

AN OVERVIEW OF LAMS (LEARNING ACTIVITY MANAGEMENT SYSTEM)

by **Christopher Alexander**

The University of Nicosia, Cyprus

alexander.c @ intercollege.ac.cy

Abstract

This paper provides a thorough introduction to LAMS (Learning Activity Management System). An overview of what LAMS is, and who created it, is followed by a description of its Learner, Monitor and Author environments. The numerous and supportive creator-designed online animated tutorial links ‘built into’ the paper cover in detail all the facets of these environments. It is held that the reader will benefit greatly and will acquire a sound knowledge base of how to use LAMS if these presentations, which total several hours, are viewed. To this extent, this article is also teacher-training in scope. The final part of the paper comprises a brief literature review on LAMS. LAMS pilot use in ESOL is highly recommended and a call is made for the subsequent dissemination of research findings.

Introduction

LAMS software creates a visual ‘drag-and-drop’ authoring platform in which the formation, supervision, distribution, storing, sharing and remixing/repurposing¹ of a wide range of online educational activities is possible. The LAMS’ administration capability provides teachers with a ‘round-the-clock’ point of access to student online contributions.

LAMS, which is used worldwide and in many specific international [institutions](#), is developed and managed by [LAMS Foundation Ltd](#), [LAMS International Pty Ltd](#) and [Macquarie E-learning Centre Of Excellence \(MELCOE\), Macquarie University](#). The [LAMS community](#)² teacher and developer website, which boasts 3200 members in 80 countries, encourages the sharing and adapting of freely available digital lesson plans and the exchange of experiences using LAMS; this facilitates the dissemination of best practice and give impetus to future software development.

¹ Downes (nd.)

² There is also an online presentation of the LAMS Community on [here](#)

The current stable version of LAMS is LAMS2.1³. LAMS can operate as a stand-alone e-learning system or in combination with [other learning management systems](#) (LMS)/ Virtual Learning Environments (VLE). such as [Moodle](#), [Sakai](#), [LRN](#), [WebCT](#) and [BlackBoard](#); it also runs through [all major web browsers](#) and since 2005 has been open source software licensed under the [General Public License v2](#) so there are no license fees for the education community (Russell *et al.* 2006).

There is commercial support with [a company](#) that provides services around its platform and the project is [technically](#) and [educationally](#) documented in detail. New users can [register](#) on a Demo LAMS 2.0 Server and test LAMS as Teachers, Monitors and Learners; the courses that are assigned to those that register enable the design of sequences, the assigning to students, the monitoring of students and the participation with students. Detailed instructions for downloading LAMS versions is available on this [site](#), on the [System Administrator's Guide](#) or on [LAMS 2 Technical Wiki](#), however an experienced lab technician may also be required.

[Dalziel \(2003b: 594\)](#) holds that LAMS is a Learning Design system and is 'heavily based on' [IMS Learning Design](#) and [EML](#). With regard to Learning Design, Dalziel (2003b) maintains that:

While definitions of Learning Design vary, the main elements tend to include greater focus on "context" dimensions of e-learning (rather than simply "content"), a more "activity" based view of e-learning (rather than "absorption"), and greater recognition of the role of "multi-learner" (rather than just single learner) environments. While Learning Design does not exclude single learner, self-paced modes of e-learning, it draws attention to a wider range of collaborative e-learning approaches in addition to single learner approaches. Much of the focus on Learning Design arises from a desire for re-use and adaptation at a level above simply re-using and adapting content objects.

(Dalziel 2003b: 594)

This definition resonates with Britain (2004: 2), whose JISC E-learning Pedagogy Programme [report](#) concluded that although software⁴ development in the field of Learner Design is still at 'an immature stage', LAMS was found to be 'one of the most interesting

³ I would like to thank [Ernie Ghiglione](#) (The LAMS Project Manager at Macquarie University, Australia) for inviting me to trial LAMS 2.1

⁴ Other software analysed in this report was: [ReLoad](#), [Coppercore](#), Edubox, [Lobster](#), [EduPlone](#), [LearningSequence](#)

tools at the present time as it is the first software tool to persuasively demonstrate the concept of learning design in practice' (Britain 2004: 25).

The LAMS Foundation [video](#) provides an upbeat introduction to LAMS and an introductory animated LAMS 2.0 tutorial, whose first slide is presented in Figure 1, is available for [viewing](#); please note that this tutorial is simply a starting point for people that have never used LAMS before. The tutorial highlights how students might collaborate interacting with materials in a teacher monitored environment. There is also a voice recorded introductory LAMS Tutorials on [Part 1: LAMS Overview](#).

The strong and evident constructivist learning arena which the LAMS environment is held to provide offers opportunities to students to take greater control and responsibility over what is learned. This proactive student approach to learning resonates with Beatty (2003: 91), who holds that constructivist learning is a process by which learners *construct* new ideas or concepts by making use of their knowledge and experience. It also resonates with [Dalziel \(2003a: 1\)](#) who states that 'a key dimension of education (particularly K-12 and HE) is learning which arises from interacting with teachers and peers, rather than simply interacting with content'. Constructivism is asserted to support such key constructs of CALL as collaboration and negotiation of meaning (Beatty 2003: 94). With regard to collaboration, Beatty (2003:99-100) asserts that it is an important activity in CALL as it encourages social skills and thinking skills and it mirrors the way in which learners often need to work once they leave the academic setting. Even though LAMS has not been specifically designed for ESOL language learners, it appears to promote group work interaction; such group work interaction is held by Stevens (1992: 28) to provide 'opportunities for using language to discuss with teachers and peers, the nature of discoveries made in the course of contemplating computer-based tasks'.

