



Final Report of the EAEVE Logbook Working Group

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Introduction

The use of logbooks in veterinary education has been referenced by EAEVE for a number of years. EAEVE requirements for logbooks are linked to all practical and clinical activities and focused on the assessment of the acquisition of Day One Competences (D1C), with a clear distinction being made between core clinical training (CCT) and elective practical training (EPT). This Working Group was established to review the use of logbooks, investigate options and feasibility for a more standardised approach, including an electronic version (e-logbook) and develop guidelines.

Project Summary

The project had several phases:

- Literature review
- Collection and analysis of logbooks
- Review of options and considerations for electronic logbooks
- Development of guidelines

At the start of the project, the Working Group conducted a literature review that revealed there is not much published about logbooks in veterinary education. There are examples in medical education, although mostly from some years ago. However, there are extensive publications on best practices for assessment of graduate competences in medical education and increasingly in veterinary education. The literature review was updated throughout the project and informed the development of the guidelines.

The WG requested logbooks by email via the EAEVE Office and 46 were submitted by VEEs. These were analysed by WG members. The main finding was that the logbooks all varied in content and function. Therefore, **if a single logbook was adopted every VEE would need to change their logbook**, which was not considered desirable or feasible.

Electronic options for logbooks were investigated. The possibility of developing a single EAEVE-wide solution highlighted multiple issues e.g. GDPR, integration into a VEE's local IT systems, VEEs already having their own bespoke or commercial tools, and resource implications for EAEVE to set up, manage and sustain. Therefore, a single electronic solution was not recommended.

Consultation with VEEs led to the development of guidelines that can be used to inform discussions about the ongoing and future use of logbooks (or an equivalent) to collect evidence of student progress towards and acquisition of D1C and the associated assessment methods and quality assurance processes. A survey (71 responses) and focus groups (76 participants representing 53 VEEs across all 8 EAEVE regions) indicated widespread support for the guidelines and identified the most useful content.

Project Details

Working group

An EAEVE Working Group (WG) was established in November 2022 with team members representing six European countries. The WG was tasked with reviewing logbooks, exploring

the potential for greater standardisation including electronic options, and providing guidance for assessment of D1C. The WG met regularly over a 2-year period (fortnightly or monthly online meetings and in-person workshop days). The project was managed using a Gantt chart with a series of work packages (areas of work), which were led by different members of the team. The WG undertook consultations with VEEs at various stages of the project (through emails, a survey and focus groups), presented at General Assemblies (Leipzig 2023, Paris 2024) and provided reports to the Executive Committee of EAEVE (ExCom). A final presentation will be made at the General Assembly in Dublin in 2025.

Logbooks

Logbooks have been adopted by EAEVE for a number of years, but the literature review conducted by the WG found that there is limited published guidance or evidence around their use, particularly in veterinary education. EAEVE requirements for logbooks are linked to practical and clinical activities and make a distinction between core clinical training (CCT) and elective practical training (EPT).

Analysis of logbooks

The WG sent out an email to VEEs via the EAEVE office requesting their existing logbooks. Forty-six logbooks were received representing nearly half the members of EAEVE and were from twenty-two countries across all EAEVE regions and beyond (Figure 1). Some VEEs did not use the specific term 'logbook' and submitted their equivalent 'portfolio of evidence' that was being used for the same purpose. The logbooks were analysed by the WG. The main finding was that **all 46 logbooks were different**, with considerable variation in the design and functionality. Both paper and electronic formats were being used.



Figure 1. Logbooks received by country

The team reviewed all logbooks. In summary, two main approaches to collecting information were identified:

- Student learning opportunities e.g. a list of skills performed, a record of experience during Core Clinical Training (CCT) and Elective Practical Training (EPT), attendance logs.
- Student assessments e.g. a collection of assessments used to demonstrate student progress towards, and acquisition of competences that are required to progress to the next stage in the curriculum or to enter the workplace as a new graduate (Day One).

