

DEVELOPING FILMS TO SUPPORT THE TEACHING AND LEARNING OF THE COURSE “TOY MAKING SKILLS FOR PRESCHOOL CHILDREN”

Pham Thi Bich Huyen

Saigon University, Ho Chi Minh City, Vietnam

ARTICLE INFORMATION ABSTRACT

Journal: Vinh University
Journal of Science
Educational Science and Technology
p-ISSN: 3030-4857
e-ISSN: 3030-4784

Volume: 53

Issue: 4C

***Correspondence:**
ptbhuyen@sgu.edu.vn

Received: 17 October 2024

Accepted: 12 December 2024

Published: 20 December 2024

Citation:

Pham Thi Bich Huyen (2024).
Developing films to support the
teaching and learning of the course
“Toy making skills for preschool
children”. *Vinh Uni. J. Sci.*
Vol. 53 (4C), pp. 97-108
doi: 10.56824/vujs.2024c145c

OPEN ACCESS

Copyright © 2024. This is an Open
Access article distributed under the
terms of the [Creative Commons
Attribution License \(CC BY NC\)](https://creativecommons.org/licenses/by-nc/4.0/),
which permits non-commercially to
share (copy and redistribute the
material in any medium) or adapt
(remix, transform, and build upon
the material), provided the original
work is properly cited.

This research focuses on developing an instructional video to support teaching and learning the “Skills in Making Toys for Preschoolers” course within the preschool teacher training program. The research results have established a process for creating instructional videos, which includes key issues such as the goals, principles, and content of the instructional video for the Toy-making Skills course. The result helps lecturers and students conduct teaching and learning activities lively and engagingly. Notably, it has successfully stimulated students' interest in learning, meeting the demands of innovation in teaching and learning the Skill of Toy Making in the era of the 4th Industrial Revolution.

Keywords: Toy-making skills; teaching in the 4.0 era; preschool children.

1. Using films in teaching: A comprehensive review

The integration of films into teaching has been widely applied globally for decades, yielding significant success. Films have long been utilized in language learning and various disciplines such as physics, biology, chemistry, history, and arts, making them effective teaching and learning tools. Their visual nature makes films an impactful educational medium, fostering a fresh learning environment and enabling engaging teaching and learning activities. This approach enhances learners' understanding and increases their enthusiasm for learning.

Numerous authors have explored the use of films in education and reported outstanding results. For instance, in *Learning through the Movies*, Considine and Baker (2006) investigated the value of using films as teaching tools. They emphasized that students learn better and retain more information when interacting with content delivered through their preferred medium. This method has gained recognition from prominent literacy and language arts organizations in the United States. Similarly, Lee & O'Bannon (2010), in *Using Movies as Teaching Tools*, highlighted how films provide educators

with a valuable means to present information, leveraging the power of compelling visuals to benefit learners. Their research confirmed the educational benefits of incorporating films in teaching environments.

Eker and Karadeniz (2014) conducted experiments comparing teaching processes with and without animated films. Their findings demonstrated that incorporating animations into teaching significantly improved students' academic performance and memory retention. Furthermore, Herrero and Vanderschelden (2019) noted that audio-visual media, moving images, and modern technological tools enhance learners' cognition. However, teachers often face challenges in optimizing the potential of films, videos, and motion graphics in education.

Overall, research and teaching experiments involving audio-visual media, films, and moving images - including television and online videos - have shown that these methods foster positive thinking and creativity among learners.

In Vietnam, educators are increasingly incorporating documentaries, animated films, and educational videos into teaching. Research on active teaching methodologies has also advanced, with numerous studies focusing on integrating information technology into education. This includes designing educational documentaries, instructional films, and animated videos to support teaching and learning processes. Amid the Industry 4.0 revolution, advancements in science and technology, particularly information technology, have facilitated the creation of educational films tailored to specific teaching objectives and themes. Notable studies in this area include Tra & Hieu (2020), Minh (2020), Tu (2019), and Dung & Hang (2018). These authors highlight the effectiveness of applying films and videos in teaching, recognizing them as versatile educational resources that enrich lessons with engaging visuals and support effective learning.

At the time of this study, no prior research specifically addressed developing films to support the teaching and learning of the *Making Toys for Preschool Children* course. This course requires demonstrations and modelling of practical techniques to help students grasp the steps involved in creating products. However, the class often includes students with diverse skill levels, ranging from highly talented to struggling to master the processes.

