Creating videos: A Pedagogic Tool for 21st Century Teachers of India

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Abstract

With smartphones and tablets becoming part of our lives, videos grabbing the learners' attention, and the resultant increased screen time, the idea was to test video creation as a learning tool for pre-service teachers. Creating videos related to current social, environmental, or economic issues requires in-depth research of the issue being investigated, interview of people connected directly with the subject, visiting required locations and having the first-hand experience or visiting a familiar place with a lens, and then synthesising the content into a meaningful short video. The action research study having four phases – reflection, planning, implementation, and feedback- shows that video creation engages the learners' head, heart, and hand, fostering critical thinking, creativity, and collaborative and communication skills necessary to tackle 21st-century challenges. The study was conducted on thirty pre-service teachers enrolled in two colleges offering B.Ed. Programme under the University of Delhi and resulted in the creation of four videos. The study also highlights how video creation contributes to quality education for 21st-century learners based on the Four Pillars of Education outlined in the Delors Report: learning to know, learning to do, learning to be, and learning to live together.

KEYWORDS: Action Research; Pedagogic Tool; Video Creation.

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1. Introduction

Today's youth has grown up in a world of technology, shaping the future landscape of education and work. The youth is more interested in interacting with the complex social, political, environmental, and economic issues affecting their lives by writing blogs, posting on social networking sites, and documenting through pictures and videos than through formal schooling. Learners today advocate for flexible, relevant, and meaningful learning tasks and strategies that allow them to direct their learning. Students have consistently used tools to support their learning. Traditional examples include books, pencils, blackboards, paper, rulers, and calculators. Digital technologies are also learning tools that support student learning in collaborative, communicative, and creative ways. Redecker and Punie (2013) say, "digital technologies will not only alter what students need to learn in the future but also *how* they learn." Today's education community is fascinated by the learning opportunities that mobile technologies offer. It helps increase access to resources, collaborate with others, and create online content through blogs or videos. With advancements in Information and Communication Technology (ICT) tools and declining prices of smartphones, mobile devices with a camera are increasingly becoming accessible and affordable by almost everyone.

"The continual growth of web-based multimedia and social media incorporating text, audio, photo and video capabilities provide increasing opportunities for educational institutions to integrate these technologies into teaching, learning and assessment" (McLoughlin and Lee, 2010).

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Video creation provides an active learning experience that is "social, participatory, supported by rich media and within learner control" (UNESCO, 2015). Classrooms are not the only places where learning can occur; classrooms are, in fact, artificially created settings isolated from reality. The community and our surrounding natural settings offer powerful sites for learning if visited to achieve intended educational objectives. Mobile technologies and digital tools allow learners to become active content creators and not just passive consumers (Klamma et al., 2007; McLoughlin & Lee, 2010). YouTube, a popular video-sharing platform, has seen exponential growth in users creating and consuming content.

However, integrating technology in classrooms is successful only if the teacher is well aware of its benefits and the extent of its usage in their subject matter. Thus this research aims to train teachers in integrating technology to make it more relevant and meaningful for the learners of today and, at the same time, help shape what young people need to learn in order to 'act' or 'respond' to the socio-economic and environmental challenges of 21st century.

The objectives of the study are to explore video creation as a pedagogical tool for the 21st-century teachers, and to understand the benefits of video creation in terms of building crucial competencies required for advancing the agenda for sustainable development.

2. Learning Content of the 21st Century

With the complexity and uncertainty daunting our lives, preparing our children for the 21st century has become challenging as never before. Phenomena like globalisation, increasing acceptability of new technologies, blurring of boundaries, and changing markets compel us to ponder the learning content and methods students need to succeed in the twenty-first century. More and more researchers are focussing on learning experiences tailored to the needs of individuals and grounded in real life (Ala-Mukta et al., 2010; Learnovation, 2009). The learner of the 21st century likes to learn by exploring and expressing themselves through technology (Ben-David Kolikant, 2010). Leadbeater and Wong (2010) argue that "schools are not the only, nor necessarily the most important, place where children learn. Children learn first in their homes, families, and communities" (p. 15).

Moreover, 21st-century learners want freedom of choice in deciding on the content they want to learn and do not want their learning to be governed by traditional 'authoritative' sources. The learning approaches and methods are also moving away from teacher-dominated classrooms to more flexible, interactive, and self-driven forms of learning. The learners of today are "producing new insights and ideas motivated by a spirit of inquiry" (Lee & McLoughlin, 2007).