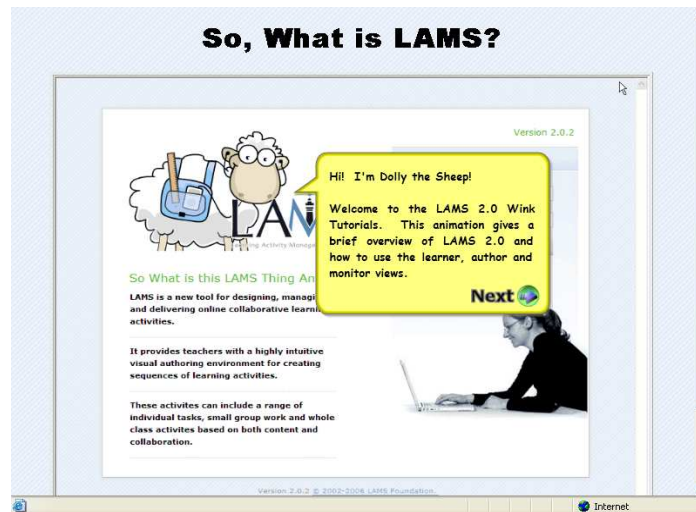


Figure 1 The animated introductory LAMS 2.0 Tutorial for complete beginners

1. Selected literature on LAMS

Even though there is abundant anecdotal teacher/lecturer [feedback](#) that suggests students find LAMS and ICT motivating, there are two key large-scale LAMS studies that are particularly informative: the first is Russell *et al.* (2005) at the University of Liverpool (Becta-SSAT study) and the second is [Masterman and Lee](#) (2005) Oxford University (JISC study).

With regard to Russell *et al.* (2005), Russell *et al.* (2005) state on the [home page](#) of Becta-SSAT LAMS Review that: between November 2004 and August 2005 a research team from [CRIPSAT](#) was commissioned by the [British Educational Communications and Technology Agency \(Becta\)](#), in partnership with the [Specialist Schools and Academies Trust](#) (SSAT) to review and examine the achievements and innovative pedagogies arising from practitioners' use of [LAMS](#) in SSAT schools piloting the software. The [Full Report](#) provides in-depth analysis of key issues in LAMS and also draws on the findings of Masterman and Lee (2005). The wide range of data collection methods used during the approximate 7-month pilot study comprised an initial and final LAMS questionnaire, 27 management staff and teacher semi-structured interviews, 12 LAMS-session structured observations, interviews with pupil groups and analysis of

LAMS server statistics. The scale of involvement of the forty-one schools that had registered to participate in the LAMS pilot varied significantly.

Staff uptake⁵ in the study was found to be broadly affected by the level of institutional ICT provision (Russell *et al.* 2005: 4); moreover a decisive criterion to LAMS' successful implementation was maintained to be 'the positive example of staff using LAMS successfully in their teaching and so putting them in a position to create demand and influence management' (Russell *et al.* 2005: 4). This finding complements Boshuizen and Wopereis (2003, 149), Potter and Mellar (2000, 35), Coles *et al.* (2000, 173) who hold that sharing effective teacher lesson materials may be an efficacious way to reduce long-term training and support. Data suggested that teachers had felt that the coherent, structured and integrated use of LAMS for teaching led to higher levels of pupil motivation as compared with traditional non-ICT lessons (Russell *et al.* 2005: 5-6). Moreover the likelihood of every class member contributing in the 'non-threatening' (i.e. through anonymous contributions) self-paced LAMS student learning environment and developing confidence, meta-cognitive skills, and autonomous learning skills were found to have increased (Russell *et al.* 2005: 5-7)⁶.

2. An overview of LAMS' key features and functions

There is significant up-to-date general technical support for new LAMS users. LAMS [Home Page](#) for instance provides a link to basic guidelines on navigating and learning for students who are new to LAMS on the [LAMS 2 Learner's Guide](#) (Figure 2). Also, there is specific assistance for teachers and instructors who are new to LAMS on how to create sequences using the [Authoring Environment](#) (Figure 3) and how to view Learner's progress in the [Monitoring Environment](#) (Figure 4). Moreover, access to a whole range of animated tutorials is available from [LAMS Tutorials](#) (Figure 5) or from the [Home Page](#).

⁵ This finding resonates with Jones (2004).

⁶ Similar findings were noted in Masterman & Lee (2005)

LAMS v2 Learner's Guide

Flashless Interface

In LAMS 2.1+... learner's can choose to use a Learner interface that uses **no flash** features.

Navigating in LAMS

The Learner's Environment in LAMS is where the content in sequences created by teachers or instructors (called 'Authors' in LAMS) is presented to students (referred to in LAMS as 'Learners').

Learners can navigate through sequences similarly to working on a web page on the internet. LAMS Sequences present content, either text, image, video or music, and navigation tools, like command buttons and hyperlinks.

Logging In and Using LAMS

Click to Magnify thumbnails.



The LAMS Login Screen.



You access LAMS through an internet browser over the Internet or a Network Connection. Your Teacher or Instructor will be able to provide you with a URL link to the LAMS server, as well as your unique username and password.

When you first load LAMS, you'll be presented with the Login screen. Type your username and password to Log In to your LAMS account.

You will then see the "My Groups" page - this is your "Home" page in LAMS. The Instructors on your LAMS server will be able to assign your user account to Groups and Sub-Groups - you can think of these as Subjects and Classes.

Here, the demo student 'Demetrius' is enrolled in Course2650- Ancient History. Demetrius has access to two different LAMS sequences, "Introductions" and "Seven Ancient Wonders."

The "Introductions" has been placed in the Ancient History group, so it's available to all of the Learners enrolled in the course. The "Seven Ancient Wonders" sequence, however, has been

Figure 2 The LAMS v2 Learner's Guide

LAMS Authoring

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1.2 Creating Activities

1.2.1 Properties Page - General Features

1.2.2 Properties Inspector

The Authoring Environment is where you create and modify the sequences that are used in Learner. You can access the Author environment by clicking on the Blue Author tab at the top of the screen, once you have logged in to LAMS.