Developing films for specific topics within the *Making Toys for Preschool Children* course can create an engaging learning atmosphere and support dynamic, interactive teaching and learning activities. These films would enhance students' interest in the subject, aligning with modern educational innovations in the context of Industry 4.0. Consequently, building instructional films for this course is essential to foster students' autonomy in self-learning and research, allowing them to practice before and after classroom sessions.

2. Research methods and key conceptual tools

2.1. Research methods

- Theoretical research methods:
 - Study Circular No. 47/2020/TT-BGDĐT issued by the Ministry of Education and Training.
 - Analyze books, newspapers, academic journals, theses, and dissertations related to the topic.

- Investigate educational materials and theoretical frameworks regarding using visual aids, including educational films, in teaching.

- Review curriculum outlines and instructional materials for the course *Making Toys for Preschool Children*.

Practical research methods:

- Observe and document the advantages and challenges in teaching practices.

- Study techniques for creating educational films.

Synthesis methods:

- Aggregate relevant materials, selecting high-quality resources and films/videos that provide sufficient information to meet the synthesis objectives for developing suitable educational films.

- Summarize research findings from documents, films, and videos.

2.2. Key conceptual tools

2.2.1. Definitions of films

According to the *Vietnamese Dictionary* by the Vietnam Institute of Social Sciences, a cinematographic film (also referred to as a cine film or motion picture) is an artistic work recorded on reels and shown on screens.

Educational films are used in teaching to stimulate learning through visual and auditory means, engaging multiple senses. They can take various forms, including documentaries, animations, fictional stories, television programs, and short educational films (*Education Framework*).

Educational films serve as instructional tools in classrooms, portraying processes and introducing events, phenomena, inventions, or technological applications to help learners address lesson-related problems.

2.2.1. The role of educational films

Educational films are among the most modern teaching tools. Philosopher John Dewey emphasized their potential to improve education and learning through visual and engaging approaches. David Buckingham, a researcher in media and education, highlighted how educational films create rich and diverse learning experiences, offering viewers opportunities to learn and explore new concepts.

Educational films are more effective than static images, slides, or model observations, especially for practical and experimental lessons. They are potent media tools for delivering knowledge and sparking learners' curiosity and focus. However, their efficacy depends on supporting problem-solving activities and encouraging active learner participation through social interactions. They standardize and unify information for learners with similar needs, providing consistent content delivery. The dynamic nature of films allows them to convey both primary and supplementary information at a speed unmatched by verbal lectures.

2.2.3. Classification of educational films

Educational films encompass various terms based on usage, such as simulation software, virtual experimental films, original documentary films, video analysis tools, and instructional videos. These terms align with how the films are utilized in teaching. Films can be classified based on their role in innovating teaching methods and facilitating

teachers and learners in exploring content during instruction: situational films, films supporting problem-solving proposals, films aiding the implementation of solutions, and films requiring applying knowledge and skills.

This research aims to develop educational films to support teaching and learning, providing educators and learners with tools to utilize film content in instructional processes effectively.

2.2.4. Objectives of educational films

The primary objective of educational films is to provide learners with knowledge, skills, and new information through visually engaging content. These films help educators convey concepts and theories more effectively and vividly. Additionally, educational films enhance learners' critical thinking, problem-solving abilities, and practical skills. The ultimate goal is not only to transfer knowledge but also to inspire curiosity and creativity. Specifically:

- Develop learners' skills, fostering problem-solving capabilities.
- Utilize the visual nature of films as an effective and valuable teaching and learning tool.

3. Developing educational films

3.1. Process of creating films/videos

Step 1: Preparation

- Identify specific content for each chapter or lesson based on the detailed syllabus.
- Collect and process available resources effectively.
- Use a camera, camcorder, or smartphone with a camera feature.
- Microphone (if necessary).

Step 2: Design

- Develop a script concept for the educational film.
- Utilize creativity to design teaching aids that are simple, cost-effective, and safe.
- Employ tools and devices to design and record the film/video.
- Establish the film structure, typically comprising an introduction, main content, and conclusion.

Step 3: Completion

- Assemble the recorded scenes into a cohesive film, ensuring seamless transitions.
- Review and edit as necessary.
- Export the final film.

3.2. Content of educational films for teaching and learning

Basic requirements for designing and editing educational films:

Regarding film content:

- The film must present a systematic body of knowledge aligned with the curriculum, corresponding to the lessons in the course syllabus. Additionally, it may expand on topics to provide updated or supplementary knowledge.
- The content should detail the steps for creating products, enabling learners to observe and replicate the process. Educational films must focus on essential content, be concise, and adhere to the time constraints of each teaching session.