The analysis of the content of the logbooks (Figure 2) indicated the prevalence of a skills-based structure (87%), usually verified by a signature (83%). The number of skills listed varied considerably. Just over half (54%) of the logbooks were structured by species. A relatively small proportion incorporated assessment of competence e.g. included workplace-based assessments (30%), provided tracking of competency level achieved (28%), or a score/grade (22%). A few were mapped to D1C (17%).

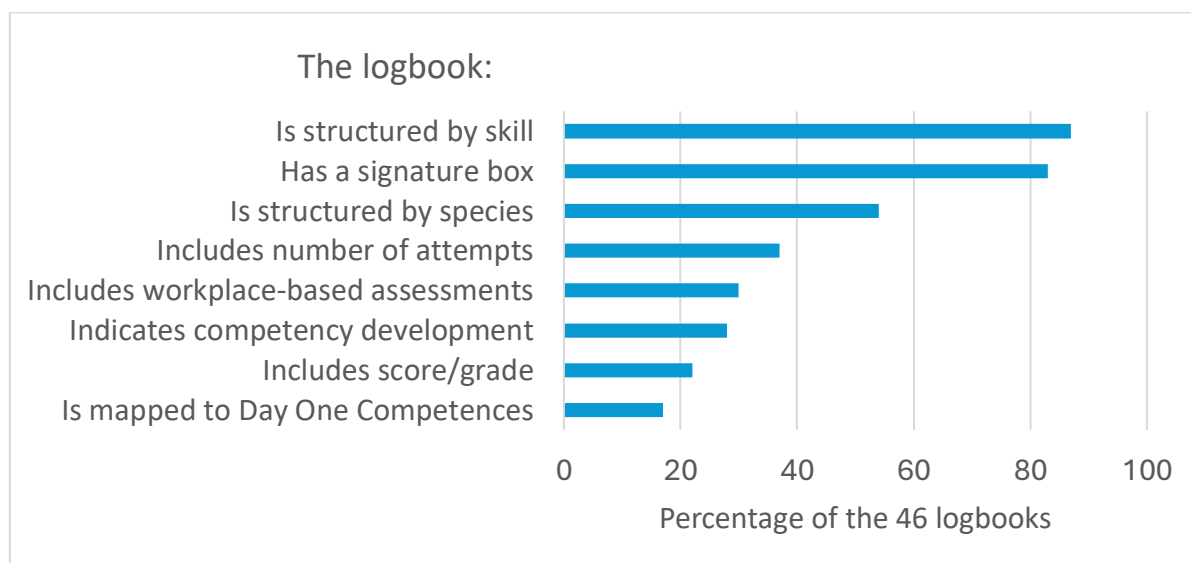


Figure 2. Structure and uses of logbooks

Options and considerations for electronic logbooks

A sub-team of the WG undertook a requirements analysis for a digital 'e-logbook' and explored bespoke and commercial options. It became apparent that different electronic systems already existed, having been developed or purchased by VEEs. The WG also reviewed any potential challenges of adopting a standardised e-logbook by EAEVE and identified that such an approach would be unlikely to be feasible for various reasons. These include general data protection regulations (GDPR), how to integrate with the local VEE's IT (such as the learning management and student record systems), local and commercial tools already being used, and a need for customisation (e.g. different languages, local context). It would not be feasible for EAEVE to implement an e-logbook for several additional reasons including funding, management and sustainability.

Although a paper logbook can fulfil requirements, there are benefits to an electronic system including convenience and data analysis. Considerations include that it will work on all types of device and be accessible when in the veterinary teaching hospital (VTH) and on external placements. An electronic system helps streamline documentation processes, reducing

administrative workloads. Electronic systems often come with features such as data analysis tools that allow teachers, students and the administration to track student progress towards competence, identify trends, and review and adapt learning opportunities accordingly.

Developing guidelines

After the analysis of the 46 logbooks and presentation at the General Assembly in June 2023, it was clear that producing a single standardised logbook and an electronic option was not feasible or desirable for several reasons. For example, every VEE would need to change their existing logbook. A proposal was made to develop guidelines to assist VEEs in their discussions about the ongoing and future use of logbooks (or an equivalent) to collect evidence of student progress towards and acquisition of D1C.

