Research Article

ASSESSMENT CRITERIA AND RATING SCALE
OF E-LEARNING LESSON FOR PRESCHOOL CHILDREN
Tran Thi Tam Minh
Saigon University, Vietnam

Corresponding author: Tran Thi Minh Tam – Email: tamminhtran.gdmn@gmail.com
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ABSTRACT

In Vietnam, E-Learning lessons have been implemented in preschools since 2009. However, until now, there have not been any set of assessment criteria and the rating scale for this activity. The development of assessment criteria and rating scale for e-Learning lessons is critical to help preschool teachers to design of e-Learning lesson more effectively. At the same time, it makes the assessment of e-Learning lessons more accurate and scientific. By analyzing and synthesizing relating documents and the papers of local and foreign authors, combined with comparing and analyzing the application of information technology in teaching activities in Vietnam in reality, this article systemizes the general requirements for e-Learning lessons for preschool children, the selection criteria for teaching contents and for subjects and electronic databases. Based on these, the author proposes an rating scale with 17 criteria for an e-Learning lesson.

Keywords: e-Learning lesson; preschool; preschool children; criteria; evaluation scale

1. Introduction

The application of e-Learning lesson in preschools has been implemented since 2009. However, until now, this activity of preschool teachers still has certain limitations such as selecting topics that are inappropriate for teaching with information technology, activities without sound and images, lack of interactions, leading to passivity or boredom of children. Movies and photos used still have many technical and aesthetic errors, not yet linked to technical factors and pedagogy.

In addition, the evaluation of an e-Learning lesson at schools is conducted mainly based on personal experience, which does not help teachers much to design lessons. At the same time, it does not guarantee the rationales and the reasons of evaluation.

Therefore, developing the criteria for designing and assessing e-Learning lessons to help preschool teachers to design e-Learning lessons more effectively and to evaluate e-Learning lesson more scientifically and appropriately is necessary. Through research,
analysis and synthesis of relevant materials, this paper presents the general requirements of an e-Learning lesson, criteria for selecting topics and electronic databases, from which the contents and rating of electronic lessons are proposed.

2. Content

2.1. Concept

Currently, the terms “E-learning lesson”, “electronic lesson plan”, “electronic lecture” or “electronic lesson” are still controversial. However, basically these terms all refer to a form of teaching that incorporates technology, meaning that the lesson is conducted by a means of technology such as computers, projectors or other electronic devices. The article chooses to use the term “E-Learning lesson” because firstly, teaching activities for children in preschool are understood in a broad sense, preschool teachers only conduct teaching activities in a broad sense, not like teaching at other levels (Nguyen, 1998). Secondly, the educational activities of the lesson are carried out through electronic devices such as computers and projectors or interactive boards. Therefore, using the term “E-Learning lesson” is more appropriate than “electronic lectures”.

The term “electronic lesson plan” is not appropriate when describing the teaching time in the classroom with electronic tools and devices because “lesson plan is a plan, lesson plan designed to conduct classroom teaching” (Bui, 2013). Therefore, the term “electronic lesson plan” is understood as planning, and lesson plans presented by technology means and stored in computer files will be more accurate.

2.2. Some general requirements on e-Learning lessons for preschool children

E-Learning lessons are very suitable when teaching children to get acquainted with their surroundings, language development, literary works, music education, value education and life skills and some of the contents in the form of math symbols. This is because they provide vivid images and sound, saves the cost of learning materials and can be reused many times without taking up much storage space and efforts. However, for the remaining activities such as shaping, physical activity, preschool teachers should consider if they want to use e-Learning lessons or not because the characteristics of these activities are more in the form of practice. Normally, adopting an electronic lesson in the shaping activities will be suitable for the purpose of providing the symbol and the work’s origin or instructing the child how to make certain products. For e-Learning lessons used in physical activities, it is usually a simulation game, a movement with a combination of music or learning games. In addition, according to the above orientations, when designing an e-Learning lesson, the following should be noted:

- The structure of e-Learning lesson basically does not differ from the traditional lessons, but the number of activities and the systematic nature of the activities depend on the educational objectives and contents.
- It is advisable to limit the time that children are exposed to computer screens. For 3-year-old children, it should not exceed 15 minutes, and for children from 4-6 years of age, the maximum access time is 40-60 minutes a day; children under 3 years of age should not access technology (Van Scoter, Ellis, & Railsback, 2001). In one week, e-Learning lessons should only be used once or twice (Dao, 2010).