3. Pedagogies for the 21st Century

The 21st-century challenges demand 21st-century competencies from the learners, which cannot be acquired through the age-old lecture method, where the teacher is believed to have all the knowledge which is to be transmitted to learners whose role is to be a passive listener. Today's learners are active co-creators of knowledge and new ideas. Learners of today must be engaged in meaningful inquiry-based learning that holds relevance and value for them and the communities in which they live.

"Real-world experiences merged with sustained engagement and collaboration offer opportunities for learners to construct and organise knowledge; engage in detailed research, inquiry, writing, and analysis; and communicate effectively to audiences." (Barron & Darling-Hammond, 2008).

It is believed that 21st-century Learning is based on three pedagogical pillars – personalisation, participation, and productivity (McLoughlin and Lee, 2008). "Twenty-first-century pedagogy must employ innovative and research-supported teaching strategies, learning technologies and real-world applications" (Saavedra and Opfer, 2012). It can be said that pedagogical approaches using technology for inquiry and problem-based learning will empower the learners with the required competencies to develop higher-order thinking skills.

4. Contribution to Quality Education for 21st Century Learners

The problem of quality and 21st-century learning outcomes is the most significant agenda for the world nowadays. The Sustainable Development Goal on education for 2030 aims to 'Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. Learning: The Treasure Within, famously called, Delors report recommended that the aims of education be created on "four pillars of learning" which further strengthens the belief that video creation as a pedagogical tool can promote quality education in the following ways:

Learning to Know: Video creation engages learners in informal and self-directed learning while understanding the concepts in the real context. It makes education meaningful and relevant by studying local and global issues in a cross-disciplinary manner, breaking the subject boundaries.

Learning to Do: Video creation enables learners to investigate local needs, perceptions, or conditions by exploring and reviewing the concepts in real settings. The learners interview those directly involved with the

issue, interact with the location, and create a piece of work after incorporating his/her creativity.

Learning to Be: Video creation not just provides an opportunity to develop cognitively but also socioculturally. It not just prepares one for academics but also for failures, conflicts, and crises. It helps the learners take responsibility for their growth and see it as central to their creations. Thus, it can push learners beyond their comfort zones and make them innovators of tomorrow.

Learning to Live Together: Creating videos requires extensive teamwork and coordination to have the vision or idea of what to create, for what purpose, and how to bring the desired outcome. Not only does it require cooperation and collaboration among the team members but also stewardship and adaptability for working with other community members engaged in it, be it an interviewee or a contributor.

5. Methodology

Action Research was conducted with two-fold objectives: (1) To familiarise the young future teachers with the learning potential and use of readily available technology (like a smartphone), and (2) to encourage pre-service teachers or students of education to experiment with the video creation as a teachinglearning tool so that they can effectively assign and evaluate their students using video technology in their future classrooms. (Girod, Bell & Mishra, 2010; Kearney & Schuck, 2004, 2006; Hofer & Swan, 2005, 2006) The population of the study consists of social science pre-service teachers enrolled in the B.Ed. Programme in Delhi.

Furthermore, the sample for the study was purposively selected to include only social science pre-service teachers. A total of thirty pre-service social science teachers were chosen from two of the colleges offering B.Ed. Programme under the University of Delhi, India.

5.1. Phases of the Action Research

The study was conducted in a phased manner, following the below mentioned four phases:

1. **Reflection:** With smartphones and tablets becoming part of our lives, videos grabbing the learners' attention, and the resultant increased screen time, the idea was to test video creation as a learning tool. The students were divided into groups of five and asked to reflect on how they can use video creation as a pedagogic tool to teach social science concepts to their secondary school students. After discussing within the group, each group was asked to present at least one topic or concept which they think is embedded in or is part of our day-to-day activities.

The reflection phase involved providing opportunities for learners to reflect on their ideas or understandings about a specific issue or topic of their interest. Work in groups to span over its multiple perspectives – social, environmental, ethical, political, legal, and economic, that they can show through their videos.

- 2. *Planning:* Deciding on the settings, audience, and narrative was all part of the planning phase. Aligning the roles and responsibilities of each team member to achieve the best results is also an essential element of planning.
- 3. *Implementation:* Finally, going in the field as a team, to execute the plan and experience the issue first-hand. In the process, learners also handle many unforeseen situations as they work with the community.
- 4. *Feedback:* Involves review of what was planned and what happened, and if something could have been done better to achieve the desired results. Feedback was crucial to empowering the teachers to take Video Creation to their classrooms.