The Authoring Environment provides teachers and instructors with a visual authoring environment for creating, storing and re-using of learning activities. To create sequences, you drag-and-drop **activities** onto the learning space, and then create **transitions** to specify the path that learners take through the sequences. This **Graphic Workflow Model** is what principally distinguishes LAMS from other, more content based, Learning Management Systems by providing teachers with a high level of interactivity and collaboration.

There are three main areas in the Authoring Environment:

- **Authoring Space** - this is the whitespace with a grid of dots. It is where sequences are Created and Edited.
- **Activity tools** - located down the left-hand side of the screen. The toolkit contains all of the activities available for use in the sequence.
- **Sequence Management Tools** - located across the top of the screen. These allow File Operations (Saving, Opening) and Sequence Linking Operations (Branching and Gates) as well as allowing users to Preview their sequence.



Click to Magnify thumbnail.

Figure 3 The LAMS Authoring Guide

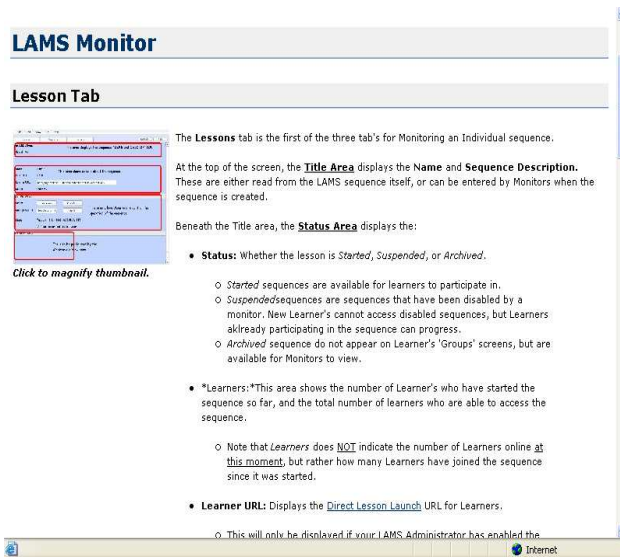


Figure 4 The LAMS Monitor Guide

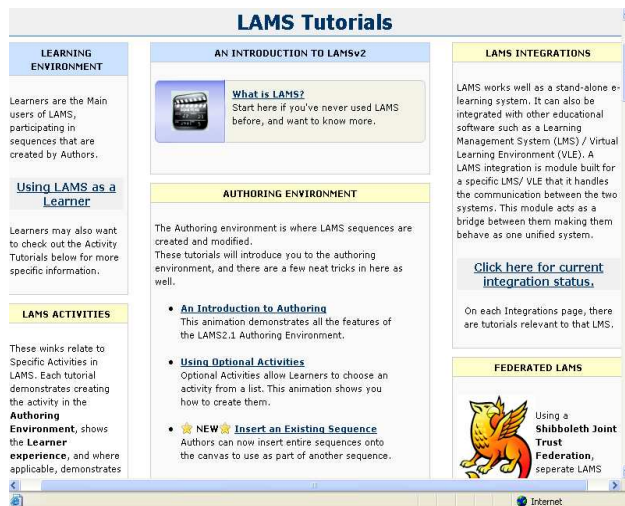


Figure 5 LAMS Tutorials

A beginner's tutorial of how to use the monitoring environment to run a sequence is available on [Starting a Lesson](#).

2.1 The LAMS Learner's Environment

In the LAMS Learner's Environment, content that has been created by teachers or instructors (called 'Authors' in LAMS) is made available to students (referred to as

'Learners' in LAMS) that have logged in. Learner sequence navigation, which is facilitated with interactive user-friendly navigation tools, may include exposure to text, images, video or music. Figure 6 provides a screenshot of the three areas of the student main environment. These three areas are the [Progress Bar](#) (on the upper left side), the [Notebook](#) (on the lower left side) and [the Main Panel](#) (the rest of the screen). Additional introductory LAMS demonstrations are freely available on: (1) A Flash [demonstration of LAMS in action](#); (2) A Powerpoint [walk through of LAMS](#), (3) New to LAMS? [LAMS Animated Tutorials](#). Moreover, these 2 voice-recorded tutorials provide an excellent overview of the key LAMS environments: [Part 2: LAMS Learner and Monitor](#) and [Part 3: LAMS Authoring and LAMS Community](#).

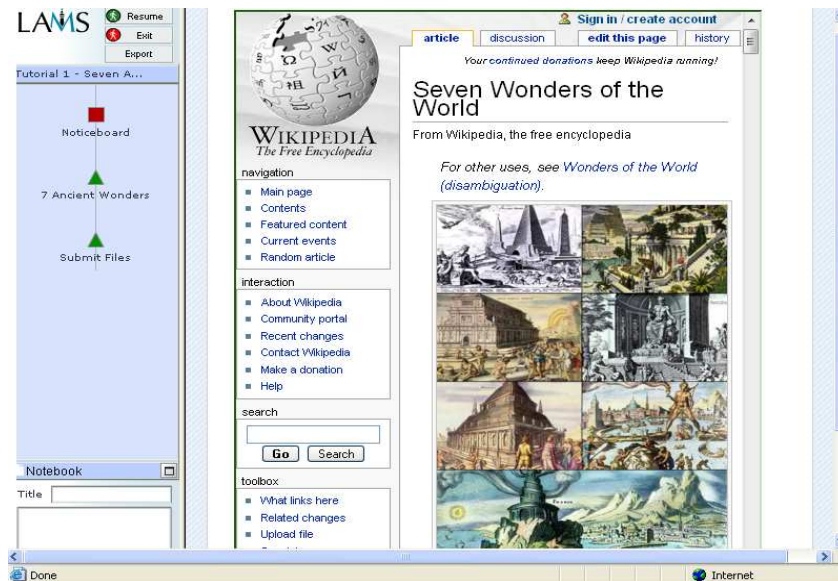
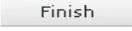