- All activities in e-Learning lessons have the rate of activities with application of information technology is 2/3 (if the rate is less then 2/3, the lessons are considered as using information technology, not e-Learning lessons).

- Activities in the lesson must be intertwined between static and dynamic; creating interactions between the children and the media; giving priority to learning games because children learn through play.

- The effects of the software used should have a purpose, to avoid overusing effects and images that make the children lose attention.

- E-Learning lessons need to effectively maximize the strengths of sound and image to help the children form and enhance their senses and emotions (delight, surprise, humor, curiosity...)

- Priority should be given to designing activities that have a comprehensive impact on children's developmental aspects like a motion game combined with audio - visual on the screen and thinking to solve the problem to minimize the risk of lack of movement, social interaction when children are exposed to computers.

- When organizing activities with e-Learning lessons, it is necessary to arrange the child's seat physically suitable with enough lighting to ensure the physical development of the child.

### 2.3. Evaluation criteria and rating scale of e-Learning lessons

#### 2.3.1. Content selection criteria

The selection of contents for e-Learning lessons should ensure educational, non-violent and not having unsuitable factors for children's psychological development. Besides, e-Learning lesson is only effective for the contents that have many limitations and unsafe for children or costly when applying traditional methods. The details are as follows:

- There are lots of limitations in terms of geography, space and time to the training contents: the cycle of rain, the transformation of things, the life cycle of trees, the life cycle of frogs, prehistoric times, dinosaurs, the underground world, the undersea world, deserts, clouds, galaxies, countries around the world, Vietnam, tourism, strange flowers, special plants (walking trees), wonders of the world...

- The contents that are not safe for children if learning in the traditional way: volcanoes, thunder, natural disasters, peace, earthquakes, floods, dangerous situations in accident prevention and inflation prevention education use...
The experiments require a lot of time and tools but are difficult to observe such as the absorption of roots and stems; waste decomposition; mold development process; what does the tree need to live...

- The contents that is costly if teaching traditionally: National flags of countries around the world, National costumes of countries around the world, groups of nutrients in food, transportations, seasonal fashion...

2.3.2. Selection criteria for films and images in designing e-Learning lessons
- The selection of films and images should be science-based such as providing accurate and logical information (except for creative and mythical contents); just long enough for the child's ability to concentrate, (about 30-40 seconds); contents in movies or pictures should focus on the main contents, avoid the unnecessities that can distract the children’s attention.
- The selection of films and images must ensure aesthetics and education: beautiful, attractive to children, sympathetic, non-violent or offensive.
- Technical aspects: remove background of images if not suitable or unsightly. Images should be neat without non-aliased cut lines (unless intended), bright enough.
- Copyright: most images, movies and audios are downloaded from internet resources, so it is important to pay attention to the copyright of the database. For images and videos with a copyright mark on them, quote the source.

2.3.3. Evaluation criteria and the rating scale of e-Learning lessons

From the above sections, contents and criteria for evaluating e-Learning lessons are specified in Table 1 on a 100-point scale:

Table 1. Evaluation criteria of e-Learning lessons

<table>
<thead>
<tr>
<th>No.</th>
<th>Evaluation criteria (0 - 50 point)</th>
<th>Level 1 (1p)</th>
<th>Level 2 (2p)</th>
<th>Level 3 (3p)</th>
<th>Level 4 (4p)</th>
<th>Level 5 (5p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Objectives are suitable for age and training program</td>
<td>___</td>
<td>___</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>2</td>
<td>Objectives are suitable for deploying electronic lesson</td>
<td>___</td>
<td>___</td>
<td>___</td>
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<td>___</td>
</tr>
<tr>
<td>3</td>
<td>Educational contents suit the objectives, topics, and age</td>
<td>___</td>
<td>___</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>4</td>
<td>Educational contents suitable for implementing e-Learning lessons</td>
<td>___</td>
<td>___</td>
<td>___</td>
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<td>___</td>
</tr>
<tr>
<td>5</td>
<td>Activities appropriate to age group and goals of the lesson</td>
<td>___</td>
<td>___</td>
<td>___</td>
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<td>___</td>
</tr>
<tr>
<td>6</td>
<td>The activities of the lesson are balanced and logical</td>
<td>___</td>
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<td>___</td>
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<tr>
<td>7</td>
<td>Activities suitable for information technology (double the point)</td>
<td>___</td>
<td>___</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>8</td>
<td>The methods of organization of activities are suitable (double the point)</td>
<td>___</td>
<td>___</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>
No. | Designing (0 – 40 point)
--- | ---
1 | Beautiful pictures, clear, not copyrighted
2 | Clear movie, condensed film contents, suitable length (30 - 60 seconds)
3 | Sound: loud enough to hear and in good quality
4 | Use effects with clear purpose, not overused
5 | The effect is consistent with the idea to be expressed
6 | Level of information technology application (multiply by 2)
7 | Emotional factors