Before writing the guidelines, the WG undertook further consultation with VEEs. A survey was used to gather input on topics that should be included. Responses (n=71) indicated that there was widespread support for the proposed topics (Figure 3).

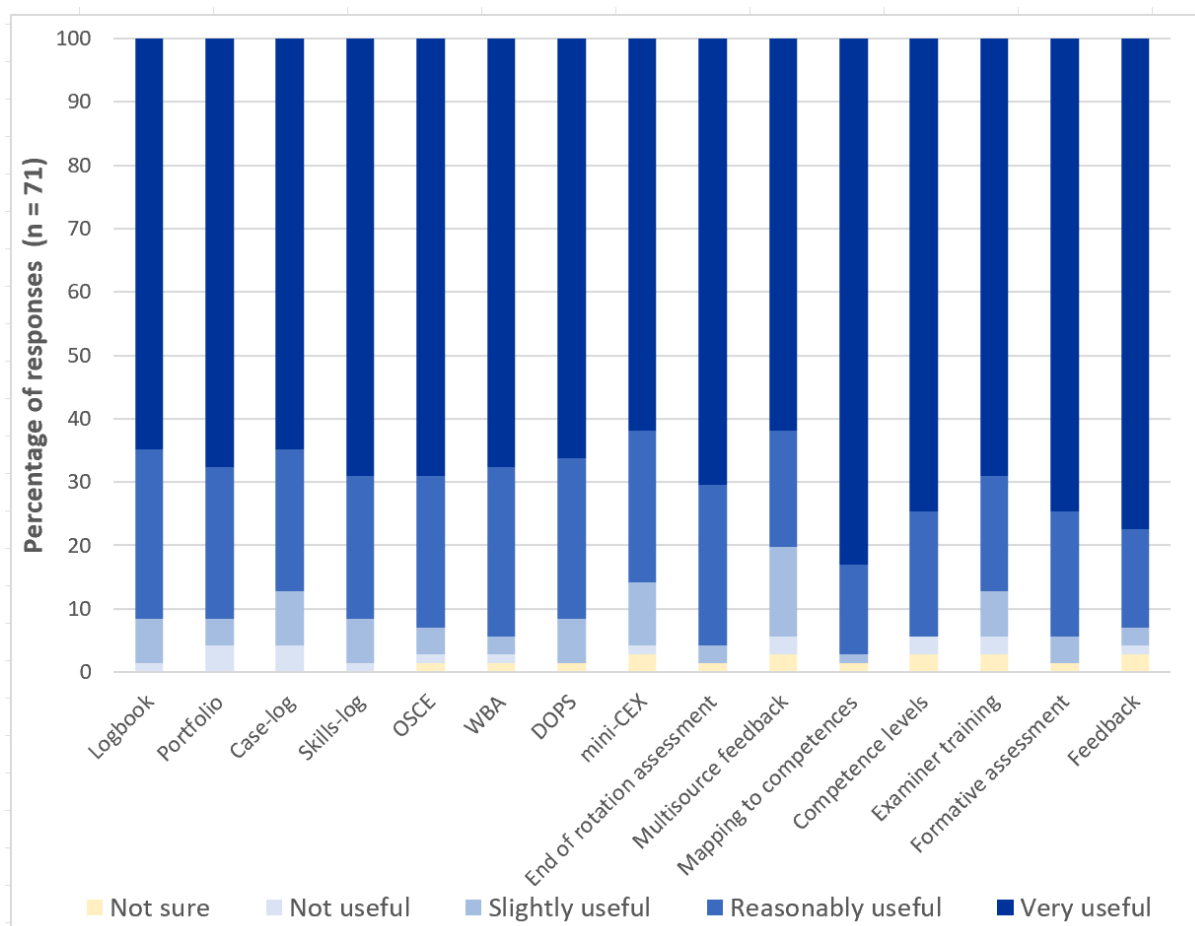


Figure 3: In the proposed guidelines, how useful would explanations of the following be?

Focus groups were then conducted with VEEs from the 8 EAEVE regions (10 focus groups, 76 participants representing 53 VEEs). During the focus groups, participants asked questions about the proposed guidelines, discussed what would make the guidelines most valuable for their VEEs and suggested additional topics that could be included. The feedback provided

further support for the guidelines and informed the development of the sections and the content.

