

[P35] *Fungi Online*: web-based introductory mycology for undergraduates

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In 2001 the '*Fungi*' website was launched. Its primary aim was to support formal classes on fungal biology being delivered to first-year bioscience undergraduates as part of an introductory microbiology module at Queen's University Belfast. However, the website proved popular with many UK and overseas colleagues responsible for teaching introductory mycology, who found it a valuable learning resource and who adopted many of its materials in support of their own teaching and their students' learning. Students' reactions to the website included: '*. . . absolutely fabulous. Great idea and a great help in my understanding of fungi*'; '*Excellent web site*'; '*Fungi web site was very good, especially the sample questions and quiz*'. Mycologists expressed their regret when the website had to be suspended, following its author's move to a new institution, and were eager to see the website re-established as a resource that could support their courses and enhance their students' learning experience. A successful application to the British Mycological Society's Small Grants fund ensured that a newly designed website could be hosted and supported for an initial two-year period.

The aim was to redesign and re-establish the '*Fungi*' website, under a new title, '*Fungi Online*', and new independent domain, fungionline.org.uk.

Specific objectives included:

1. redesigning and implementing the website '*Fungi Online*';
2. extending the mycological content of the website;
3. redesigning and extending the 'Quiz' (a formative self-assessment test) to provide an interactive learning experience for students;
4. ensuring that the website satisfied guidelines regarding web accessibility and usability;
5. evaluating the e-learning materials designed via feedback from tutors and their students;
6. disseminating and publicising the web site and outcomes of the project.

'*Fungi Online*' was launched in August 2006 and is hosted by Netcetera (www.netcetera.co.uk), with all materials delivered via the website freely available via the Internet. The website was designed and implemented using *Macromedia™ Dreamweaver™ MX 2004*. To help ensure that *Fungi Online* complied with appropriate web accessibility and usability guidelines (such as those produced by the W3C, TechDis and

Main sections:		
- Introduction to fungi	- Growth kinetics	- Recommended resources
- Fungal spores	- Asexual sporulation	- Quizzes
- Structure of hyphae	- Sexual sporulation	- Links to societies & groups
- Hyphal growth	- Glossary of terms	- Links to related web sites

Table 1: Overview of *Fungi Online* content



Figure 1: *Fungi Online* home page at www.fungionline.org.uk

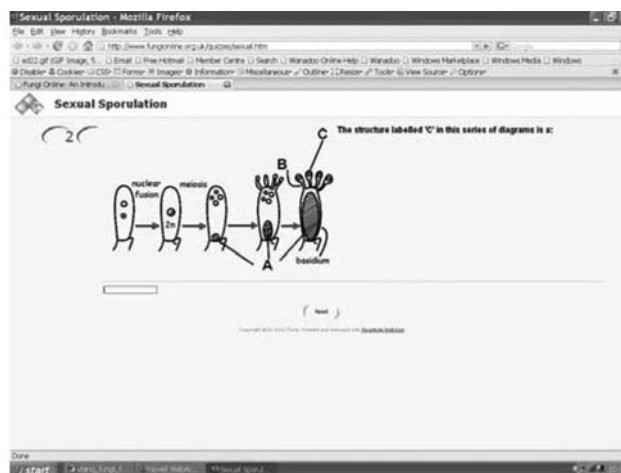


Figure 2: Sample question screen from one of the quizzes

UsableNet), the website was implemented using Cascading Style Sheets (CSS) (**Figure 1**). Although the main sections of the original website, '*Fungi*', were retained (**Table 1**), the mycological content of each section was extended.

The self-assessment quiz, a feature of the original *Fungi* website that learners and their tutors found particularly valuable, was redesigned and extended using *SmartLite's* affordable software *WebQuiz XP* software (www.smartlite.it/). Seven quizzes, delivering a total of 100 questions, provide formative self-assessment tools, made up of objective questions, to deliver a more engaging and interactive learning experience for students

(Figure 2). The quizzes provide students with an opportunity to self-assess their knowledge and understanding of fungal biology in a non-threatening environment and to receive prompt feedback on their performance.

In addition, an online form provides users with the opportunity to provide feedback on the website and/or to ask a specific question, e.g. *'Your website is excellent and recommended to my 120 students. You have done a wonderful job'* (UK-based tutor).

Monthly statistics on website traffic, provided by Netcetera, indicate that during the first six months following its launch in August 2006, website traffic increased rapidly, peaking through January 2007, when almost 23,000 hits and 1200 unique visitors were recorded.

'Fungi Online' is sponsored by the British Mycological Society through its Small Grants Scheme.