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**Appendix A**  
**Student Questionnaire**

**Questionnaire Schedule For Students Studying Online In Syria Virtual University  
(SVU)**

Abdullatif Ismail  
Faculty of Education  
University of Malaya

**August, 2008**

Evaluation of Web-based learning environments  
 Student Questionnaire Schedule  
 August, 2008

Abdullatif Ismail  
 Faculty of Education  
 University of Malaya

**Research title:**

Development of an Evaluation Instrument for Web-Based Learning Environment (WBLE)  
 in Syria

**Instructions**

1. This questionnaire aims to find out what you think of the Web site that you have been using for this unit regarding the ease of use (**Usability**), the quality of learning design and the quality of teaching and strategic styles (**Pedagogy**), the added value of using the online learning (**Added value**), the ease of accessibility to the Web site and learning material (**Accessibility**), and finally the quality of the presented information (**Information quality**).
2. The term “**class Web site**” used in this questionnaire refers to the Web site that you used to access the learning material or course. You may have been using WebCT, Blackboard, TopClass, or some other online courseware to access your course material.
3. The **unit** refers to the learning (or module’s) content, assignment, tests, communication, or any other learning materials obtained from the course homepage.
4. There are no ‘right’ or ‘wrong’ answers. Your opinion is what is wanted. This is not a test.
5. Your name and answers will not be shown to anyone else.
6. Throughout the following you will find a number of statements. Some words and terminologies are explained at the end of this questionnaire. Read these statements carefully and think about how well the statement describes your Web site.
7. Most questions will ask you to circle the number that best corresponds to your answer.

Example:

	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
The class Web site is always easy to access.	1	2	3	4	5

Your opinion may be:

- If you think that the class Web site is always easy to access, circle the number (5) which means the <SA> option.
  - If you think that the class Web site is never easy to access, circle the number (1) which means the <SD> option.
  - If you think the question is not applicable to you, circle the number (3) which means the <U> option.
  - Or you can circle the (2) or (4) numbers if this seems like a more accurate answer.
8. Some questions will use check boxes (). These allow you to choose more than one answer for the question (you will tick the boxes that correspond to the answers).
  9. Some questions have options; circle the option that best corresponds to your answer.
  10. You may find that some of the questions seem to be repeated in different sections of the questionnaire. This is to assist with the analysis of the questionnaire.

11. Please, for any query contact me on: [abdullatif\\_ismail@hotmail.com](mailto:abdullatif_ismail@hotmail.com), mobile: 0944629198.

**Please answer all of the questions.** Questions marked “optional” may be omitted.



## Section 1: Student identity & General questions

1.Name (Optional):						
2. Age	3.Gender(M/F)	4. Faculty	5.Year of study	6. Name of course	7. Course_ID	
8. Do you have access to your class Web site at home?				1. Yes	2. No	
9. Have you received any orientation training with this WBLE?				A. None	B. 1 to 4 hours	
				C. 4 to 8 hours D. up to 3 days		
10. Did you feel you needed any additional WBLE training?				1. Yes	2. No	
11. How would you rate your ability in using a computer?				A. Novice user B. Competent user		
				C. Proficient user D. Expert user		

## Section 2: Usability Evaluation

**Usability** is the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.

<b>Part 1. Usability Basic Attributes</b>					
<b>A. Learnability</b>					
12. The system was easy for me to accomplish basic tasks the first time I encounter it.	1	2	3	4	5
<b>B. Efficiency</b>					
13. Once I have learned to use the system, I can quickly perform tasks.	1	2	3	4	5
<b>C. Memorability</b>					
14. I can easily re-establish proficiency after a period of not using the system.	1	2	3	4	5
<b>D. Errors Recovery</b>					
15. I can recover from errors easily.	1	2	3	4	5
<b>E. User Satisfaction</b>					
16. The system is pleasant, comfortable and acceptable of use.	1	2	3	4	5
<b>Part 2. Technical Usability</b>					
<b>A. Performance</b>					
17. No links in the user interface were missing or broken. All links work.	1	2	3	4	5
18. Most web pages take less time to load.	1	2	3	4	5
19. Most pages on the website work with all browsers and various versions of each, and still have the same characteristics.	1	2	3	4	5