When writing the guidelines, the WG drew upon the literature from education, veterinary medicine and other health professions, and the information provided by VEEs at the various consultation phases of the project. It is intended that the guidelines are used as a reference document or a 'toolkit' by VEEs to help guide ongoing and future decision-making about curriculum enhancement, assessment choices and quality assurance and when determining the role that a logbook or equivalent has within the overall approach.

The guidelines are based on current evidence and best practices and consist of sections with short summaries of key topics (Figure 4). The guidelines include descriptions of ways to collect information about student learning opportunities and collate assessments used to demonstrate progress towards and eventual acquisition of D1C. These include logbooks, portfolios, skills logs and case logs. From the literature review and project consultations, it became clear that there is not a single best way to collect and collate the information, and the tool used will depend on local requirements, context and resources.

Guidelines	
List of Sections	
Table of Contents	
<p>Section 1: Introduction</p> <ul style="list-style-type: none"> • Overview • How to use the guidelines <p>Section 2: Collecting and Collating Evidence</p> <ul style="list-style-type: none"> • Overview • Logbooks <ul style="list-style-type: none"> ○ Logbooks in medical education ○ Logbooks in veterinary education • Portfolios • Clinical skills logs • Case logs • Considerations for electronic logbooks & e-portfolios <p>Section 3: Pedagogical Frameworks</p> <ul style="list-style-type: none"> • Overview • Constructive alignment • Bloom's taxonomy • Miller's pyramid • Competences and milestones <p>Section 4: Assessment Methods</p> <ul style="list-style-type: none"> • Overview • Formative and summative assessment <ul style="list-style-type: none"> ○ Formative assessment (for learning) ○ Summative assessment (of learning) • Examples of assessment methods • Knows & Knows How <ul style="list-style-type: none"> ○ Multiple-Choice Questions (MCQ) ○ Extended Matching Questions (EMQ) ○ Short Answer Questions (SAQ) ○ Essays ○ Authentic Assessment ○ Viva/Oral • Shows <ul style="list-style-type: none"> ○ Objective Structured Clinical Examination (OSCE) • Does <ul style="list-style-type: none"> ○ Workplace-Based Assessments (WBA) ○ Mini-Clinical Evaluation Exercise (mini-CEX) ○ Direct Observation of Procedural Skills (DOPS) ○ End-of-Rotation Evaluation ○ Multi-Source Feedback (MSF) 	<p>Section 5: Quality Assurance Processes to Support Curriculum Development & Assessment Strategies</p> <ul style="list-style-type: none"> • Overview • Curriculum mapping • Utility, reliability and validity • Examiner training • Feedback <ul style="list-style-type: none"> • Feedback to students for learning • Feedback on courses and teacher performance • Feedback on the curriculum • Generative AI • Systems of assessment • Using psychometric reports • Standard setting • Pass/fail versus grades <p>Appendix 1: Examples of Assessments</p> <ul style="list-style-type: none"> • Objective Structured Clinical Examination (OSCE) • Workplace-Based Assessments (WBA) <p>Appendix 2: Assessment Quality Assurance Cycle</p> <p>Glossary</p>

Figure 4. Guidelines: List of sections and table of contents

It is intended that the guidelines will be useful to a range of individuals including teachers and clinicians, course leaders, programme directors, those involved in programme quality assurance processes and VEE leadership. Some of the key literature is included in 'Further reading' sections with DOIs to assist the reader in finding more in-depth information on a topic of particular interest.

The guidelines are not prescriptive or exhaustive and have been written with the understanding that all programmes are different and that the focus of enhancement at any particular time will vary in each VEE. Integration of all the approaches outlined in the guidelines is not an EAEVE requirement. The guidelines should be used in conjunction with the current ESEVT SOP and are designed to help VEEs in the development of their global strategy for assessing the acquisition of D1C.

The WG are grateful to the many VEEs who have engaged in the project and hope that VEEs will find the guidelines useful as part of their ongoing cycle of quality enhancement.