Figure 6 A screenshot of the three areas of the LAMS student main environment

The Progress Bar shows a student's activity status as he or she works through a sequence; a blue, red, green colour system indicate which activities have been completed, are in sequence or have not been reached. Some activities such as *Chat* or *Forum* can be revisited provided they have not been instructor-locked and exited with *finish* button. The actual content is displayed on the Main Panel; in Figure 6 the current task is an imported

Wikipedia text. To move on to another task the  button is used. The Notebook is used for taking and storing private notes during a task; notebook entries can be viewed in their entirety or collated into a *Journal* of entries which can be made available for viewing by instructors. An introductory Learner tutorial is available on this [site](#).

2.2 The LAMS Monitoring Environment

Learners' progress through a LAMS' sequence is instructor viewed in the Monitoring environment. Figure 7 presents the three Tabs for monitoring a sequence (i.e. the Lesson, Sequence and Learners' Tabs).

2.2.1 The Lesson Tab

Figure 7 also shows the Lesson Tab screenshot layout. The Title area, which here is called the Activities Demo, at the top of the screen displays the Name and Sequence Description. The Status Area, which is directly beneath, displays (1) the Status i.e. whether the lesson has been *Started*, *Suspended* (for new learners), or *Achieved* (only available for monitors to view). *Learners* does not indicate the number of Learners online at a given moment, rather it pinpoints how many Learners have entered the sequence since it was started. The Learner URL displays the [Direct Lesson Launch](#) URL if the LAMS administrator has enabled this feature. The Class shows the class selected as the Learners for the given sequence.

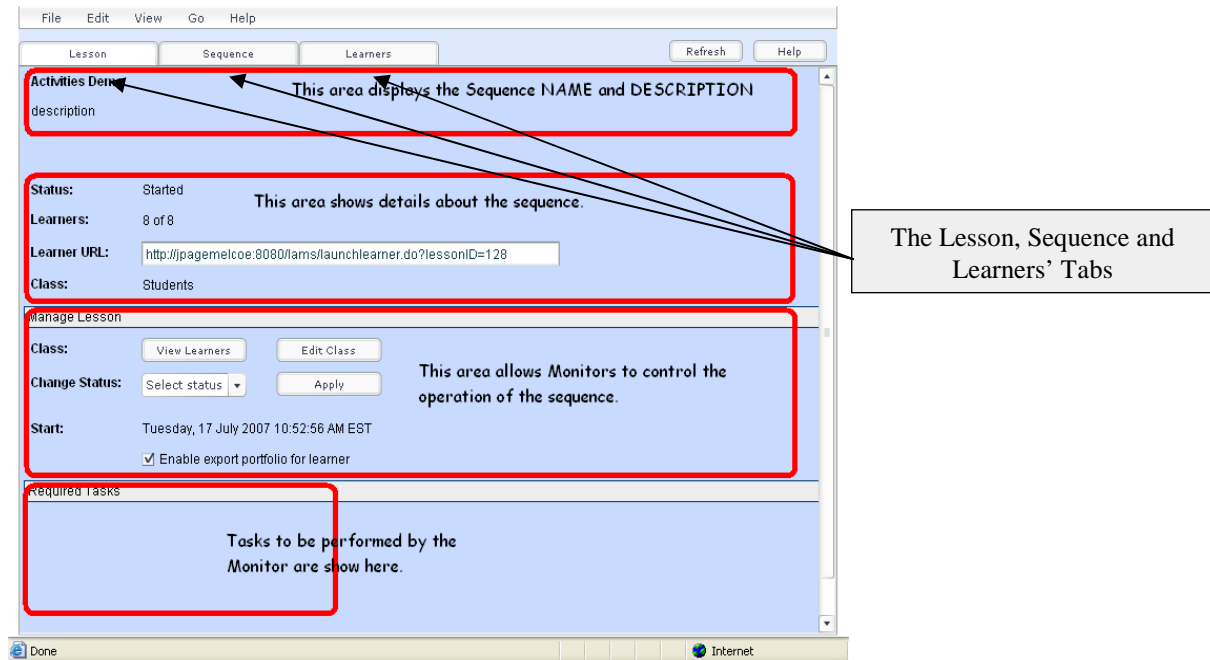


Figure 7 The 3 Monitor-user Tabs for monitoring a sequence

The next screen area of the Lesson Tab shown in Figure 7 is the Manage Lesson Area, which allows modification of many sequence functions. Its subsections comprise

- (1) *View Learners* which gives pop-up-menu access to privileged Learner Names and Logins;
- (2) *Edit Class* which permits new Learners access to the sequence;
- (3) *Select Status* which authorizes the Monitor to *Disable, Archive, Enable* or *Delete* a sequence. A tutorial showing how to change status and what each status means is available on [Changing the Status of a Sequence](#);
- (4) *Start* indicates the precise start date and time of the sequence and toggle below enables Learners to export their portfolios.
- (5) *Required Tasks* Area which displays Monitor tasks for a particular sequence, such as assigning [Groups](#), choosing [Scribes](#) or opening [Gates](#).