No. | Overall (0 – 10 point)
--- | ---
1 | Time strictly according to regulations
2 | Creativity (ideas, design techniques)

In particular, level 1 - corresponds to the following indicators:
- The lesson is designed by basic operations: entering text, inserting images, unscientific format, lack of aesthetics.
- Children's activities are mainly listening to teacher’s explanation and looking at the screen.
- Inappropriate topic (not effective).
- Level 2 - corresponds to the following indicators:
- Use some basic effects (turn pages, appear, disappear).
- Basic format, relatively scientific.
- Sometimes slightly overused effects, causing distraction
- Inappropriate topics (can be conducted but using other forms will be more effective).
- Level 3 - corresponds to the following indicators:
- The illustrated contents (images, sounds, movies...) are not suitable (technical quality, scientific features...).
- Use available e-Learning lesson and make some adjustments.
- Appropriate teaching topics.
- Level 4 - corresponds to the following indicators:
- A combination of audio & visual activities.
- Smoothly use the effects to create vivid products: animation, games...
- Good and consistent image - sound - movie quality.
- Suitable and new topics.
Level 5 - corresponds to the following indicators:
- The activities of children combine harmoniously, scientifically and naturally with the contents of e-Learning lesson.
- Combining different/various effects to create a new, suitable and attractive effect.
- Combined use of many supporting softwares to make e-Learning lessons more vivid and attractive.

*Note: Because this is an electronic lesson, elements suitable to information technology in terms of application level and form of activity have double points compared to other criteria.

3. Conclusion

The use of traditional or modern teaching facilities needs to meet certain requirements and principles to ensure the quality of education because they are only considered as tools and the effectiveness depends entirely on the implementation. Therefore, to promote the advantages of information technology in teaching such as vivid visualization, high simulation ability, not limited by time - space...; limitations such as obesity, delayed speech or language, lack of physical activity when children access too often to computers, lack of evidence and research when designing e-Learning lessons, preschool teachers should comply with the requirements and the criteria described in this paper. In addition, the evaluation of e-Learning lessons should also be based on the proposed evaluation contents and criteria to ensure that it is science-based and synchronized.

Conflict of Interest: Authors have no conflict of interest to declare.

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TIỂU CHÍ VÀ THANG ĐÁNH GIÁ BÀI DẠY ĐIỆN TỬ CHO TRẺ MẦM NON
Trần Thị Tâm Minh
Trường Đại học Sài Gòn, Việt Nam
Tác giả liên hệ: Trần Thị Tâm Minh – Email: tamminhtran.gdmn@gmail.com
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Tóm tắt
Bài dạy điện tử đã được triển khai trong trường mầm non từ năm 2009, nhưng cho đến nay vẫn chưa có tiêu chí và thang đánh giá rõ ràng, khoa học cho hoạt động này. Việc xây dựng tiêu chí và thang đánh giá bài dạy điện tử là cần thiết vì giúp giáo viên mầm non định hướng thiết kế bài dạy điện tử hiệu quả hơn đồng thời giúp việc đánh giá bài dạy điện từ khoa học, phù hợp hơn. Bằng phương pháp phân tích tổng hợp tài liệu có liên quan của các tác giả trong và ngoài nước, kết hợp với việc so sánh và phân tích thực tế ứng dụng công nghệ thông tin trong tổ chức hoạt động giáo dục tại Việt Nam, bài báo đã đề xuất hóa những yếu tố chung của bài dạy điện tử cho trẻ mầm non, tiêu chí lựa chọn nội dung, tiêu chí lựa chọn để tài và cơ sở dữ liệu điện tử. Trên cơ sở đó, tác giả đề xuất thang đánh giá bài dạy điện tử cho trẻ mầm non theo 5 mức độ với 17 tiêu chí cụ thể.

Từ khóa: bài dạy điện tử; mầm non; trẻ mầm non; tiêu chí; thang đánh giá