- Films designed for artistic disciplines targeting students with independent thinking should include open-ended content. They should emphasize creativity and personal perspectives rather than strictly adhering to correctness, encouraging learners to explore new, innovative viewpoints.

Regarding film imagery:

- Imagery must align with the lesson content in the syllabus and textbooks. It should be clear, culturally appropriate, and scientifically accurate. When using films adapted from online sources, ensure the selected clips have relatively high-quality visuals and audio.

- Avoid images that conflict with cultural norms or the institution's educational objectives.

Regarding teaching and learning methods:

- Unlike narrative films, educational films must explicitly reflect teaching methodologies, particularly in the current context, emphasizing active learning and enhancing learners' self-study and research capabilities.

- The structure and content of the film should serve not only as self-learning material for students but also as an effective tool for instructors to organize and facilitate learners' cognitive activities.

- Films should promote active teaching and learning methods, fostering learners' self-study skills and problem-solving abilities. Based on general teaching guidelines and materials, instructors should choose the most suitable and effective resource utilization. A universal formula cannot apply to all situations.

The creation of educational films for teaching and learning must reflect the specific characteristics of each subject and pedagogical principles. This distinguishes educational films from other types and highlights the differences between artistic subjects and basic sciences.

3.3. Principles for developing and selecting educational films/videos

- *Alignment with curriculum content:* Educational films must align with specific curriculum content, clearly reflecting the defined objectives and meeting the requirements for each topic, such as key points, theoretical depth, and the level of skill development as prescribed by the curriculum.

Educational films should exhibit pedagogical characteristics, such as stimulating cognitive interest, serving as a knowledge source for learners, and supporting active thinking processes.

- *Suitability for learners' age characteristics:* University students' age allows for good concentration, relatively strong evaluative abilities, and remarkably purposeful perception at a high level. However, their perception still requires guidance from instructors. Thus, the content and duration of the film should match the cognitive and psychological characteristics of the learners' age. The film must enhance learners' observational, evaluative, inferential, creative thinking, and critical reasoning abilities.

- *Structured, clear, and user-friendly composition:* The film's concept is expressed through the subjective lens of the filmmaker. Therefore, when creating and selecting films, the purpose of use must be clear, such as:

- At what stage of the teaching process will it be used?

- Which competencies is it meant to support?

- When should narration be included, and when should it be omitted?
- How will learners' cognitive activities unfold when observing the film's visuals?

The structure should be well-organized, concise, and student-friendly to ensure effectiveness.

- *Ease of use and practical application:* The film must ensure teachers and learners can use it conveniently. The visuals should be clear, from the preparation stage of creating teaching aids to executing each step. Educational films must meet the practical needs of teachers and learners, supporting teaching activities and enhancing the learning experience.

3.4. Identifying content knowledge for lessons in the Toy-Making Skills course

The *Toy-Making Skills* course for preschool education includes six basic techniques: stamping, tearing and pasting, cutting and pasting, blowing (streams/bubbles), mosaic work, and paper layering. Additionally, the course covers practical activities such as creating toys from recycled materials and stage toys.

This study highlights specific features in some basic techniques through the following lessons:

- Practical lesson on stamping;
- Practical lesson on tearing and pasting;
- Practical lesson on blowing (streams/bubbles);
- Practical lesson on cutting and pasting;
- Practical lesson on mosaic work;
- Practical lesson on paper layering.

3.5. Developing educational films/videos for the Toy-Making skills course

In this study, the author introduces six fundamental techniques and educational films specifically designed, edited, and tailored to illustrate the section “Basic Techniques” in the *Toy-Making skills* course for preschool education. The films provide suggestions for students to watch, download, and effectively apply to practical lessons. The materials for toy-making are diverse and abundant; in creating educational films/clips, the author selected a few representative materials.

Preparation: Tools and materials include pencils, markers, paints, rulers, various types of tape, scissors, knives, clips, recording devices, and a laptop. Additional support came from curated video clips.

Process: The author conceptualized the script and film content around predefined knowledge from lessons in the course curriculum. Small clips were recorded, combined with existing resources, and edited using film-making software to create a complete film. This approach is advantageous for educators as it requires minimal effort, reduces costs for infrastructure and personnel, and is resource-efficient. However, copyright issues must be addressed when using existing resources to produce films.

Usage: Educational films for the *Toy-Making Skills* course can be applied directly in class or reviewed by students through class group pages to reinforce their skills after class. The films allow students to pause and replay sections multiple times. Learners are encouraged to connect sequences within the films to address learning challenges.

Below are examples of completed films with varied formats and structures to enrich the collection of teaching films.