A tutorial of how course owners can move running lessons up and down the course page in LAMS is available on [Rearrange Sequence on the Course Page](#). There are also further Monitor-related tutorials on: (1) How to Run a Class: [link](#); (2) Monitoring Students Progress: [link](#); (3) [Disabling and Archiving Lessons](#)

2.2.2 The Sequence Tab

The second of the three Monitoring Tabs is the Sequence Tab (Figure 8); it presents an *Authoring-Environment* style view of Learner sequence progression. Learner current online or offline⁷ task positions are characterized with the use of small white icons displayed within individual activity Icons; the Refresh button on the top right-hand screen side allows an updating of current Learner sequence positions. Learners can be *Force-Moved* to specific activities by moving their icon to a specific activity; moreover Learners can be moved to the end of the sequence by dragging them to the small grey door in the bottom-left of the Sequence tab

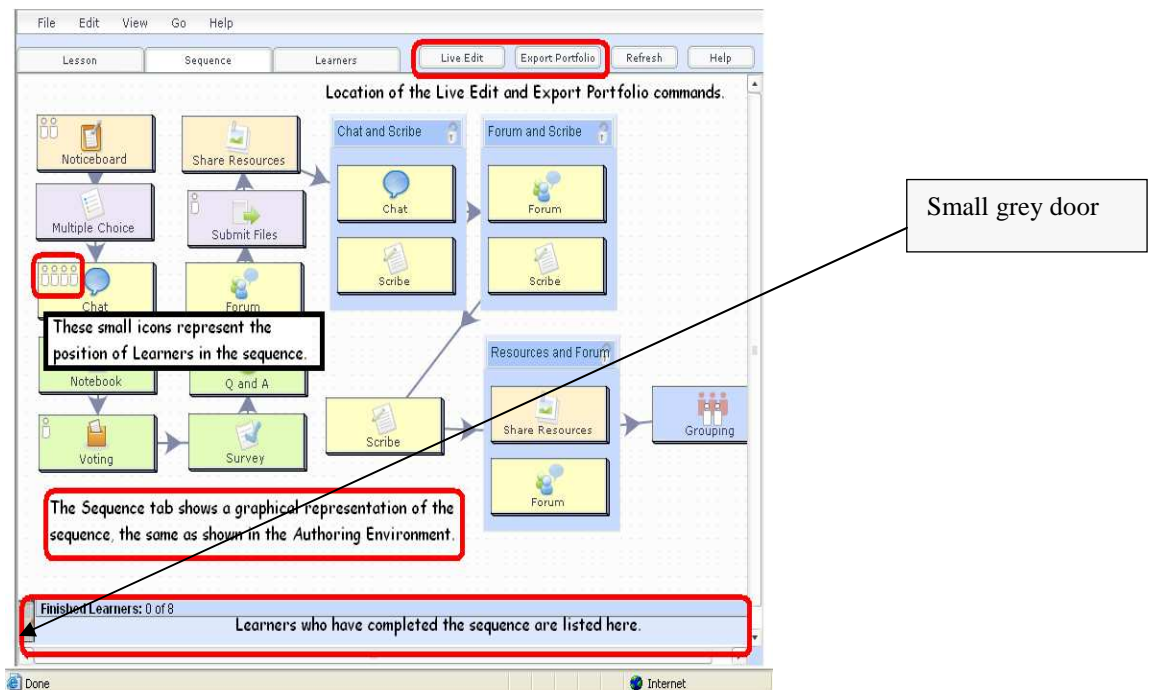


Figure 8 The Sequence Tab

⁷ Run Offline - New to LAMS 2.0 is the concept of running activities "Offline." When Learners reach an Offline Activity, they are presented with a prompt: "This activity is not being done on the computer. Please see your instructor for details." This allows teachers and instructors to incorporate offline classroom activities into a LAMS sequence. See [Creating Offline Activities](#)

The *Live Edit* allows Monitors to make sequence changes to content by adding or removing particular activities; a general tutorial on live edit is available on [Using Live Edit](#) and a LAMS 2.1 live-Edit update tutorial is available on [Live Edit Update in LAMS 2.1](#). The following Gate-related tutorial explains how LAMS 2.1 Monitors can open scheduled gates prematurely [Opening Schedule Gates before Assigned Time](#).

The sequence tab also comprises the Export Portfolio tool; this tool exports the entire Learner-completed sequence into a ZIP file containing the sequence as a bundle of HTML files with a directory file for accessing the various activity answers. Please note that *Export Portfolios* contains all contributions from all learners to a sequence whereas *Individual Learner portfolios* only have a particular Learner's contributions to a sequence.

2.2.3 The Learners' Tab

A Learner-based view of Learner sequence progression is presented in the Learner's Tab (Figure 9). Three coloured shapes indicate current Learner positions: (1) blue circles show completed activities; (2) red squares indicate current Learner positions; (3) green triangles represent activities that have not been undertaken. These colours and symbols are also used in the Learner [Progress Bar](#). A principal feature of the Learner Tab is that the Monitor can click on the relevant symbol and view in a separate window individual learner progress on activities. In the case of numerous learners participating in a sequence, LAMS will display the Learner query bar.

