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Instructional Videos for Distance Fine Arts Learning in Islamic Primary Teacher Education

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Abstract

Instructional video is particularly relevant to distance fine arts learning because practical art techniques require visible and repeatable demonstrations. This study examined whether instructional-video-supported online project-based learning was associated with stronger fine arts learning outcomes and practical skills among pre-service primary teachers. A quasi-experimental pretest-posttest control-group design involved 66 Primary School Teacher Education (PGSD) students at Universitas Terbuka in Bengkulu, divided into an experimental group (n = 33) and a control group (n = 33). The experimental group learned through online project-based activities supported by instructional videos, whereas the control group received conventional online instruction. Learning outcomes were summarized using pretest, posttest, and normalized gain (N-Gain), while practical skills were assessed from project performance. The experimental group increased from 66.42 to 90.54 (N-Gain = 0.69) and achieved a practical-skill mean of 90.61; the control group increased from 66.09 to 80.64 (N-Gain = 0.38) and achieved 68.50. The descriptive pattern indicates stronger improvement in the video-supported group. The findings have pedagogical relevance for Islamic primary teacher education, although Islamic values were not measured directly.

Keywords: Fine Arts Education; Instructional Video; Islamic Primary Education; Online Learning; Pre-service Teachers

Introduction

Fine arts education can contribute to primary teacher preparation by developing visual perception, imagination, creativity, cultural awareness, and the capacity to communicate ideas through artistic forms. Arts learning is not limited to producing aesthetically pleasing objects; it can cultivate habits of observation, persistence, reflection, and disciplined experimentation that are relevant to broader educational practice (Eisner, 2002; Hetland et al., 2013; Winner et al., 2013). Research on learning in and through the arts likewise emphasizes that the educational value of arts experiences depends on the quality of the learning processes that accompany creation, interpretation, and reflection rather than on assumptions of automatic transfer to unrelated domains (Burton et al., 2000). For primary teachers, this means that art competence should include both technical knowledge and the pedagogical ability to organize meaningful creative experiences.

This issue is especially important in pre-service teacher education. Primary teachers frequently teach across multiple subject areas and may have limited specialist preparation in the arts. Studies of primary teachers have documented tensions between the recognized value of

creative arts and teachers' confidence, time, resources, and pedagogical knowledge for teaching them effectively (Alter et al., 2009). Practice-oriented teacher preparation can reduce this gap by allowing prospective teachers to observe artistic procedures, experiment with materials, receive feedback, and reflect on how those procedures can later be demonstrated to children. In Indonesia, project learning based on local artistic traditions has also been used to support students' artistic creativity and connect art activities with cultural contexts (Ifrianti et al., 2025).

Within Islamic primary education, the relevance of fine arts should be framed carefully. Islamic education seeks the integrated development of knowledge, character, moral responsibility, and purposeful action (Halstead, 2004; Douglass & Shaikh, 2004). Research on Islamic teacher education similarly stresses that teachers require pedagogical competence together with an understanding of the values and purposes that guide Islamic educational practice (Memon, 2011; Alhashmi & Moussa-Inaty, 2021). Fine arts activities can therefore be adapted to support creativity, appreciation of beauty, responsible self-expression, and respect for culture when the selected themes, materials, and classroom practices are consistent with the aims of the institution. Indonesian work on the relationship between arts and Islamic Religious Education further illustrates the potential for contextual integration through culturally meaningful artistic practices (Mahardhika et al., 2022; Zainul et al., 2026).

The challenge addressed in this study arises because the Fine Arts course was delivered through distance education. Distance learning expands access and flexibility, but it also changes the pattern of interaction between students, teachers, learning materials, and peers. Transactional-distance theory explains that physical separation can be educationally managed through the design of dialogue, structure, and learner autonomy (Moore, 1993), while the Community of Inquiry framework highlights the importance of teaching, social, and cognitive presence in online learning (Garrison, 2017). Systematic research shows that interaction matters for learning in distance education (Bernard et al., 2009; Tonga & Şahin, 2023) and that online learning is most effective when instructional design deliberately supports engagement rather than merely transferring classroom materials to a digital platform (Martin et al., 2020; Means et al., 2013).