20. I am satisfied with the site's performance.	1	2	3	4	5
<b>B. User Interface Design</b>					
21. The main User Interface is not busy.	1	2	3	4	5
22. Horizontal scrolling was avoided.	1	2	3	4	5
23. Blinking or Ticker-Tape text was avoided.	1	2	3	4	5
24. Height and width dimensions are included in all "image" tags.	1	2	3	4	5
25. The user interface design uses standard colors for links (blue for links and red or purple for visited links).	1	2	3	4	5
26. The interface design uses similar control icons for all types of media and over all web pages.	1	2	3	4	5
27. Background and foreground colors are relevant with each other (no interference).	1	2	3	4	5
28. Text formatting techniques (e.g., Bold, Italic, and Underline) are used consistently.	1	2	3	4	5
29. I am satisfied with the user interface layout and design.	1	2	3	4	5
<b>C. Navigation tools</b>					
30. The navigation design connected all related information in a sequence that made sense to me.	1	2	3	4	5
31. The site map is helpful.	1	2	3	4	5
32. Links showed clearly the relationship between all pages of the site and the currently viewed page.	1	2	3	4	5
33. External links were loaded in a separate window.	1	2	3	4	5
34. The "skip to main content" link was included at the top of each page (no dead-end pages).	1	2	3	4	5
35. Local search engines are productive.	1	2	3	4	5
36. I am satisfied with my browsing over the class web site	1	2	3	4	5
<b>D. Information Architecture (Structure)</b>					
37. Headings are created effectively.	1	2	3	4	5
38. The site's information is positioned according to priority.	1	2	3	4	5
39. Links are kept separated from narrative text blocks (links are placed at the beginning or end of text blocks).	1	2	3	4	5
40. Links labels are matching the titles of the pages to which they refer.	1	2	3	4	5
41. Title tags describe page content appropriately.	1	2	3	4	5
42. Graphs and diagrams are used adequately for clarifying concepts.	1	2	3	4	5
43. Site structure is organized to minimize the number of levels below the homepage (pages are not structured far from the main user interface).	1	2	3	4	5
44. Site's content and subject matter are consistent with the keywords and key phrases used in search engines.	1	2	3	4	5
45. I am satisfied with the design of the site's information architecture.	1	2	3	4	5

<b>E. Content</b>					
46. Web pages are thoroughly free from misspelling and grammatical errors.	1	2	3	4	5
47. Longer pages exist only when content should be printed as one document.	1	2	3	4	5
48. Every page contains the University name, some contact info and logo.	1	2	3	4	5
49. Every essay contains the author name and his/her contact information.	1	2	3	4	5
50. The site's content design is satisfactory.	1	2	3	4	5
<b>F. Media elements</b>					
51. Media elements were of high visual and aural quality.	1	2	3	4	5
52. Animations are used deliberately.	1	2	3	4	5
53. Videos are kept short.	1	2	3	4	5
54. The visual and auditory media are provided with equivalent text.	1	2	3	4	5
55. Names of media elements reflect their real content and effect.	1	2	3	4	5
56. The system informs learners of the media's size and time download.	1	2	3	4	5
57. Using media was not done gratuitously.	1	2	3	4	5
58. Using multimedia elements was satisfactory.	1	2	3	4	5

### Section 3: Pedagogical Usability Evaluation

**Pedagogy** is the profession, science, or theory of teaching. *Pedagogical Usability* refers to the tools, content, interface and the tasks of the web-based learning environments that support various learners to learn in various learning contexts according to selected pedagogical objectives.

<b>A. Structure/Organization</b>					
59. Topics are presented in a logical and ordered manner.	1	2	3	4	5
60. Hierarchies of content are designed of breadth rather than depth (no more than three levels in each paragraph).	1	2	3	4	5
61. The organization of course topics facilitate my exploration of the course.	1	2	3	4	5
62. No gaps in structuring the information.	1	2	3	4	5
63. The help is structured productively.	1	2	3	4	5
64. I am satisfied with the course structure.	1	2	3	4	5
<b>B. Content</b>					
65. The objectives of each lesson (topic, assignment, etc.) are stated clearly.	1	2	3	4	5
66. A complete syllabus of the course was available ahead of learning.	1	2	3	4	5