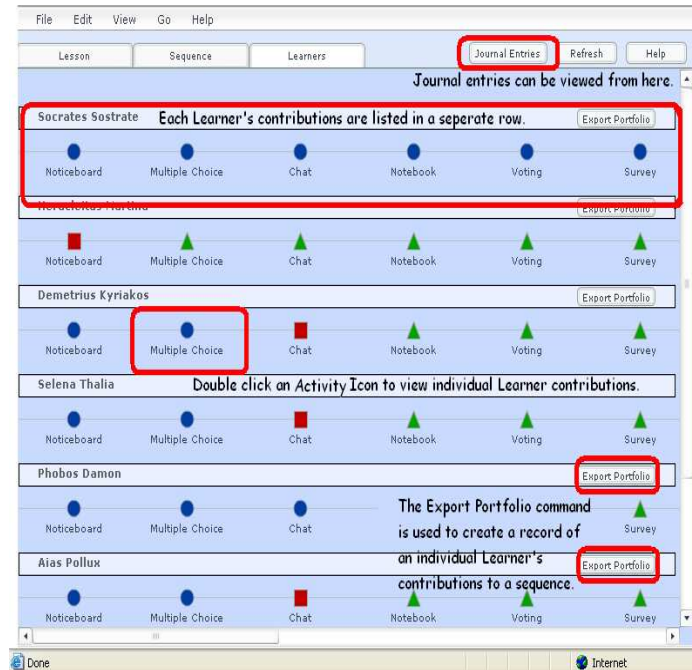


Figure 9 The Learners' Tab

From the Learners tab, Monitors can also Export a Portfolio for a particular Learner. For individual activities, this portfolio will contain only the content from a specific Learner. For group activities, the portfolio will contain the contributions from all group members. This option is available to the Monitor even if Learner Export has been disabled on the Lesson tab.

2.3 The LAMS Author Environment

LAMS learner activity sequences are created, stored, modified and re-used in the Authoring environment. An instructive animated tutorial showing all the key features of the LAMS2.1 Author environment is available on [An Introduction to Authoring](#). Figure 10 shows the four key areas of the Author environment:

- (1) the Activities Toolkit. This is located on the left-hand side of the screen and contains all of the sequence-creating activities accessible for use;
- (2) the Sequence Management Tools. These are located across the top of the screen and permit File Operations (Saving, Opening) and Sequence Linking Operations (Branching and Gates). Users can also Preview their authored sequences;

- (3) The Authoring Space. This is the white space with a grid of dots where *drag-and-drop* Learner-path transition activity sequences are Created and Edited;
- (4) The Properties Inspector, which may be hidden at the bottom of the Authoring Screen, allows speedy admission to various common tasks for Activities. Virtually everything that exists in the Authoring Space can be double-clicked so as to modify its properties; there is also a Trashcan to delete activities.

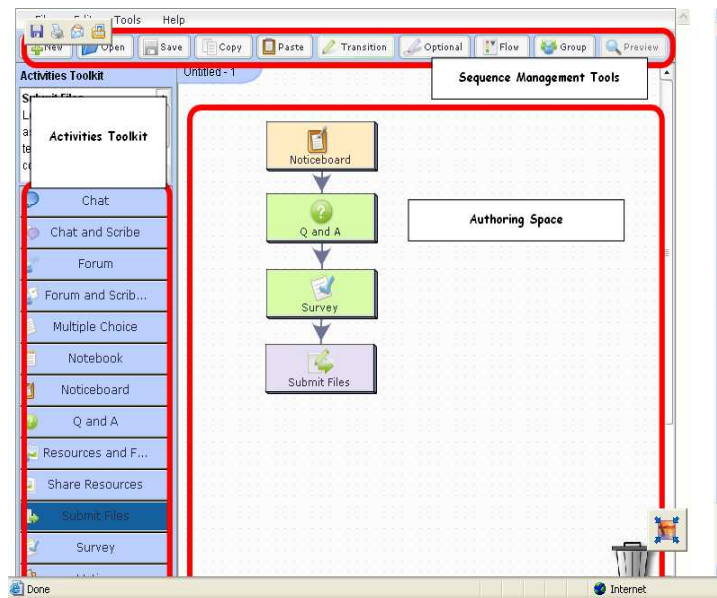
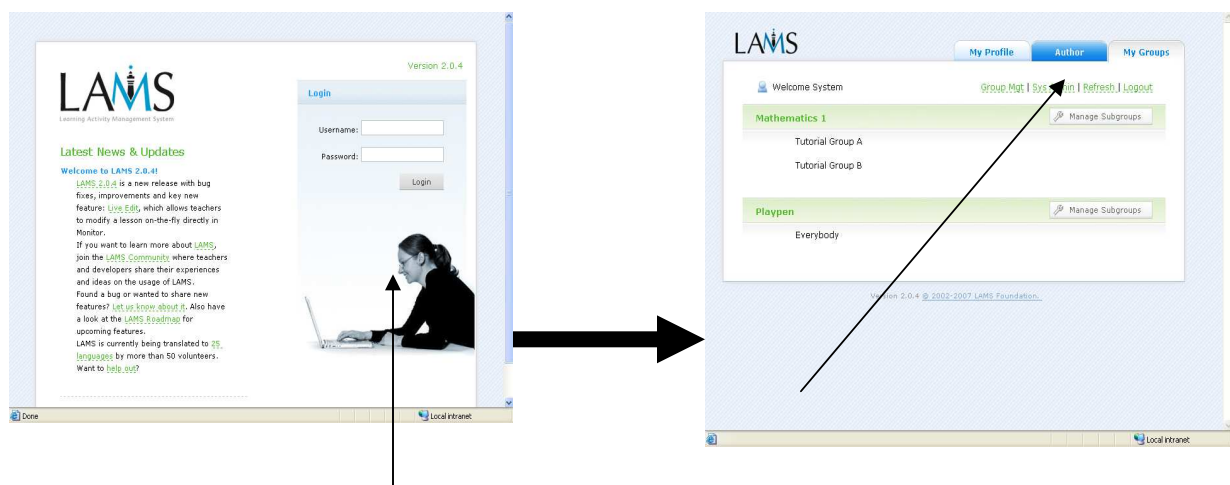


Figure 10 A screenshot of the LAMS Author environment

Access to the Author environment is enabled by clicking on the Blue Author Tab at the top of screen after logging in LAMS. Figures 11 provide screenshots of the Login page and the position of the Blue Author Tab.