These challenges become more pronounced in practical arts education because students must see how materials are handled, how tools are positioned, how a sequence of actions is performed, and how an unfinished work is adjusted. Written explanations can describe procedures, but they cannot always make movement, timing, texture, and spatial relationships sufficiently visible. Student teachers learning practical art online have similarly reported the need for clear demonstrations and support in developing hands-on skills (de Jager, 2024). Indonesian studies of online art learning also show that digital environments can support creative activity when tasks, media, and guidance are designed around the practical nature of artistic work (Wibowo & Nugraheni, 2021).

Instructional video provides one response to this problem because it combines spoken explanation with visible demonstration and allows learners to pause, replay, and review specific steps. Multimedia-learning research explains why such features can be useful: people learn through limited-capacity visual-pictorial and auditory-verbal channels, and well-designed multimedia can reduce unnecessary processing while directing attention to essential relationships (Mayer, 2021; Mayer & Moreno, 2003; Sweller et al., 2019). In e-learning design, this implies that narration, signaling, segmentation, and coherent visual presentation should be used strategically rather than simply adding more media (Clark & Mayer, 2016). Brame (2016) and Fiorella and Mayer (2018) similarly emphasize concise structure, learner engagement, and active processing as key principles for effective educational video.

Empirical studies provide substantial support for the use of video in learning, although effects depend on design and context. A systematic review in higher education found that replacing or supplementing existing teaching with video generally improved learning outcomes (Noetel et al., 2021), while earlier reviews found that video can support learning when students can control pace and revisit material (Kay, 2012). Interactive video has also been associated with improved learning effectiveness in e-learning (Zhang et al., 2006). Design details matter: shorter and more focused videos tend to sustain engagement better (Guo et al., 2014), step-by-step instructional video benefits from clear action segmentation and task alignment (van der Meij & van der Meij, 2013), and interactive control can improve learning of procedural motor sequences (Schwan & Riempp, 2004).

The relevance of these findings to fine arts is strengthened by research on video and technology-supported creative learning. Video-based and video-assisted learning scenarios can support active participation when learners are asked to observe, discuss, and apply what they see (Galatsopoulou et al., 2022). In arts-related learning, virtual and multimedia environments can help students examine artistic processes and engage in appreciation activities (Chiu et al., 2023), while online arts education can use aesthetic presence and carefully mediated demonstration to maintain the experiential dimension of creative practice (Sajnani et al., 2020). Indonesian studies have also developed video resources for printmaking and photography learning, demonstrating the practical relevance of video for visual and procedural arts instruction (Harna B & Hakim, 2022; Setyawan & Handoko, 2022).

The instructional videos in the present study were used within online project-based learning rather than as stand-alone content. Project-based learning asks students to develop knowledge and skills through sustained work on meaningful tasks and products. Its effectiveness depends on clear goals, appropriate scaffolding, opportunities for inquiry, and support for reflection (Blumenfeld et al., 1991; Krajcik & Blumenfeld, 2006). Reviews of project-based learning emphasize that it can support engagement and deeper learning when projects are well structured and connected to disciplinary content (Bell, 2010; Kokotsaki et al., 2016). In fine arts, the combination is particularly appropriate because students can observe a technique in video, apply it in a project, revisit difficult stages, and demonstrate learning through an artwork rather than through recall alone.

A further reason to examine video in this context is the relationship between asynchronous access and self-paced practice. Distance courses often combine synchronous meetings with asynchronous materials, and the two modes serve different learning functions. Synchronous interaction can support explanation, feedback, and social connection, whereas asynchronous resources allow learners to return to content when they are ready to practice independently (Hrastinski, 2008). For practical fine arts, this temporal flexibility is especially useful because students may need to prepare materials, repeat a hand movement several times, or stop the demonstration while completing one stage before moving to the next. Instructional video therefore functions not only as a presentation medium but also as a reusable practice resource that can remain available beyond the limited time of a live session.

The effectiveness of such a resource also depends on how observation is converted into action. Procedural learning requires learners to identify relevant visual cues, organize the sequence of actions, attempt the procedure, notice mismatches between the demonstration and their own performance, and adjust their next attempt. This cycle is compatible with multimedia-learning principles that emphasize active processing rather than passive watching (Mayer, 2021). It also explains why video may be particularly valuable when paired with a project: the project gives students a concrete reason to search the video for information, and the video gives them an

external model against which they can compare their developing work. The instructional value consequently lies in the relationship among demonstration, learner control, practice, and reflection rather than in the video file alone.

