large grade differences were becoming increasingly rare; in 2018, 90% of grade differences between the first and second examiner were within the 1.0 point limit. The BoE explanation reassured the panel. It indicates that the BoE closely monitors grade discrepancies and takes the necessary actions to minimize any unwanted differences in grading practices.

The students and alumni indicated that the oral feedback helped them to understand their final grades. To increase the transparency for external parties and the students, it may be helpful to pay attention to the way in which the third assessment form is designed and filled in by the two examiners. In some cases in the sample, the third form contained a rationale and justification for the final assessment. These were considered very helpful by the panel and represent a best practice in its view. It recommends allowing for more free text evaluation on the current form, to justify the grade given in more detail – especially on the contents and argumentation of the thesis as the current form tends to entail a focus on formal aspects. The panel recommends that the Faculty of Archaeology collaborate with the Faculty of Humanities in this respect, and learn from each other's practices. A concrete suggestion for the third form is to introduce a qualitative reflection on the publishability of all or parts of the thesis, potentially suggesting suitable media or platforms, to highlight to the students which part of their research is most promising or most likely to serve as a basis for publication.

The panel noted during the site visit that there seems to be some internal confusion about the 30,000 word limit for theses. The students seem to think that a thesis should be at least 30,000 words, the course description for the theses implies that this should be considered a maximum limit, and the BoE suggested to the panel that the 30,000 word limit is foremost a guideline – as practices within the various disciplines differ. The panel understands this last argument and agrees that quality should always be the basis for any assessment. It is still in favour of a 30,000 word limit. Such a limit would allow for a strict criterion for grading (with a stringently defined allowance for overrunning) and, potentially, awarding distinctions. Enforcing a word limit may encourage the students to finish in time, which increases their chances for a PhD position in an international setting. Moreover, a word limit will, in many cases, force the students to write more succinctly and improve the presentation of their findings. The panel leaves it to the Faculty of Archaeology to negotiate its position in this matter.

The panel has a concrete suggestion regarding the use of the grade descriptors and the grading scale. It suggests adjusting the current grade description for the highest grade of 10.0. Currently, a 10.0 is awarded when a work is 'more than excellent'. To the panel, this seems unclear and raises the question of who could be the judge of this level, which also may explain why this grade is never used by examiners. It would like to encourage the staff to make use of the full range of the grading scale in awarding grades, including the highest grade; first-class work may in exceptional cases be awarded the highest possible grade, as is common in international grading practice. This is

relevant for research master students, as they need to compete internationally for PhD positions. The BoE indicated that staff members are aware of this last argument. It will continue to raise the matter in staff meetings.

Boards of Examiners

Assessment in the programme takes place under the supervision of the Board of Examiners (BoE) for the bachelor, one-year master and research master programmes in Archaeology. The BoE consists of five members, four experienced examiners with a permanent position within the Faculty, and one external member who is also an assessment expert. It is supported by a secretary and works according to closely observed procedures. It meets at least every six weeks to discuss cases of doubt and non-routine requests. The panel heard that the BoE is visible within the educational organisation, for example, through explanations provided during the introduction period, the appointment of examiners for each course, and its analyses of assessment forms and grades. In general, the BoE feels acknowledged and rewarded for its work. Its members pointed out that the secretary for the BoE was highly valued by all of them. She is considered essential for their smooth operation. The BoE felt that she is currently not fairly compensated in time for the ever-increasing workload and asked for further compensation for the secretary. The panel supports this request and was pleased to hear that the Faculty of Archaeology was already reviewing it.

The panel is positive about the work of the BoE, which has a positive effect on the quality of assessment within the programme. Since the 2015 assessment, the Faculty has invested in the professionalisation of its assessment and quality assurance systems. The BoE fully embraced this improvement-oriented direction. It invested in its own members' assessment credentials by urging them to follow courses on quality assurance and assessment practices. These members now take the lead in discussions with staff members regarding assessment and the need for a quality culture. This attention has had the required effects, the panel noted with appreciation. Many procedures have been revised, and guidelines set up, and the staff seems fully on board with the direction taken.