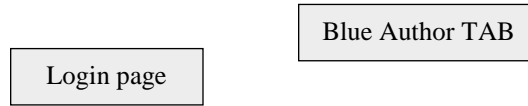
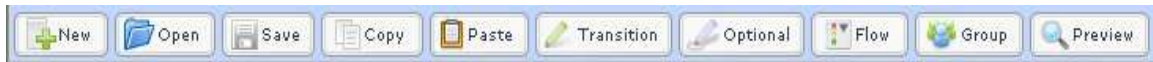


Figure 11 Screenshots of the Login page and the position of the Blue Author Tab

2.3.1 Sequence Management Tools

The Sequence Management Toolbar, presented below, comprises 10 commands grouped into File Operation Tools (New, Open, Save), Editing Tools (Copy and Paste onto the Authoring-Space) and Sequence Tools (Transition, Optional, Flow, Gates, Preview).



The Sequence Management Tools are also replicated in Drop-Down Text menus above the Toolbar; *some additional tools are also found here*. A number of Tutorials might be useful with regard to mastering particular aspects of the use of Sequence Management Tools:

- (1) [Using Grouping Objects](#) : this divides an entire LAMS class into smaller groups for specified activities. Also see Tutorial on [English](#)



- (2) [Gates](#) permit teachers to generate *Stop Points* at some points in a sequence. These Stop points halt the progress of learners through a sequence until a specified condition is met.



- (3) Using Optional Activities [link1](#) or [link2](#)

- (4) Using Optional Activities with Groupings (advanced) [link](#).
- (5) A new LAMS 2.1 feature is the Insert command which allows authors to paste entire sequences inside another, [link](#)
- (6) using [Branching](#); Branching allows LAMS Authors to create several 'pathways' through a sequence



- (7) [Importing and Exporting Sequences](#), Importing and Exporting of sequences allows the sharing sequences with colleagues.

2.3.2 Authoring Tools

The following online tutorials provide an introduction to Authoring [link1](#) / [link2](#). Activities are created with the use of activity tools and each tool has its own specific function with three tool tabs on the tool's Properties' Page (1) Basic, this controls the content of the activity; (2) Advanced, manages the behaviour of the activity; (3) Instructions, allows authors to upload online and offline Support Files for other teachers and instructors.

Figure 12 provides screenshots of the Basic, Advanced and Instruction tabs of the Chat Authoring tool. Access to a tool's Properties Page is achieved by double-clicking the particular activity.

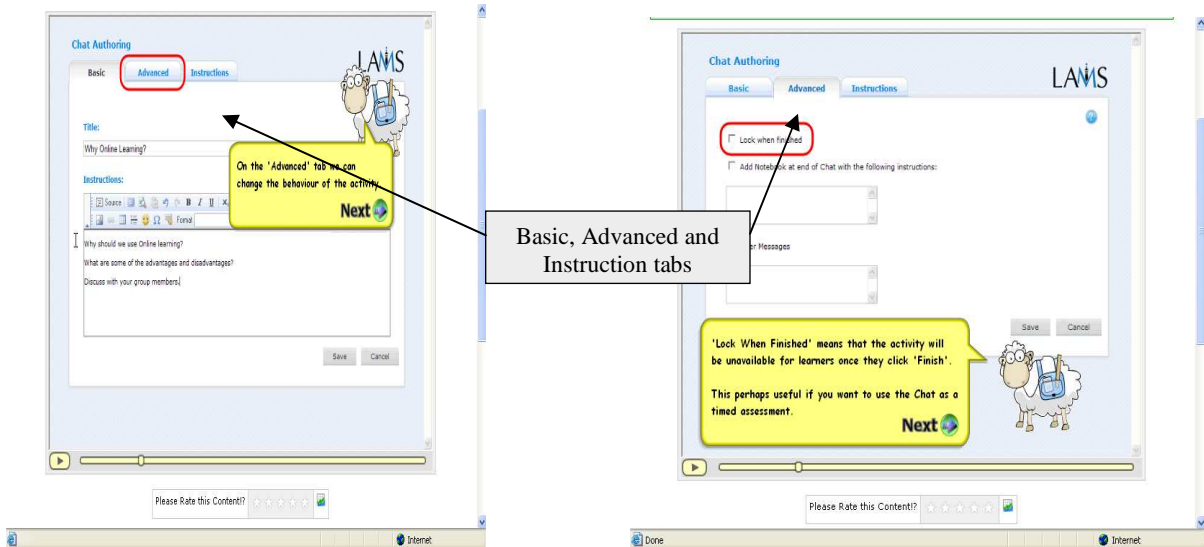


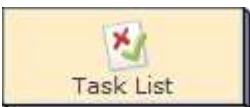
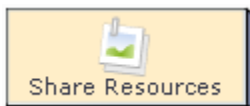
Figure 12 The Basic, Advanced and Instruction tabs of the Chat Authoring tool

The explanatory online LAMS Authoring-tools tutorials described below in this section demonstrate activity creation where applicable specialise into Informative Tools, E

The [Noticeboard Tutorial](#) is a straightforward way of providing information and content to the learners. The activity can display text, images, links and other HTML content.