For prospective primary teachers, this learning process has an additional professional dimension. Students are not only learning to make art for themselves; they are also developing knowledge that may later be transformed into explanations, demonstrations, classroom tasks, and feedback for children. Teacher preparation therefore benefits when prospective teachers experience instructional media from both learner and teacher perspectives. They can notice which camera angles make a procedure clear, where beginners are likely to become confused, how much information can be presented at one time, and how a practical task can be divided into manageable stages. These observations can inform their future selection or production of instructional videos for elementary art learning, including contexts in which Islamic schools seek to combine creative expression, cultural awareness, and responsible classroom practice.

Despite the growing evidence on instructional video, a more specific gap remains in distance fine arts learning for pre-service primary teachers. Much of the video literature focuses on conceptual subjects, general higher education, software procedures, or large-scale online courses. Fine arts learning adds a practical dimension in which students must translate observation into coordinated artistic action. The present context also has relevance for Islamic primary education because PGSD graduates may work in diverse primary settings, including schools that integrate Islamic values. However, the current study did not directly measure Islamic attitudes, values, or character outcomes. Any implication for Islamic primary education must therefore be framed as a pedagogical possibility for adapting art learning, not as empirical evidence that the intervention developed Islamic values.

Against this background, the study examined whether instructional-video-supported online project-based learning was associated with stronger improvement in fine arts learning outcomes and practical art-making skills than conventional online instruction. It compared pretest and posttest achievement and normalized gain between an experimental class and a control class and compared their project-based practical-skill scores. The study contributes context-specific evidence about the use of repeatable visual demonstration for procedural arts learning in distance teacher education and discusses how such media could be adapted responsibly for Islamic primary teacher education while remaining within the limits of the outcomes actually measured.

The study therefore addresses two related questions: (1) how did learning outcomes change in the experimental and control groups as reflected in pretest, posttest, and N-Gain scores; and (2) how did the groups differ descriptively in practical fine arts project performance? These questions are intentionally limited to the available evidence. Because the manuscript reports group summary statistics rather than a complete inferential analysis, the findings are interpreted as descriptive comparative evidence and not as proof of statistical significance or definitive causal effectiveness.

Method

This study used a quasi-experimental pretest-posttest control-group design. The designation quasi-experimental is appropriate because the intervention was implemented in two existing PGSD classes and the available study record does not document random assignment of individual students (Shadish et al., 2002; Creswell & Creswell, 2018). Participants were 66 students in the Primary School Teacher Education (PGSD) program at Universitas Terbuka in Bengkulu. The control group consisted of 33 students from Class II A, and the experimental group consisted of 33 students from Class PDGK4207_9. The groups had similar pretest means (66.09 and 66.42),

providing a descriptive indication of comparable starting achievement on the measured fine arts content.

The experimental group participated in online project-based learning supported by instructional videos. The videos provided observable demonstrations of fine arts procedures that students could pause, replay, and revisit while completing their projects. The control group received conventional online instruction without the same video-supported project treatment. Both groups completed a pretest before the learning activities and a posttest after the instructional period. Students in the experimental condition also used the project process to practice the demonstrated techniques and produced artworks that were assessed as evidence of practical performance.

Learning outcomes were summarized using mean pretest and posttest scores and normalized gain (N-Gain). N-Gain was calculated as the observed gain divided by the maximum possible gain. Following the widely used interpretation introduced by Hake (1998), $g \geq 0.70$ is classified as high, $0.30 \leq g < 0.70$ as moderate, and $g < 0.30$ as low. Practical skill was assessed from students' final project performance using the 0-100 score categories reported in Table 2. The available manuscript does not report inter-rater reliability or detailed rubric dimensions; consequently, practical-skill results are interpreted as course performance scores rather than as a fully validated psychometric measure.

The analysis in this article is intentionally descriptive. Group means, N-Gain values, and practical-skill scores are compared to characterize the observed learning pattern. No inferential test result is available in the supplied study record; therefore, the manuscript does not claim statistical significance and avoids treating the descriptive differences as definitive causal effects. This reporting decision preserves alignment between the conclusions and the evidence actually available.