The panel verified that the BoE adequately handles its legally mandated tasks, including regularly reviewing courses and their assessments in their entirety. Additionally, it approves fieldwork, internships and individual study projects, assigns thesis supervisors and second (and third) examiners, organises calibration sessions with the staff for thesis grading, and checks graded theses and regular papers. It also carefully checks every student's individual programme prior to awarding the appropriate degree: either a research master's degree as Master of Arts (MA) or as Master of Science (MSc). Its practices and rules related to academic misconduct are in line with common standards as regulated in Faculty policy. It also closely monitored assessment during the circumstances caused by the Covid-19 pandemic, although no major changes were needed within the relatively small-scale programme setting of the research master's programme.

Considerations

The panel noted that over the period of assessment, the Faculty of Archaeology professionalised in terms of its system of assessment and assessment practices. It was pleased to note that in this process the Faculty adopted guidelines such as the 'Tips for Testing' manual provided by the Faculty of Humanities, a sharing of information that indicates a raised awareness of the need for a shared quality culture within the university. The Board of Examiners has been key in taking the lead in the professionalisation of the assessment culture at the Faculty. The panel verified that the BoE fulfils its role in the quality assurance of assessment very well, and has the checks and balances in place to monitor and assure the quality of the assessment and the degree level. It supports the BoE's request for added time compensation for the Board's secretary. It concludes that the programme has a sound assessment system, which enables a verifiable way of guaranteeing a good fit between the module objectives, testing methods and degree level. It praises the solid implementation of constructive alignment within the programme, which ensures that all ILOs are assessed within the curriculum. The variety of assessment methods used in the programme is in line with the aims and orientation of a research master's degree.

The thesis assessment procedure is well-designed, employing two academic examiners who assess the thesis independently and seek consensus afterwards. These procedures and the existing thesis assessment forms, which

make use of detailed grading criteria, seem to function well. The panel suggests two adjustments to the current third assessment form, which is shared with the students. The first is to increase the transparency of the assessment by including some additional free text, which ideally should contain the arguments for the justification of the grade. The second is to include a comment on the publishability of all or parts of the thesis. In addition, the programme is advised to communicate more clearly to students about what is intended by the current thesis word count, and encouraged to consider a strict application of the word limit. The use of the full range of the grading scale may be explored. The panel insists on adjusting the current grade descriptor for the highest grade, as the current level aimed for is unfeasible.

Conclusion

Research master's programme Archaeology: the panel assesses Standard 3 as 'meets the standard'.

Standard 4: Achieved learning outcomes

The programme demonstrates that the intended learning outcomes are achieved.

Findings

To assess the quality of the level achieved in the research master's programme Archaeology, the panel studied a sample of seventeen theses. Fifteen were selected from a list containing all finished projects by students who graduated between 2016 and 2019. Two recent theses were added to this selection to represent the work produced by graduates who finished in 2020 during the Corona pandemic. For more information on the selection, see appendix 4.

Within the selection, the panel tried to cover all research within Archaeology as offered to research master students. Although the programme no longer has any official specialisations in the new curriculum, all theses in the sample were still written within the context of the old curriculum with seven specialisations. Therefore, the panel took care to assure that all former specialisations were represented in the sample, met the ILOs and made sure that all the research foci of the Faculty were represented. As a result, the sample differed greatly in terms of chosen method, region of study, time period and approach, showing the wide variety of approaches pursued at the Faculty and the richness of the available research strands. Subjects included, for example, isotopic analyses to identify migration streams in southern Italy in the 6th-5th century BC, a study of spatial patterns and ceramic finds to study the agricultural settlements in the Late Islamic period (1500-1950), a study of Early Medieval cremation burials in their context, and research into the conceptualisation of the Caribbean archaeological record.

The panel recognised in these topics and research angles the uniquely wide research expertise available in Leiden at the Faculty of Archaeology, and also found that the theses fitted the Faculty's research themes. In its view, the variety of topics and approaches bears witness to the inspiring research environment available to the students. The sample convincingly demonstrated that they live up to the ambitions outlined in the intended learning outcomes: graduates have acquired advanced knowledge at the master's level in the necessary disciplines which provide the theoretical, methodological and practical aspects of research in archaeology. Theses written by recent graduates embody all elements of the research cycle: from the formulation of a research question to the output of a written report that offers sufficient grounds for publication upon reworking into a suitable format. The panel found that the research projects are generally well-designed, but noted that the weaker theses in the sample lacked focus in the formulation of the research question and the execution of the chosen research method. This seems amendable as part of the supervision process, as suggested above (see Standard 2).