67. The syllabus is helpful.	1	2	3	4	5
68. Content is built upon my prior knowledge.	1	2	3	4	5
69. The content encompasses all stated objectives (both theory and practice).	1	2	3	4	5
70. The content is rich with multimedia components.	1	2	3	4	5
71. I am satisfied with the course content.	1	2	3	4	5
<b>C. Interaction</b>					
72. Which of the following communication devices were available on your class Web site? <input type="checkbox"/> Email <input type="checkbox"/> Bulletin board (Discussions) <input type="checkbox"/> Chat <input type="checkbox"/> Forum <input type="checkbox"/> All mentioned					
73. How often did you typically use email to contact your lecturer during this course? A. Daily   B. Weekly   C. Once a month   D. Once per term   E. Never   F. No answer					
74. How often did you typically use the bulletin board to communicate with your lecturer during the time this unit was running? A. Daily   B. Weekly   C. Once a month   D. Once per term   E. Never   F. No answer					
75. Lecturers frequently schedule specific chat times and conversational spaces (the purpose is to discuss course topics, and to reflect on ideas and learning experiences).	1	2	3	4	5
76. Progress reports, assignments feedback, etc. are frequently communicated to me.	1	2	3	4	5
77. I feel satisfied with the reaction I got in this class web site.	1	2	3	4	5
<b>D. Learner control</b>					
78. I have the opportunity to spend as much time as I want or need learning the material.	1	2	3	4	5
79. I have the opportunity to control over the media elements.	1	2	3	4	5
80. I have always the feeling that I am responsible for my own learning.	1	2	3	4	5
81. I have access to online lecturer's notes.	1	2	3	4	5
82. I feel satisfied with my control over learning this course.	1	2	3	4	5
<b>E. Cooperative/Collaborative Learning</b>					
83. Much of learning sessions take place in groups.	1	2	3	4	5
84. I frequently participate in online discussion with other team members.	1	2	3	4	5
85. I frequently communicate with my classmates (via email, bulletin boards, and chat line).	1	2	3	4	5
86. The class web site authorized me to know what other learners have been doing in the learning material (e.g., which topics have been read the most or assignments that have been the most popular, etc.)	1	2	3	4	5
87. I feel satisfied with the cooperative/collaborative learning techniques being conducted in this course.	1	2	3	4	5

<b>F. Goal Orientation</b>					
88. The objectives are built using simple language.	1	2	3	4	5
89. The objectives state clearly what skills are required in order to reach each goal.	1	2	3	4	5
90. The objectives show clearly what I'm going to know (or learn) after having the course.	1	2	3	4	5
91. The objectives show clearly what kind of assessment I am going to have at the end of semester.	1	2	3	4	5
92. Special behavioral objectives are identified adequately (I got to know about behavior for success, failure and dishonesty in the class).	1	2	3	4	5
<b>G. Applicability</b>					
93. The course topics accommodate different learning styles.	1	2	3	4	5
94. This course teaches me indeed the skills that I will need.	1	2	3	4	5
95. The available examples in the course are helpful when performing assignments.	1	2	3	4	5
96. Learning is conducted through the base "learning by doing" using methods that involve practical tasks.	1	2	3	4	5
97. I feel that this course has been designed for me.	1	2	3	4	5
<b>H. Motivation</b>					
98. The course topics are interesting.	1	2	3	4	5
99. The course topics are completely new to me.	1	2	3	4	5
100. The course topics meet my needs and expectations.	1	2	3	4	5
101. The course topics focus on real-world problems.	1	2	3	4	5
102. The activities throughout the course motivate me to learn.	1	2	3	4	5
103. The course encourages active participation and knowledge construction.	1	2	3	4	5
<b>I. Evaluation of Previous Knowledge</b>					
104. I am assessed ahead relating to some required skills and techniques for this course.	1	2	3	4	5
105. The course is structured to go over earlier material before starting to teach me a new topic.	1	2	3	4	5
106. The course topics are designed in such a way as to meet different learning levels.	1	2	3	4	5
107. The course is not over simplifying learning; instead it was designed in new ways to provide appropriate scaffolding and support.	1	2	3	4	5
<b>J. Flexibility</b>					
108. The course offers optional routes for my progress	1	2	3	4	5
109. The course contains diverse assignments.	1	2	3	4	5
110. The class web site gives me the opportunity to add	1	2	3	4	5