Table 1. N-Gain Interpretation Criteria

N-Gain (g)	Category
$g \geq 0.70$	High
$0.30 \leq g < 0.70$	Moderate
$g < 0.30$	Low

Practical project scores were interpreted using the course categories shown in Table 2.

Table 2. Practical Skill Score Categories

Value Range	Category
80-100	Very Good
66-79	Good
56-65	Satisfactory
40-55	Needs Improvement

Results

Learning Outcomes and N-Gain

Pretest and posttest assessments were administered to both groups to describe changes in fine arts learning outcomes. The groups began with nearly identical mean scores: 66.09 for the control group and 66.42 for the experimental group. After instruction, the control mean increased to 80.64, whereas the experimental mean increased to 90.54. The corresponding N-Gain values were 0.38 and 0.69. Under the Hake (1998) criteria, both values fall within the moderate category, although the experimental value is close to the high threshold of 0.70. The descriptive pattern therefore

shows substantially greater improvement in the group that used instructional videos within online project-based learning.

Table 3. Pretest, Posttest, and N-Gain Summary

Group	Pretest Mean	Posttest Mean	N-Gain
Control	66.09	80.64	0.38
Experimental	66.42	90.54	0.69

Figure 1 below visualizes the difference in N-Gain between the control and experimental groups.

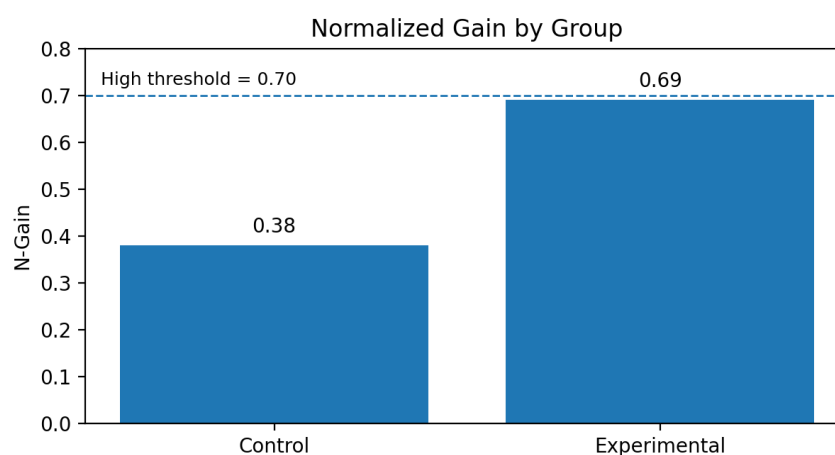


Figure 1. N-Gain Scores of the Control and Experimental Groups

Practical Art-Making Skills

Practical project performance showed a similar descriptive pattern. The control group obtained scores ranging from 61.80 to 77.00 with a mean of 68.50, whereas the experimental group obtained scores ranging from 85.38 to 93.18 with a mean of 90.61. Based on the course categories in Table 2, the experimental mean was classified as Very Good and the control mean as Good. These results indicate that students who had access to repeatable video demonstrations performed better on the assessed art projects, although the available data do not establish whether the difference is statistically significant.

Table 4. Practical Skill Scores by Group

Group	Minimum	Maximum	Mean
Control	61.80	77.00	68.50
Experimental	85.38	93.18	90.61

Discussion

The learning-outcome pattern is consistent with the central affordance of instructional video: it makes procedural information visible and repeatable. Fine arts students need to see not only what a finished product looks like but also how each stage is carried out. Multimedia-learning theory predicts that coordinated visual demonstration and concise verbal explanation can support mental model construction when unnecessary information is minimized and essential actions are signaled (Mayer, 2021; Mayer & Moreno, 2003). Cognitive-load theory similarly suggests that instruction is more effective when limited working-memory resources are directed toward task-relevant processing (Sweller et al., 2019). In the present study, the opportunity to pause and revisit demonstrations may have reduced the need to remember an entire procedure from a single explanation and allowed students to concentrate on the stage they were currently performing.