The panel concluded that the graduates have amply proven that they can master an independent research project of good academic quality and are able to convey their findings in a suitable manner at the level expected for a research master's programme. This demonstrates that the programme realises a good fit between the students'

qualities and its aims. The panel verified that many of the best theses offer a good foundation for further research at the postgraduate level, offering new perspectives and intelligent, refreshing research. The publication record of the graduates confirmed this conclusion: the research presented in the master theses resulted in publications in international journals, such as *Heritage*, *World Archaeology* and the *Journal of Archaeological Science: Reports*, and to contributions in edited volumes.

The panel's positive impression of the achievement level is also confirmed by the performance of the programme's alumni. Graduates typically find a job in line with their degree. From the Faculty's extensive and very informative alumni data, the panel learnt that a high proportion of all graduates (on average 65%) find a PhD position; this shows that the programme meets its claim that it trains the next generation of researchers in Archaeology. Graduates who did not continue in academia found positions in a wide range of fields. Notably, many opted for a career as an heritage consultant or continued in a relevant traineeship. Alumni praised the programme and the skills acquired for the advancement of their careers, and also commended the support received from staff members. They found the acquired skills relevant for their current occupations, notably their ability to work independently and their time-keeping and planning skills. They think that the programme provided them with the necessary knowledge and skills to be successful, both in academia and in a professional career. Alumni who continued in academia compared their skills favourably to those of their peers.

Considerations

Graduates of the research master's programme Archaeology successfully achieve the ILOs at the intended level. The panel concluded that they have acquired advanced knowledge at the master's level in the necessary disciplines and complete the full research cycle in an independent manner. In this way, the graduates convincingly meet the additional criteria for a research master's programme. To the panel, this demonstrates that the programme realises a good fit between the students' qualities and its aims. Alumni are in demand and find suitable employment. In particular, the high percentage of students continuing in PhD positions (65%) is notable; those who did not continue in academic research often pursued a career as a heritage consultant or were hired in a traineeship. Alumni consider their training beneficial for their current work environment. These testimonies strengthen the panel's positive impression of the programme's achievement level. It considers the high employability rate in academia as well as the positive attitude of students and alumni regarding the skills acquired additional evidence of the programme's good success rate, fitting for a research master's degree.

Conclusion

Research master's programme Archaeology: the panel assesses Standard 4 as 'meets the standard'.

GENERAL CONCLUSION

The panel assessed standards 1, 2, 3, and 4 of the research master's programme Archaeology as 'meets the standard'. It hereby took into account the additional aspects for research master's programmes as included in the *Specification of Additional Criteria for Research Master's Programmes*. Based on the NVAO decision rules regarding limited programme assessments, it therefore assesses the programme as 'positive'.

Conclusion

The panel assesses the *research master's programme Archaeology* as 'positive'.

APPENDICES

APPENDIX 1: INTENDED LEARNING OUTCOMES

Learning Outcomes of the Research Master Program in Archaeology of Leiden University

Graduates of the programme have attained the following learning outcomes:

The theoretical context

The graduate:

1. is, like the Master Archaeology, well aware of the current research problems and themes, and their history;
2. is, like the Master, within their chosen track as well as on a more general archaeological level, capable of placing research questions and relevant related archaeological data within a scientific, philosophical and theoretical framework and reflect critically upon it;
3. in addition, is capable of applying theories and methods in a broader discipline transcending academic framework and in new, multidisciplinary contexts.

Occupation specific knowledge and understanding

The graduate:

1. possesses, like the Master, thorough knowledge and understanding of the theories and methods used in their chosen track and as such is able to interpret any relevant archaeological data.

Applied archaeological skills and methods

The graduate:

1. possesses, like the Master, thorough knowledge and understanding of the methods and techniques required for field and laboratory research for their chosen track and has the analytical skills to process data obtained from fieldwork;
2. in addition, is capable of developing and applying original, creative ideas within their own archaeological research;
3. in addition, is capable of independently planning and executing this research/fieldwork with an original component within their own track, including adequately managing organizational, legal, logistical, social and administrative aspects, and efficiently using available time and resources.

Multidisciplinary skills

The graduate:

1. is, like the Master, capable of critically considering developments in adjoining alpha-, beta- and gamma disciplines regarding possible applications within their chosen specialization hence placing their own research/fieldwork within a multidisciplinary framework and is, in addition, capable of stepping out of the box of their own track to combine alpha-, beta- and gamma applications in a creative and confident way.