3.5.1. Lesson: Stamping with fruits and vegetables

Materials and Tools: Fruits and vegetables (e.g., bitter melon), A4 paper, watercolours, trays for holding colours, paintbrushes or sponges, knives, etc.

Implementation: The author created two films/videos featuring stamping with vegetables and bitter melon, showcasing images of plants and animals. The films visually present the materials and tools. Students observe the shapes and characteristics of different fruits and vegetables. Key steps demonstrated in the films include:

Handling and Arranging: How to effectively manipulate and arrange vegetable pieces to create aesthetically pleasing images.

Techniques for Stamping: Demonstrating how to use parts of vegetables for stamping; Introducing methods to apply colours to vegetables using paintbrushes or sponges.

Design and Creativity: Suggestions for arranging vegetables to produce various shapes and stamping patterns.

Learning Outcomes: Students observe and understand the process, engage in fun and interactive learning, and gain inspiration from hands-on activities.

Below are sample images captured from the educational film for the lesson on stamping with fruits and vegetables.



Figure 1: Some illustrations cut from the learning film *Lesson Printing pictures from fruits and vegetables*

3.5.2. Lesson: Tearing and Pasting

Materials and Tools: Colored paper, newspaper (optional), A4 paper (210 x 297 mm) as the base, pencil, ruler, glue, and templates (if available).

Implementation: The instructional film illustrates the tearing and pasting technique, using coloured paper to create a simple landscape collage.

Visualization: The film showcases the required materials and tools.

Techniques: It introduces different paper-tearing methods, including shredding, strip tearing, and block tearing.

Creative examples: A sample simple collage is displayed in the film, while learners are encouraged to unleash their creativity to produce various images.



Figure 2: Some illustrations from the learning film *Tearing and Pasting*

3.5.3. Lesson: Cutting and Pasting

The author created two films/videos for the cutting and pasting section.

a. Illustrative Film: Decorative Borders

Materials and Tools: A4 paper (210 x 297 mm) in desired colours, pencil, ruler, scissors.

Implementation: Visualization: The film introduces the necessary materials and tools. Design Ideas: It presents examples of decorative border patterns.

Step-by-Step Guide:

Folding and Cutting:

- Fold an A4 sheet of coloured paper in half or quarters lengthwise. In this example, the paper is folded into four strips, resulting in pieces measuring 53 x 297 mm after cutting.
- Fold each strip three more times horizontally to create a long, layered stack.

Drawing and Cutting:

- Draw floral or animal motifs on one side of the paper, ensuring to leave portions along the edges to maintain connectivity.
- Cut along the main outlines of the drawing.
- Unfold the paper to reveal a decorative border.

Learning Outcomes: This film provides visual guidance and simplifies the practical process, enabling learners to follow along and create their decorative borders.

Below are sample images from the instructional film on creating paper-cut decorative borders.



Figure 3: Some images cut from the learning film *Decorative Borders*

b. Illustrative Film: Toy-Making with Paper

Materials and Tools: Cardstock, coloured paper, plastic eyes (optional), additional decorative accessories (optional), markers, scissors, and glue.

Implementation: Visualization: The film displays the materials and tools needed for toy-making. Guided steps:

Toy Assembly:

- The film demonstrates how to draw and cut paper components for a toy, using an animal figure as an example.

- It guides learners in creating the body, head, and limbs.

Construction and Decoration:

- Attach the limbs and head to the body to complete the toy.

- Add final touches by drawing eyes, noses, mouths, whiskers, and other details.

These visual resources enrich the learning process and help learners grasp practical techniques for toy-making.



Figure 4: Some illustrations of paper toy collage films

3.5.4. Lesson: Blowing rays

Materials and Tools: Watercolors, A4 paper, straws, brushes, trays, containers, and water.

Implementation: The author created two instructional films/videos illustrating using straws for painting through blowing techniques.

Introduction: The film begins by showcasing various samples of straw-blown paintings, allowing learners to visualize the patterns and shapes created by blown paint streaks. The next segment introduces the materials and tools needed for the technique, giving learners a clear understanding of the resources required.

Step-by-Step Guidance:

- Place a sheet of paper on a flat surface or within a tray.
- Add a drop of watercolour to the paper using a dropper or brush.
- Blow through a straw to spread the watercolour.
- Repeat the process with additional colours as desired (based on the chosen design).

Below are some sample images captured from the instructional film on straw painting.



Figure 5: *Some images cut from the learning film “Blowing rays”*

3.6. Usage of films

Each teacher should select the most appropriate and effective way to utilize the instructional materials. There is no universal formula for this process. Alongside physical objects and presentation slides, films/clips can be integrated with teaching methods to make lessons more dynamic.