The observed difference also aligns with a substantial body of research on educational video. Noetel et al. (2021) found across higher-education studies that video frequently improves learning relative to existing instruction, while Kay (2012) identified learner control and repeatability as recurring advantages of video-based learning. Zhang et al. (2006) showed that interactive video can improve e-learning effectiveness, and Schwan and Riempp (2004) demonstrated cognitive benefits when learners could actively control video while acquiring a practical procedure. These studies do not prove the mechanism in the present sample, but they provide a plausible explanation for why the experimental group, which could repeatedly observe fine arts procedures, showed a larger descriptive gain than the control group.

Video design is also important. Educational video is not effective simply because moving images are present. Brame (2016) emphasizes the need to manage cognitive load, maximize engagement, and promote active learning, while Fiorella and Mayer (2018) distinguish design features that support learning from features that distract or encourage passive viewing. Engagement research in online video also suggests that concise, focused presentations are more likely to be viewed productively (Guo et al., 2014). For procedural instruction, van der Meij and van der Meij (2013) recommend clear task orientation, stepwise action, appropriate pacing, and visual correspondence between the demonstration and the learner's task. These principles are directly relevant to fine arts videos because students must translate what they see on screen into actions with physical materials.

The practical-skill scores strengthen the pedagogical interpretation because the outcome was not limited to a written posttest. The experimental group achieved a mean project score of 90.61 compared with 68.50 in the control group. Arts learning depends on embodied and procedural knowledge, and the ability to replay a demonstration can support repeated observation-practice cycles. Technology-supported arts research provides related evidence: video and multimedia can help learners examine creative processes, observe examples, and participate in art appreciation or production tasks (Chiu et al., 2023; Galatsopoulou et al., 2022; Sajnani et al., 2020). Indonesian developments in printmaking and photography education also show that instructional video is suitable for visually demonstrating arts procedures (Harna B & Hakim, 2022; Setyawan & Handoko, 2022). The present results extend this logic to distance fine arts learning for PGSD students.

The project-based structure of the experimental condition may have contributed alongside the videos. Project-based learning emphasizes sustained engagement in meaningful tasks and the production of an observable product rather than passive reception of information (Blumenfeld et al., 1991; Krajcik & Blumenfeld, 2006). Bell (2010) and Kokotsaki et al. (2016) note that project learning can support engagement and deeper learning when tasks are well structured and scaffolded. In this study, video and project work were intertwined: students could observe a procedure, apply it, identify difficulties, revisit the relevant demonstration, and refine the artwork. Consequently, the observed group difference should be attributed to the video-supported project-learning package rather than to video exposure in isolation.

Distance education provides another important context for interpreting the results. Students learning remotely must manage greater physical separation from the instructor and may receive less spontaneous demonstration or immediate correction. Moore's (1993) concept of transactional distance explains why course structure, dialogue, and learner autonomy become especially important under these conditions. Empirical syntheses likewise show that student-content, student-teacher, and student-student interaction affect distance-learning outcomes (Bernard et al., 2009), while contemporary online-learning research stresses purposeful design and facilitation (Garrison, 2017; Martin et al., 2020; Means et al., 2013). Video can partially compensate for limited

face-to-face demonstration by giving students stable access to an instructor-modeled procedure, but it does not replace feedback, dialogue, or opportunities to ask questions (Tonga & Şahin, 2023).

For pre-service primary teachers, the implications extend beyond mastering one art assignment. Teachers need to understand artistic processes well enough to demonstrate them, anticipate common learner difficulties, select age-appropriate materials, and create conditions for exploration and appreciation. Arts-education scholarship argues that studio habits such as observing, envisioning, persisting, reflecting, and stretching beyond familiar solutions are educationally significant (Hetland et al., 2013), while Eisner (2002) emphasizes the distinctive forms of thinking cultivated by the arts. However, transfer should not be assumed automatically; Burton et al. (2000) and Winner et al. (2013) caution that the effects of arts education depend on what is taught and how it is learned. Instructional video is therefore best understood as a scaffold that can strengthen teachers' procedural confidence when integrated with active practice and reflection.