Academic skills

The graduate:

1. is, like the Master, capable of gathering literature on a particular archaeological subject or topic using both traditional and modern (digital) techniques and selecting this literature on the basis of relevance and quality;
2. is, like the Master, capable of analysing archaeological literature in terms of data- and/or artefact interpretation and arguments and conclusions, and of assessing the interpretative and argumentative merits of said literature;
3. is, like the Master, capable of analysing and interpreting archaeological data using modern (digital) techniques and instruments;

4. is, like the Master, capable of adequately applying and integrating graphical footage into a presentation so as to clarify and/or strengthen their argumentation (and vice versa);
5. is, like the Master, capable of taking criticism in a constructive and business-like manner and where necessary to revise their own previous position and is, in addition, capable of criticizing the research of others in the same way;
6. in addition, is capable of writing an academic report on their own research/fieldwork in academic English or another relevant language within the specialization, ultimately culminating in a substantiated personal position and recommendations for further research, with the potential of being published;
7. in addition, is capable of presenting a clear oral report to a public of international specialists and peers, in at least academic English or another relevant language within the specialization;
8. in addition, is capable of functioning independently in academic networks or teams.

Social orientation

The graduate:

1. like the Master, has the ability to convey research data and -interpretations together with corresponding theoretical and methodological approaches to an audience of non-specialists, both orally and in writing;
2. in addition, is capable to reflect on the ethical-social aspects of Archaeology and is able to debate the latest archaeological developments and their significance to society, the field of Archaeology and their own research, and can communicate and discuss this from an international globalizing perspective;
3. in addition, is capable of assisting archaeological education at Bachelor level, under supervision of the lecturer and primarily in the education of academic and study skills (tutorship).

APPENDIX 2: OVERVIEW OF THE CURRICULUM

Year 1

Advanced Archaeological Theory	compulsory	5
RMA Thematic course: Advanced Themes in Archaeology	compulsory	5
Research seminar 1: general	compulsory	10
Conferences and Workshops ARCHON		5
Teaching Assistance 1	compulsory	5
RMA Thesis Archaeology year 1 proposal		15
Modular course 1, pick from list		5
Modular course 2, pick from list		5
Elective		5

Year 2

RMA Thesis Second Year thesis		20
Epistemology of Archaeology	compulsory	5
Teaching Assistance 2	compulsory	5
Conferences and external workshops (e.g. offered by ARCHON)		5
Research seminar 2, <i>this year we offer</i> :		10
Heritage and Museum Studies		
Archaeology of Hominin Diversity		
The Deep History of European Societies		
Archaeology of Marginal Landscapes		
Modular course 3 pick from list		5
Modular course 4 pick from list		5
Elective		5

Electives:

Advanced Masterclass: The Classical Body		5
Internship: relevant fieldwork or lab work		5
Any course from a master programme (internal or external)		5
Optional (extra) Leiden Leadership Programme		20

MA courses offered as modular course

Advanced studies on the Human Planet
Advanced Studies in How Deep History Shaped the Human World
Advanced Studies in How globalization shaped the human world
Advanced Studies in Key Developments in European Prehistory
Advanced Studies in Neolithisation in the Near East
Advanced Archaeology of Early Roman Imperialism
Advanced Studies in Mobility, Interaction and Colonialism in the Americas
Advanced Urban Archaeology
Advanced Current Issues in the Archaeology of the Frontier Regions of the Roman Empire
Advanced Studies in the Archaeology of the Assyrian Empire
Advanced Archaeology of the Crusades
Advanced Studies in Diversities of Doing Greek: 'Hellenisation' and 'Hellenism' in Ancient Eurasia
Advanced Current Issues in the Archaeology of the Americas
Advanced Critical Museology
Advanced Community Heritage and Global Challenges
Advanced Archaeological Site Management
Advanced current Issues in Archaeological Science

APPENDIX 3: PROGRAMME OF THE ONLINE VISIT

AS	Asian Studies
MES	Middle Eastern Studies
CAC	Classics and Ancient Civilizations
LAS	Latin American Studies
AfS	Africa Studies

Dates	Preparatory meetings	Participants
10 December 2020	Preparatory panel meeting (15:30-17:00)	Full panel
18 January 2021	Preparatory panel meeting (10:00-12:00; including office hour)	Full panel