some comments and suggestions.						
<b>K. Feedback/ Help</b>						
111.	There is an adequate technical online support from the support department.	1	2	3	4	5
112.	My lecturer's expectations are clearly communicated to me.	1	2	3	4	5
113.	Generally, I am satisfied with the help provided in the class web site.	1	2	3	4	5
<b>L. Lecturer role</b>						
114.	Lecturers perform tasks in a straightforward manner.	1	2	3	4	5
115.	Lecturers provide me with one-on-one instructions during the class time.	1	2	3	4	5
116.	Lecturers use the technology reliably.	1	2	3	4	5
117.	Lecturers manage the discussions and forums helpfully.	1	2	3	4	5
118.	Lecturers reply to my emails periodically.	1	2	3	4	5
119.	I am satisfied with the lecturer's role in this course.	1	2	3	4	5
<b>M. Learning styles and strategies</b>						
120.	Which of the following learning styles were used frequently on your class Web site? <input type="checkbox"/> Visual/Verbal <input type="checkbox"/> Visual/Nonverbal <input type="checkbox"/> Auditory/Verbal <input type="checkbox"/> Tactile/Kinaesthetic <input type="checkbox"/> All mentioned					
121.	Which of the following learning strategies were used frequently on your class Web site? <input type="checkbox"/> Learning Contracts <input type="checkbox"/> Small Group Work <input type="checkbox"/> Discussion <input type="checkbox"/> Project <input type="checkbox"/> Lecture <input type="checkbox"/> Collaborative Learning <input type="checkbox"/> Self-Directed Learning <input type="checkbox"/> All mentioned.					
122.	I am required in this course to find out my own solution (not the teacher's or the program's model solutions).	1	2	3	4	5
123.	The course often provides learning problems with a pre-defined model for the solution.	1	2	3	4	5
124.	I am rewarded for good answers (e.g., expressions of approval or admiration, of respect and gratitude).	1	2	3	4	5
125.	Lecturers used to consider my remarks and suggestions.	1	2	3	4	5
126.	Lecturers' support (feedback) is presented in a scaffolding way.	1	2	3	4	5
127.	Lecturers often encourage us to work collaboratively with other class members on assignments.	1	2	3	4	5



## Section 4: Accessibility Evaluation

**Accessibility** is the ability of learners with different characteristics and abilities to access an educational system.

<b>A. Perceivable Content</b>						
<b>128.</b>	Which of the following inaccessibility (difficulties) cases confronted you in the class Web site? <input type="checkbox"/> Visual <input type="checkbox"/> Auditory <input type="checkbox"/> Motor <input type="checkbox"/> Cognitive <input type="checkbox"/> All mentioned					
<b>129.</b>	Text alternatives are provided for any non-text content (so that it can be changed into other forms people need, such as large print, braille <sup>3</sup> , speech, symbols or simpler language).	1	2	3	4	5
<b>130.</b>	Synchronized alternatives were provided for multimedia (such as captions, audio descriptions, sign language, etc.)	1	2	3	4	5
<b>131.</b>	Content is flexibly presented in different ways without losing information or structure (e.g., spoken aloud, simpler layout, etc.).	1	2	3	4	5
<b>132.</b>	Content is presented in a way that is visible and hearable.	1	2	3	4	5
<b>B. Operable Interface</b>						
<b>133.</b>	Most user interface functionalities are available from the keyboard.	1	2	3	4	5
<b>134.</b>	The presented content was very concise, quiet, and understandable which has avoided causing seizures (e.g., flashes).	1	2	3	4	5
<b>135.</b>	I am provided with flexible ways to find content, orient myself in it and navigate through it.	1	2	3	4	5
<b>C. Understandable Content</b>						
<b>136.</b>	Text content is readable and understandable (abbreviations, pronunciations, etc).	1	2	3	4	5
<b>137.</b>	I can predict the Web page appearance and operation.	1	2	3	4	5
<b>D. Robust-Content</b>						
<b>138.</b>	Content can be interpreted reliably by a wide variety of user agents, including assistive technologies	1	2	3	4	5
<b>139.</b>	Content is accessible (or accessible alternative is provided).	1	2	3	4	5

<sup>3</sup> The Braille system is a method that is widely used by blind people to read and write. Braille was devised in 1821 by Louis Braille, a Frenchman.

## Section 5: Information Quality Evaluation

**Information quality (IQ)** is recognized generally as a term to describe the quality of the content of information systems.