The study's connection to Islamic primary education should be interpreted within the same evidentiary limits. Islamic education is concerned with integrated intellectual, moral, and practical formation (Halstead, 2004; Douglass & Shaikh, 2004), and Islamic teacher preparation requires pedagogical competence that is consistent with institutional aims and values (Memon, 2011; Alhashmi & Moussa-Inaty, 2021). Fine arts videos could be adapted for madrasah ibtidaiyah or Islamic primary schools by selecting culturally and developmentally appropriate themes, materials, motifs, calligraphic or decorative forms, and reflection prompts that encourage responsible creativity. Indonesian studies demonstrate possibilities for connecting artistic practice with Islamic learning and local culture (Mahardhika et al., 2022; Zainul et al., 2026). Nevertheless, Islamic values were not operationalized or measured in the present study, so no claim can be made that the intervention itself improved religiosity, character, or Islamic-value internalization.

The N-Gain values require careful interpretation. The experimental value of 0.69 is numerically much higher than the control value of 0.38, but both remain within Hake's moderate category because the high category begins at 0.70 (Hake, 1998). This point matters because categorical labels can obscure meaningful numerical differences when a value lies near a threshold. The more informative reading is therefore that both groups improved, while the video-supported group demonstrated a substantially larger normalized improvement. The similar pretest means also reduce, but do not eliminate, concern that the descriptive difference simply reflects one group beginning with much stronger prior knowledge. Without inferential analysis or random individual assignment, however, the study cannot determine the probability that the observed difference would occur by chance or rule out other class-level influences.

The practical-skill result also deserves a distinct interpretation from the cognitive posttest. Fine arts competence involves coordinated observation, material handling, sequencing, judgement, and revision. Video is well suited to showing these elements because a learner can inspect the hand position, order of operations, use of tools, and visible changes in a work as it develops. Schwan and Riempp's (2004) procedural-learning research demonstrates why interactive control over a demonstration can matter: learners can selectively revisit the steps that are difficult for them. In arts learning, this is particularly valuable because errors often become visible only after a student begins working with actual materials. The high mean project score in the experimental group is therefore consistent with a learning environment in which students had repeated access to an external procedural model during practice.

At the same time, the study should not imply that video can replace the relational aspects of arts teaching. Artistic learning often benefits from dialogue about intention, interpretation, quality,

and alternative solutions. A video can show one procedure clearly, but it cannot fully anticipate the diversity of student responses or the unexpected problems that occur when materials behave differently. The Community of Inquiry perspective is useful here because effective online learning depends on teaching presence and social presence as well as access to content (Garrison, 2017). A stronger distance fine arts design would therefore combine concise demonstration videos with opportunities for students to upload work-in-progress, discuss decisions, receive formative feedback, compare multiple approaches, and reflect on how their artistic choices developed over time.

The findings also have implications for the production of instructional video itself. A useful fine arts video should focus the camera on the action that learners must imitate, maintain sufficient visual resolution to show material changes, and segment longer processes into meaningful steps. Explanations should direct attention to decisions that are not obvious from the image, such as pressure, timing, material consistency, or the reason for choosing one technique over another. Mayer and Moreno (2003), Brame (2016), and van der Meij and van der Meij (2013) all emphasize reducing extraneous information and aligning explanation closely with the demonstrated task. For art education, designers should also avoid presenting a model as the only acceptable creative outcome; the video should make procedures accessible while leaving room for variation, experimentation, and personal expression.

This balance between guidance and creative freedom is central to project-based arts learning. Highly prescriptive demonstration may improve procedural accuracy but can unintentionally narrow students' exploration if they believe the exemplar must be copied exactly. Project-based learning literature stresses the importance of learner agency, meaningful problems, and opportunities to make decisions within a structured learning environment (Blumenfeld et al., 1991; Krajcik & Blumenfeld, 2006; Kokotsaki et al., 2016). Instructors can preserve creative agency by using video to demonstrate transferable techniques rather than fixed products, providing multiple examples, asking students to justify artistic choices, and assessing both process and final work. This approach would allow instructional video to function as scaffolding rather than as a recipe.

For distance teacher education, another implication concerns the development of pedagogical content knowledge. Prospective teachers who watch, use, and critique instructional videos can learn not only an artistic technique but also ways of representing that technique to novice learners. They can compare verbal explanations with visual evidence, identify points at which learners may need additional scaffolding, and consider how to provide feedback when direct physical demonstration is not possible. This is especially relevant to primary education, where teachers often need to translate specialist procedures into age-appropriate tasks using limited time and resources. The video-supported project experience can therefore be viewed as a dual learning opportunity: students develop their own art-making competence while also encountering a model of how practical knowledge can be communicated digitally.