Day 1: Wednesday, February 3

Area Studies & Classics and Ancient Civilizations, Faculty of Humanities

Starts at	Ends at	Activity	Participants	
08:30	09:45	Internal panel meeting (panel only)	Full panel	
09:45	10:00	Break		
10:00	10:30	Meeting with Faculty Board Humanities	Full panel	
10:30	11:00	Meeting with programme chairs FGW	Full panel	
11:00	11:15	Break		
11:15	11:45	<p>Meeting with Programme Board AS and MES</p> <p>Panel: Prof.dr. Jens-Uwe Hartmann (Munich) Dr. Gerhard Anders (Edinburgh) Prof.dr. Thomas Meier (Heidelberg) Prof.dr. Helena Houvenaghel (Utrecht)</p> <p>Notulist: Dr. Irene Conradie (Qanu)</p>	<p>Meeting with Programme Board CAC</p> <p>Panel: Prof.dr. Kristoffel Demoen (Ghent) Em.Prof.dr. John Healey (Manchester) Yannick de Raaff, MA (Groningen)</p> <p>Secretary: Dr. Els Schröder (Qanu)</p>	Parallel sessions
11:45	12:15	Internal panel meeting (panel only)	Full panel	
12:15	13:15	Lunch		
13:15	13:30	Internal panel meeting (panel only)	Full panel	
13:30	14:15	<p>Meeting with staff AS and MES</p> <p>Panel: Prof.dr. Jens-Uwe Hartmann (Munich) Em.Prof.dr. John Healey (Manchester) Prof.dr. Thomas Meier (Heidelberg) Prof.dr. Helena Houvenaghel (Utrecht)</p> <p>Notulist: Dr. Irene Conradie (Qanu)</p>	<p>Meeting with students CAC</p> <p>Panel: Prof.dr. Kristoffel Demoen (Ghent) Prof.dr. Thomas Meier (Heidelberg) Yannick de Raaff, MA (Groningen)</p> <p>Secretary: Dr. Els Schröder (Qanu)</p>	Parallel sessions
14:15	14:30	Internal panel meeting (panel only)	Full panel	

14:30	15:15	Meeting with students AS and MES Panel: Prof.dr. Jens-Uwe Hartmann (Munich) Dr. Gerhard Anders (Edinburgh) Yannick de Raaff, MA (Groningen) Notulist: Dr. Irene Conradie (Qanu)	Meeting with staff CAC Panel: Prof.dr. Kristoffel Demoen (Ghent) Em.Prof.dr. John Healey (Manchester) Prof.dr. Thomas Meier (Heidelberg) Secretary: Dr. Els Schröder (Qanu)	Parallel sessions
15:15	15:30	Break		
15:30	17:00	Internal panel meeting AS, MES, CAC (panel only)		
17:00	17:45	Alumni AS, MES, CAC		
17:45	18:15	Internal panel meeting wrap up day 1/preparation day 2 (panel only)		

Day 2: Thursday, February 4

Latin American Studies & African Studies, Faculty of Humanities

Starts at	Ends at	Activity	Participants
09:00	09:15	Internal panel meeting (panel only)	
09:15	09:45	Meeting with Programme Board LAS Panel: Prof.dr. Helena Houvenaghel (Utrecht) Prof.dr. Kristoffel Demoen (Ghent) Em.Prof.dr. John Healey (Manchester) Yannick de Raaff, MA (Groningen) Notulist: Dr. Irene Conradie (Qanu)	Meeting with Programme Board AfS Panel: Dr. Gerhard Anders (Edinburgh) Prof.dr. Jens-Uwe Hartmann (Munich) Prof.dr. Thomas Meier (Heidelberg) Secretary: Dr. Els Schröder (Qanu)
09:45	10:00	Internal panel meeting (panel only)	
10:00	10:45	Meeting with students LAS Panel: Prof.dr. Helena Houvenaghel (Utrecht) Prof.dr. Kristoffel Demoen (Ghent) Em.Prof.dr. John Healey (Manchester) Yannick de Raaff, MA (Groningen) Notulist: Dr. Irene Conradie (Qanu)	Meeting with staff AfS Panel: Dr. Gerhard Anders (Edinburgh) Prof.dr. Jens-Uwe Hartmann (Munich) Prof.dr. Thomas Meier (Heidelberg) Secretary: Dr. Els Schröder (Qanu)
10:45	11:00	Break	
11:00	11:15	Internal panel meeting (panel only)	
11:15	12:00	Meeting with staff LAS Panel: Prof.dr. Helena Houvenaghel (Utrecht) Prof.dr. Kristoffel Demoen (Ghent) Em.Prof.dr. John Healey (Manchester)	Meeting with students AfS Panel: Dr. Gerhard Anders (Edinburgh) Prof.dr. Jens-Uwe Hartmann (Munich) Prof.dr. Thomas Meier (Heidelberg) Yannick de Raaff, MA (Groningen)