6. Results

6.1. Video Creation as Pedagogic Tool for Teachers

Through this action research study, pre-service teachers felt confident that they could use video creation in their classrooms with school students. They believe their learners can do better than them as they are more creative in using such interactive technology. Further, teachers felt it would generate interest and enthusiasm in students to explore the heavy concepts creatively. Further, teachers also concluded that not every concept or topic of social science could be learned through video creation; for example, for learning history, story narration or role-play can be more effective.

The study resulted in creation of four videos on four topics: Development, Globalisation, Poverty and Consumer Awareness. Creating these videos helped the teachers broaden their understanding of these topics, and the created resource/assets, the videos, can be used with their secondary school students in the schools.

While making the videos, teachers became more aware and sensitive as they experienced poverty first-hand, and challenged their understandings. For making the video on the concept of Poverty, short clippings of different locations and underprivileged section of the society were shot. In the video, while showing a small tent in a slum where a family of six lives, a question flashes, "how do you manage to share a room with your sibling?". Thus, the video sensitises the learners about poverty's complex and multi-dimensional nature. Also, it elicits inequality and urges the viewers to help those in need, being the privileged community member. Further, by interviewing people from varied occupations and from different socio-economiccultural backgrounds, the video creators learn to critically evaluate the content, question norms, practices and opinions, and present a position in the discourse. For example, for the concept of development and consumer awareness, pre-service teachers asked pre-decided questions to different individuals, the responses of which varied among respondents. This task also required convincing others to participate in their survey and getting permission to record them as they responded to the questions.

Lastly, video creation broadens the perspective on the concept as it requires holistic understanding, which takes one beyond the textbook and into the real world. It also helps the learner understand the multidimensional nature of the concepts and their relationship with other concepts. For example, poverty and inequality are closely related concepts but are presented as separate textbook chapters.

6.2. Video Creation for Advancing Crucial Competencies

Gerhard de Haan gave a concept of *Gestaltungskompetenz* (shaping competence), which can lead people to participate actively in modifying and

shaping the future of society by addressing the current social, economic, technological and ecological problems (de Haan, 2010, p. 318). In the year 2017, UNESCO, in their publication *Education for Sustainable Development Goals: Learning Objectives*, suggested the following eight competencies crucial to advance sustainable development; how each of the competencies can be advanced through video creation is explained in the Table 1.

Based on the highlighted competency building that video creation as a pedagogic tool can result in, it is suggested that pre-service teachers be trained to create videos and use them in their classrooms.

7. Conclusion

The notion that the school is the only source of learning does not hold, and this idea needs radical transformation by understanding the environments that enable one to learn. The 21st-century learners' selfdirected and self-determined learning has immense potential in equipping them with various competencies. Video creation introduces them to real-world challenges and provides opportunities to interact with the community, collaborate with others, and solve unforeseen problems. The study showed that creating

S. No.	Learning	Components of Video Creation
1	Strategic Thinking Competency	Video creation requires breaking down material into its components, identifying the various parts, analysing the relationship between parts, and recognising the organisational principles involved.
2	Critical Thinking Competency	Video creation also demands evaluating the content critically, questioning norms, practices and opinions, and presenting a position in the discourse through video.
3	Self-Awareness Competency	Video creation involves comprehending the issue under study, which involves making meaning of the concepts or material based on first-hand experiences and understandings.
4	Citizenship Competency	Videos creation necessitates a visit to different locations, interaction with members of the community, working with peers, and developing intergenerational partnerships.
5	System's Thinking Competency	Video creation entails synthesising the various parts of the material together into a new whole. For example, writing a creative short story around the concept under study.
6	Collaboration Competency	The video creation process provokes learners to consider new uses of knowledge with their peers and cultivate new insights about the concept or issue. Collaboration is also required while interviewing those directly involved with the issue.
7	Anticipatory Competency	It is also vital for video creators to foresee the multiple possibilities or desirable impact of the video and create one's vision that one intends to create. For example, the objective can be generating awareness about the issue or changing people's attitudes or behaviour.
8	Problem Solving Competency	Video creation allows for authentic, real-world contexts, carrying out the planned activities from beginning to end, and solving problems as they arise, all of which constitute powerful learning strategies.

 Table 1 - Competencies Advanced through Video Creation.

videos related to current social, environmental or economic issues require in-depth research of the issue being investigated, interviews with the people connected directly with the subject, visits to required locations and having first-hand experience or visiting content into a meaningful short video. This action familiar place with a new lens, and then synthesising the research study having four phases – reflection, planning, implementation, and feedback, revealed that video creation engages the head, heart, and hand of the learners and fosters critical thinking, creativity, collaborative and communication skills, and many others necessary to tackle the 21st-century challenges.

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