<b>A. Intrinsic IQ</b>						
140.	The information was valid according to some stable reference.	1	2	3	4	5
141.	The information was unbiased.	1	2	3	4	5
142.	The information was correct.	1	2	3	4	5
143.	The source of information was in high standing.	1	2	3	4	5
<b>B. Contextual IQ</b>						
144.	The information was applicable and helpful.	1	2	3	4	5
145.	The information was up to date.	1	2	3	4	5
146.	The information presented was completely covering the context of a given activity.	1	2	3	4	5
147.	The size of information corresponded with the context.	1	2	3	4	5
<b>C. Representational IQ</b>						
148.	The information was conforming to our technical abilities.	1	2	3	4	5
149.	The information was easily comprehended.	1	2	3	4	5
150.	The structure of the information was matching with the information itself.	1	2	3	4	5
151.	The information was consistent.	1	2	3	4	5
<b>D. Accessibility IQ</b>						
152.	The system is giving correct answer to a feasible query in a given time range.	1	2	3	4	5
153.	The system operations were easy to manipulate.	1	2	3	4	5
154.	We were secured that information is passing privately through the system.	1	2	3	4	5

## Section 6: Added Value Evaluation

**Added values** point to those new qualities of learning which come alive because of using digital techniques such like computers, WWW, digital learning material, etc. However, the idea of “added value” results not only from using the digital techniques alone but also from that magnificent sharing between the high efficiency techniques of learning and digital techniques.

<b>A. The flexible organization of learning</b>						
155.	Lecturers have flexibly planned the interactive activities and the course structure (e.g.. timetable for the course) carefully beforehand.	1	2	3	4	5

156.	The class web site opens up the opportunities for me to cross over different education levels, fields and organizations to increase sharing of information, expertise and knowledge (via Internet-based resources or together with hard resources).	1	2	3	4	5
157.	I have been informed about appropriate materials available electronically.	1	2	3	4	5
158.	I have been supported with efficient and effective systems to access to electronic material (e.g., flexible borrowing systems)	1	2	3	4	5
<b>B. The improvement of teaching quality</b>						
159.	Lecturers are using the web-based learning environments tools adequately.	1	2	3	4	5
160.	Lecturers knew how they could connect teaching e.g. to situations in working life.	1	2	3	4	5
161.	Lecturers knew very well how they could hold the individualized teaching.	1	2	3	4	5
162.	Course materials are produced by specialists.	1	2	3	4	5
163.	Flexible feedback and support practices are promptly provided.	1	2	3	4	5
164.	Support to personal contacts is available in time.	1	2	3	4	5

<b>C. The development of learning and communication skills using web-based learning environments</b>						
165.	The class web site offers many of collaborative web-based learning tools (e.g., tools for student collaborative inquiry, problem-based learning, articulation and dialogue, debate and personal reflection, etc.)	1	2	3	4	5
166.	I have been given control over learning (e.g., I am able to actively choose the program components in whatever desired order).	1	2	3	4	5
167.	Learning methods of collaborative and individualized teaching are used effectively in every context and situation.	1	2	3	4	5
<b>D. The innovative use of information and communication technologies in teaching</b>						
168.	The planning of course structure is closely connected to the course objectives and the teaching methods on the course.	1	2	3	4	5
169.	The technological tools provided in the class web site have improved the teaching methods in comparison to previous learning environments.	1	2	3	4	5

Thank you very much for your time and participation.

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## Appendix B

### Bibliography of Experts

A questionnaire of 400 questions was forwarded to experts and academics ranged from statistic, design and development, to the online learning specifications. Some of them are chosen from Malaysia; University of Malaya (UM), Open University Malaysia (OUM), and the others are from Syria (Syrian Virtual University). Those experts are:

*Experts and academics from Malaysia.* Prof. Dr. Siow Heng Loke (Department of Mathematics and Science Education, Faculty of Education, University of Malaya); Assoc. Prof. Dr. Ananda Kumar Palaniappan (Department of Educational Psychology and Counselling, Faculty of Education, University of Malaya); Assoc. Prof. Dr. Rohaida Binti Mohd Saat (Department of Mathematics and Science Education, Faculty of Education, University of Malaya); Prof. Dr. Zoraini Wati Abas (Institute of Quality, Research and Innovation, Open University Malaysia).

*Experts and academics from Syria.* Dr. Khalil Ajami (Department of Information Technology, SVU); Dr. Ramez Hajislam (Department of Information Technology, SVU); Prof. Dr. Hasan El-Sayed (Consultant, SVU). Random sample group of students (5 students studying in SVU).