		Notulist: Dr. Irene Conradie (Qanu)	Secretary: Dr. Els Schröder (Qanu)	
12:00	12:15	Internal panel meeting (panel only)		
12:15	13:15	Lunch		
13:15	14:00	Internal panel meeting (panel only)		Full panel
14:00	14:20	Meeting with all chairs + representatives BoE FGW - Fraud procedures - Faculty support - Quality assurance policies		Full panel
14:20	14:30	Internal deliberation (panel only)		Full panel
14:30	14:50	BoE AS and MES - Assessment strategies - Improvements/Changes - Appointment examiners - Final check diploma Panel: Prof.dr. Jens-Uwe Hartmann (Munich) Dr. Gerhard Anders (Edinburgh) Prof.dr. Thomas Meier (Heidelberg) Prof.dr. Helena Houvenaghel (Utrecht) Notulist: Dr. Irene Conradie (Qanu)	BoE CAC - Assessment strategies - Improvements/Changes - Appointment examiners - Final check diploma Panel: Prof.dr. Kristoffel Demoen (Ghent) Em.Prof.dr. John Healey (Manchester) Yannick de Raaff, MA (Groningen) Secretary: Dr. Els Schröder (Qanu)	Parallel sessions
14:50	15:10	BoE LAS - Assessment strategies - Improvements/Changes - Appointment examiners - Final check diploma Panel: Prof.dr. Helena Houvenaghel (Utrecht) Em.Prof.dr. John Healey (Manchester) Yannick de Raaff, MA (Groningen) Notulist: Dr. Irene Conradie (Qanu)	BoE AfS - Assessment strategies - Improvements/Changes - Appointment examiners - Final check diploma Panel: Prof.dr. Kristoffel Demoen (Ghent), Dr. Gerhard Anders (Edinburgh) Prof.dr. Jens-Uwe Hartmann (Munich) Prof.dr. Thomas Meier (Heidelberg) Secretary: Dr. Els Schröder (Qanu)	Parallel sessions
15:10	15:30	Break		
15:30	16:00	Internal panel meeting BoEs (panel only)		Full panel
16:00	16:45	Alumni LAS and AfS		Full panel
16:45	18:00	Internal panel meeting LAS, AfS (wrap up day 2) (panel only)		Full panel

Day 3: Friday, February 5
Archaeology, Faculty of Archaeology

Starts at	Ends at	Activity	Participants
09:00	09:30	Final interview with management all programs / Faculty Board / academic directors of institutes FGW	Full panel
09:30	10:00	Internal panel meeting (panel only)	Full panel

10:00	10:45	Meeting with faculty management Archaeology + Programme Board + chair admission board and coordinator of studies		Full panel
10:45	11:00	Break		
11:00	11:30	Meeting with students Archaeology		Full panel
11:30	11:45	Internal panel meeting (panel only)		Full panel
11:45	12:15	<p>Meeting with staff Archaeology</p> <p>Panel: Prof.dr. Kristoffel Demoen (Ghent), Prof.dr. Thomas Meier (Heidelberg), Prof.dr. Jens-Uwe Hartmann (Em.Prof.dr. John Healey (Manchester) Munich)</p> <p>Notulist: Victor van Kleef, MA (Qanu)</p>	<p>Meeting with Board of Examiners Archaeology</p> <p>Panel: Prof.dr. Helena Houvenaghel (Utrecht) Dr. Gerhard Anders (Edinburgh) Yannick de Raaff, MA (Groningen)</p> <p>Secretary: Dr. Els Schröder (Qanu)</p>	Parallel sessions
12:15	12:30	Internal panel meeting (panel only)		Full panel
12:30	13:30	Lunch		
13:30	14:00	<p>Presentation facilities/research opportunities Preparation: Film 3D tour FdA</p> <p>https://www.youtube.com/watch?v=5lL4bnpS4qo</p> <p>Panel: Prof.dr. Thomas Meier (Heidelberg) Em.Prof.dr. John Healey (Manchester) Prof.dr. Jens-Uwe Hartmann (Munich) Yannick de Raaff, MA (Groningen)</p> <p>Notulist: Victor van Kleef, MA (Qanu)</p>	<p>Alumni Archaeology</p> <p>Panel: Prof.dr. Kristoffel Demoen (Ghent) Prof.dr. Helena Houvenaghel (Utrecht) Dr. Gerhard Anders (Edinburgh)</p> <p>Secretary: Dr. Els Schröder (Qanu)</p>	Parallel sessions
14:00	15:00	Internal panel meeting Archaeology (wrap up) (panel only)		Full panel
15:00	15:15	Break		
15:15	15:45	Preparations final interview (panel only)		Full panel
15:45	16:15	Final interview with Faculty management and programme FA		Full panel
16:15	16:30	Break		
16:30	17:30	Deliberations panel, formulating preliminary findings and conclusions (panel only)		Full panel
17:30	18:00	Feedback of preliminary findings FA / FGW		Full panel