The Islamic-primary-education implication is strongest when framed at the level of pedagogical adaptation rather than outcome attribution. Islamic education is concerned with the relationship among knowledge, conduct, and purposeful action (Halstead, 2004), while teacher education must prepare educators to make pedagogical decisions that are compatible with the ethos of their institutions (Memon, 2011; Alhashmi & Moussa-Inaty, 2021). Fine arts videos used in an Islamic primary setting could therefore incorporate local cultural heritage, geometric design, calligraphic or decorative traditions, natural forms, environmentally responsible materials, and discussion of respect for other people's work. Such adaptations may provide opportunities to connect technical skill with responsibility and appreciation, but whether they actually influence

students' values would need to be studied through explicit affective or character indicators rather than inferred from art achievement alone.

The study also highlights the importance of assessment design in practical online learning. A single final product score captures only part of what students learn. Future studies could assess process documentation, technique accuracy, creative decision making, reflection, and the ability to explain or demonstrate a procedure to others. Digital portfolios could preserve photographs or short clips from different stages, enabling assessors to see development rather than only the completed artwork. Multiple raters and a clearly specified analytic rubric would improve the reliability and transparency of practical-skill measurement. These additions would also help distinguish whether instructional video primarily improves procedural accuracy, conceptual understanding, confidence, creative experimentation, or some combination of these outcomes.

Finally, the results should be interpreted as evidence about an instructional configuration rather than a single isolated technology. The experimental group experienced video-supported online project-based learning, while the control group experienced conventional online instruction. Because two components differ simultaneously, the design cannot separate the effect of video from the effect of project-based activity or their interaction. A future factorial or multi-condition study could compare conventional online instruction, video-only instruction, project-based learning without video, and video-supported project-based learning. Such a design would provide a more precise test of which component contributes most strongly to learning outcomes and practical performance and whether the combination produces an added benefit beyond either component alone.

A further instructional consideration is learner self-regulation. In distance learning, students must decide when to access materials, how long to practice, when to seek clarification, and whether their own performance is sufficiently close to the demonstrated standard. The replay function of video can support these decisions because students can revisit material when they recognize a gap, but the same flexibility can be ineffective if learners do not monitor their understanding or persist through difficulty. Course designers should therefore connect videos with explicit prompts such as checklists, short reflection questions, self-assessment points, or requirements to document an intermediate stage of the project. These structures can transform repeated viewing from passive repetition into purposeful review linked to a concrete learning goal.

Accessibility and equity also deserve attention when instructional video is used in distance arts education. High-resolution demonstrations can be valuable for showing texture and fine motor actions, yet large files may be difficult to access for students with limited bandwidth or mobile data. A robust course design should therefore provide compressed versions, downloadable options, still-image step summaries, transcripts or captions, and clear lists of required materials. Such redundancy is not merely technical convenience; it can reduce the risk that students' learning opportunities depend on connectivity conditions rather than engagement with the course. In practical subjects, equitable design also requires consideration of whether materials and tools are affordable and locally available so that the demonstrated activity can realistically be reproduced in students' learning environments.

The sequence of learning activities is equally important. A video is likely to be most useful when students know what to look for before viewing and what they are expected to do afterward. One possible sequence is to activate prior knowledge, provide a short demonstration focused on one technique, ask students to reproduce or adapt the technique, collect evidence of work-in-progress, and then use feedback or peer discussion to support revision. This cycle can be repeated for more complex stages of the project. Such sequencing is consistent with project-based learning in

which scaffolding is adjusted as learners gain competence (Blumenfeld et al., 1991; Krajcik & Blumenfeld, 2006). For fine arts, it also preserves the experiential character of the subject because video serves the making process rather than becoming the learning activity itself.

The distinction between conceptual achievement and practical performance is also important. A learner may identify tools, explain a technique, or recall the sequence of a process without being able to execute that process confidently. Conversely, a learner may produce an acceptable artwork through imitation while having difficulty explaining why particular artistic decisions were made. By reporting both posttest outcomes and project performance, the study captures two aspects of learning. Future assessment should align test items and project criteria with the same stated competencies so conceptual and practical evidence can be compared more systematically. This would help teacher educators determine whether video primarily supports knowing about an artistic process, performing it, or connecting conceptual understanding with practical execution.