For the “Toy-Making Skills for Preschoolers” course, instructors can use films during, before, or after class. Students can watch the films on classroom group platforms to reinforce their learning and practice creating the products. The ability to pause and replay sections of the films multiple times helps learners better understand and execute the tasks.

4. Conclusion

The creative models presented in this research were developed based on the preschool education curriculum, particularly the “Toy-Making Skills for Preschoolers” course, focusing on basic techniques. The study results make teaching and learning activities more engaging and enjoyable for teachers and students. This research aligns with the modern trend of incorporating technological advancements into education, including instructional and documentary films designed for specific educational purposes. These films leverage the advantages of sound, visuals, and colours to captivate learners, enhance comprehension, and stimulate curiosity and enthusiasm for exploration in their studies. The theoretical foundation for developing instructional films for “Toy-Making Skills for Preschoolers” is rooted in early childhood development and learning theories. These films are valuable tools to support teaching methods, making lessons lively and engaging and fostering tremendous enthusiasm for learning among students.

While this research provides guidance, it is not an endpoint for toy-making skills, as toys and games continually evolve. The significance of this study lies in creating instructional films/videos that establish an effective and conducive learning environment. These resources encourage students to develop toy-making skills positively and actively, enhancing their learning experiences, particularly in hands-on lessons. Instead of attending in-person classes, students can learn independently at home via websites or group pages where instructors provide instructional clips and resources. This self-paced learning approach allows students to complete their education more effectively.

Instructional films strengthen the interaction between learners and instructors, enabling students to learn and solve problems more efficiently. Moreover, using these films exposes students to diverse information and learning methods, promoting the holistic development of their abilities.

REFERENCES

- Tra, D.H., & Hieu, T.Q. (2020). Building and using instructional films to teach gravitational force knowledge. *Journal of Science, Hanoi National University of Education*.
- Minh, D. T. H. (2020). *Some documentary films support the teaching of Natural and Social Science*. Hue University of Education.
- Tu, N. V. (2019). *Methods of creating and using instructional films for the history of world art course to enhance self-study and research skills*. Khanh Hoa University.
- Dung, T.Q., & Hang, P.T. (2018). The Fourth Industrial Revolution and its impact on current university teaching methods. *Journal of Education*.
- Institute of Linguistics, Vietnam Academy of Social Sciences (1992). *Vietnamese Dictionary*. Hanoi: Language Dictionary Center Publishing House.
- Eker, C., & Karadeniz, O. (2014). The effects of educational practice with cartoons on learning outcomes. *International Journal of Humanities and Social Science*, 4(14).
- Herrero, C., & Vanderschelden, I. (2019). *Using film and media in the language classroom: Reflections on research-led teaching*. Manchester, UK.

- Dale, E. (1969). *Audio-visual methods in teaching* (3rd ed., p. 108). Holt, Rinehart & Winston, New York: Dryden Press. Retrieved October 28, 2017, from <https://www.researchgate.net>.
- Considine, D. M., & Baker, F. (2006). *Learning through the movies*. National Middle School Association (NJ1), Middle Ground, 10(2), 12-15.
- Lee, J. W., & O'Bannon, T. (2010). Using movies as teaching tools. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 9(2), 4-16.

TÓM TẮT

XÂY DỰNG PHIM HỖ TRỢ VIỆC DẠY VÀ HỌC HỌC PHẦN KỸ NĂNG LÀM ĐỒ CHƠI CHO TRẺ MẦM NON

Phạm Thị Bích Huyền

Trường Đại học Sài Gòn, Thành phố Hồ Chí Minh, Việt Nam

Ngày nhận bài 17/10/2024, ngày nhận đăng 12/12/2024

Nghiên cứu này tập trung xây dựng phim học tập hỗ trợ cho việc dạy và học học phần “Kỹ năng làm đồ chơi cho trẻ mầm non” thuộc chương trình đào tạo giáo viên mầm non. Kết quả nghiên cứu đã xác lập được quy trình xây dựng phim học tập bao gồm những vấn đề chính như: mục tiêu, nguyên tắc, nội dung phim. Kết quả nghiên cứu này giúp cho giảng viên và sinh viên tiến hành các hoạt động dạy và học một cách sinh động, hấp dẫn, đặc biệt là đã giúp cho người học có được sự hứng thú trong học tập, đáp ứng sự đổi mới cách dạy và học trong thời đại cách mạng công nghiệp 4.0.

Từ khóa: Kỹ năng làm đồ chơi; dạy học thời 4.0; trẻ mầm non.