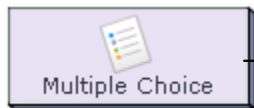
- **Informative Tools**

The [Create a Resource Sharing Activity](#) tutorial explains how to deliver online content in a controlled environment. ALSO SEE Tutorials on [link1](#) and [link2](#)

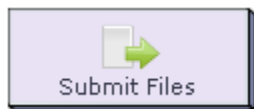


The [tasklist activity](#) allows authors to create a series of tasks which are marked off as completed by Learners. Each individual task may be compulsory or not, or require the completion of other tasks to become available (No online Tutorial currently available)

- **Evaluative Tools**

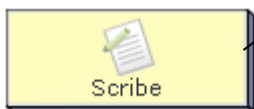


The [Multiple Choice Quiz](#) creates simple MCQ assessments for Learners. ALSO SEE [link](#)



[Author a Submit Files Activity](#) creates a place for students to upload work to the LAMS server for assessment. ALSO SEE [link](#)

- **Collaborative Tools**

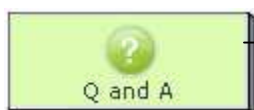


[Chat](#) and [Scribe](#) tutorials explain how Learners chat in groups and how one learner generates a report. ALSO SEE Tutorials on [link1](#) and [link2](#)

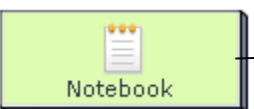


[Forum Tutorial](#); the Forum Activity provides an asynchronous discussion environment for learners, with discussion threads initially created by the teacher ALSO SEE [link](#)

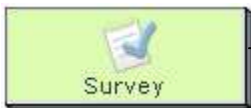
- **Reflective Tools**



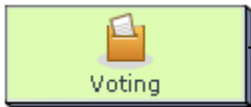
[Question and Answer](#): the Question and Answer Activity allows teachers to pose questions to learners individually, and then to see the responses of all their peers presented on a single answer screen: ALSO SEE [link](#)



The [Notebook Activity](#) is a tool for learners to record their thoughts during a sequence. It has similarities with the way advanced [Reflection feature](#) is used [link](#)

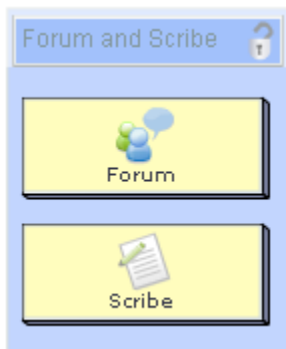


[Survey Tutorial](#): collects and analyses Learner opinions on a topic
ALSO SEE [link](#)

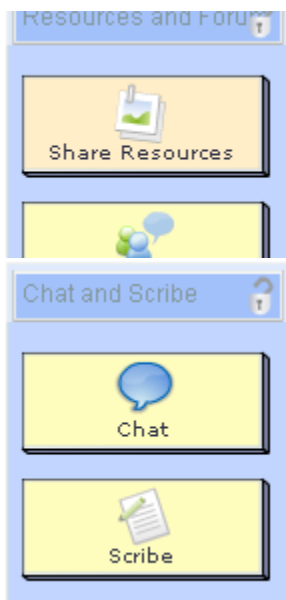


[Voting Tutorial](#): determines an outcome from Learner choices. ALSO
SEE [link](#)

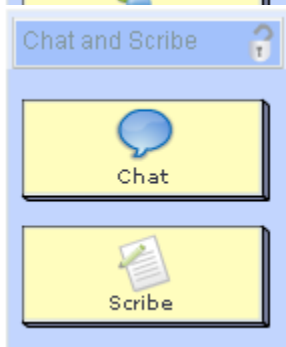
There are also some 'Split-Screen' Activities in LAMS. These are



The [Forum and Scribe Activity](#) combines a *Forum* Activity with a [Scribe Activity](#) for collating Forum Postings into a written report



The *Forum Activity* with a [Share Resources Activity](#) which allows Learners to create Forum postings based on resources by provided by the sequence author



ALSO SEE [links](#) The [Chat and Scribe Activity](#) combines a *Chat* Activity with a Scribe Activity for collating the chat group's view on questions created by the teacher

Some other general LAMS related tutorials are available on: (1) Sharing Sequences with the world (Importing and Exporting sequences), [link](#); (2) Importing sequences from the LAMS Community, [link](#); (3) Adding sequences to the LAMS Community, [link](#); (4) Using LAMS as Learner, [link](#); (5) Managing users, classes and organisations (administration), [link](#).

3. Conclusion

LAMS ESOL-related research is an area requiring development⁸. Russell *et al.* (2005: 112) make just a ‘sentence contribution’ regarding Modern Foreign Languages and pertaining to the use of Question and Answer and Forum/Chat resources for acquiring cultural skills. Research data is required regarding how LAMS can be used to develop particular language skills/knowledge in ESOL.

Many of the LAMS sequence activities appear to draw on a student’s reading and writing skills; this suggests that such activities in the ESOL context might be more suitable for, or manageable with, higher level learners who may also feel more confident about ‘publicising’ their ESOL writing. Building structured speaking and listening activities into a LAMS sequence could be challenging and may necessitate the use of Stop Gates/Run Offline with the aim of introducing a mix of non-ICT with ICT teaching. There is also a risk in LAMS, which has not been specifically designed for ESOL, that learners may ‘rapidly’ disseminate and potentially perpetuate chunks of incorrect language.

Another area that needs to be considered in LAMS ESOL use is the student’s epistemological values to studying. Laurillard (2002: 202-3) holds that students will have nurtured throughout all their previous educational encounters a conception of how one comes to know i.e. their conception of what learning is and how it should be done. Thus, students may not be used to using LAMS and may require more ‘real-time’ ‘human-to-human’ feedback from teachers; Alexander (2007a, 2007b, 2008) found that the role change brought about by monitoring students passively from a teacher computer as

⁸ The following well-known journals currently have no dedicated article on LAMS ESOL use: [Educational Media International](#), [American Language Review](#), [APACALL](#), [CALICO Journal](#), [ReCALL](#), [The Journal of Educational Technology & Society](#), [The JALT CALL Journal](#), [Language Learning and Technology](#), [TESOL Publications](#), [AJET](#), [ELT Journal](#)

opposed to going 'round' and speaking to students individually militated against some teacher and student beliefs.

However, in spite of the above points of initial concern, I thoroughly recommend the introductory trialing of LAMS for ESOL and call for the dissemination of ensuing LAMS ESOL studies.

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