APPENDIX 4: THESES AND DOCUMENTS STUDIED BY THE PANEL

Thesis selection

To assess the quality of the level achieved in the research master's programme Archaeology, the panel studied a sample of seventeen theses. Fifteen were selected from a list containing all finished projects by students who graduated between 2016 and 2019. Two recent theses were added to this selection to represent the work produced by graduates who finished in 2020 during the Corona pandemic.

Although the programme has no longer any official specialisations, all theses in the sample were still written within the context of the old curriculum with seven specialisations. Therefore, the panel took care to assure that all former specialisations were represented in the sample, met the ILOs and made sure that all the research foci of the Faculty were represented. As a result, the sample differed greatly in chosen method, region of study, time period and approach, showing the wide variety of approaches pursued at the Faculty and the richness of available research strands. Various examiners were included in the selection. The project manager and panel chair assured that the distribution of grades in the selection matched the distribution of grades of all available theses.

Former track/variant	Total theses	Thesis selection
Transformation of the Roman World	3	2
Archaeological Heritage in a Globalising World	7	2
Religion and Society of Native American Cultures	6	2
Prehistoric Farming Communities in Northwest Europe	5	2
Bioarchaeology	13	3
Town and Country in the Mediterranean Region and the Near East	12	3
Human Origins	5	3
Total	51	17

Further information on the selected theses is available from QANU upon request.

Other documents

During the online site visit, the panel studied, among other things, the following documents (partly as hard copies, partly via the institute's electronic learning environment):

Frameworks and documents pertaining earlier assessments

- NVAO Accreditation Framework 2018;
- Additional Criteria Research Master 2016;
- Assessment reports and Decisions NVAO for Research master's programmes Classics and Ancient Civilizations (2015), Middle Eastern Studies (2015), Asian Studies (2015), Archaeology (2015), Latin America Studies (2015 and 2017) and African Studies (2016).
- Review reports according to the Standard Evaluation Reports for the review period 2012-2017 for the African Studies Centre Leiden (ASCL), Leiden Institute for Area Studies (LIAS), Leiden University Centre for the Arts in Society (LUCAS), Leiden University Centre for Linguistics (LUCL), Leiden University Institute for History (LUIH), Leiden University Institute for Philosophy (LUIP) and the Faculty of Archaeology.

Faculty Documents Faculty of Archaeology (FA)

- Businessplan Onderwijsvernieuwing;
- Externe evaluatie Examencommissie;
- Regels en Richtlijnen Examencommissie FA;
- Jaarverslagen Examencommissie FA;
- Verslagen Opleidingscommissie FA;
- Onderwijsvisie 'Education at the FA';
- Actieplan marketing en communicatie FA;
- Overzicht docententeam;
- Onderzoek arbeidsmarktperspectief Archeologie;
- Report of the working group study success;
- Onderwijs- en Examenregelement 2019-2020 en 2020-2021;

Programme Documents Archaeology

- Self-evaluation report (Spring 2020) and Programme Covid update (January 2021);
- Answers to preliminary questions as formulated by the panel prior to the digital site visit per programme;
- Opleidingskaart;
- Onderwijs- en Examenregelement 2019-2020 en 2020-2021;
- Assessment plan (part I and II);
- NSE report 2019 (student evaluation);

Study materials Archaeology (including examples of assessment) and evaluations for the following courses:

- Scientific Methodology in Archaeology (1084V02)
- Epistemology (1086V01)
- How Deep History shaped the Human World (1085H01)
- Studies of the Human planet (1085G13)
- Archaeology of Roman Imperialism (1085G04)