Feedback remains a crucial complement to demonstration. In a studio, instructors can observe developing work, intervene when a technique is misunderstood, and ask questions that encourage learners to justify choices. In a distance environment, such feedback may be delayed unless it is deliberately designed into the course. Students could submit photographs or short clips at predetermined checkpoints, participate in small-group critiques, or annotate images of their work to explain decisions and difficulties. The video would then provide a common reference point for feedback: teachers could direct students back to a particular segment while also explaining how the student's work differs from the example. This combination of stable demonstration and responsive feedback is more likely to support learning than video access alone.

Peer interaction can also strengthen the video-supported project model. Art learning includes interpretation and appreciation, not only technical replication. When students compare artworks, discuss alternative approaches, and give constructive comments, they encounter multiple solutions to the same task and learn that artistic quality cannot always be reduced to one correct procedure. Distance courses can support this through discussion forums, synchronous critique sessions, or shared digital galleries. Such activities respond to the interaction problem identified in distance-education research (Bernard et al., 2009; Tonga & Şahin, 2023) and can help maintain the social dimension of arts learning. They may also prepare prospective teachers to facilitate respectful classroom critique and appreciation activities with children.

The cultural dimension of fine arts deserves similar attention. Primary art education is often most meaningful when students work with forms, motifs, objects, materials, and visual traditions recognizable within their communities. Video offers a means of documenting local procedures and making them available to learners who are geographically dispersed. Rather than relying only on generic demonstrations, teacher educators could develop videos with local artists, craftspeople, or cultural practitioners and connect technical instruction with discussion of history, meaning, and responsible cultural use. This approach is particularly relevant to Indonesian distance education because students may live in different regions with distinct artistic traditions. It also strengthens the connection between artistic technique and cultural appreciation emphasized in arts education scholarship (Eisner, 2002; Winner et al., 2013).

Several limitations should guide interpretation. First, the study involved two existing classes from one PGSD context, so the findings may not generalize to other institutions, art topics, or learner populations. Second, the reported analysis is descriptive; N-Gain and project-score differences indicate patterns but do not provide a test of statistical significance or a controlled estimate of effect size. Third, the practical-skill results are based on course project scores, and the

available manuscript does not report a detailed scoring rubric, multiple-rater agreement, or reliability evidence. Fourth, because the experimental condition combined instructional videos with project-based learning, the contribution of video cannot be isolated from the broader learning design. Future research should use adequately powered inferential analysis, document treatment fidelity, report validated practical-skill rubrics, compare alternative video designs, and examine learning in Islamic primary or madrasah settings using explicit indicators of the educational values under study.

Taken together, the results support a cautious but useful conclusion: instructional-video-supported project learning was associated with stronger descriptive gains in conceptual and practical fine arts outcomes in this distance-learning context. The result is theoretically plausible because video can make artistic action observable, reduce reliance on memory for complex sequences, and support self-paced review, while project work provides an authentic setting in which those demonstrations are applied. The contribution of the study is therefore not a claim that video is universally superior, but evidence that carefully designed visual demonstration can address a specific instructional problem in distance fine arts teacher education.

Conclusion

This study found that the group receiving instructional-video-supported online project-based fine arts learning showed stronger descriptive improvement than the control group. The experimental mean increased from 66.42 to 90.54 with an N-Gain of 0.69, whereas the control mean increased from 66.09 to 80.64 with an N-Gain of 0.38. Under the Hake criteria, both gains are moderate, although the experimental group approached the high-gain threshold. Practical performance showed the same direction: the experimental group achieved a mean of 90.61 compared with 68.50 in the control group. These results indicate that repeatable visual demonstrations embedded in active project work can be a useful instructional support for distance fine arts learning among pre-service primary teachers.

The findings have pedagogical relevance for Islamic primary teacher education because instructional videos can be adapted to provide accessible demonstrations while supporting creativity, cultural appreciation, responsibility, and reflective practice. However, the study did not directly measure Islamic values and was not conducted in an Islamic primary school or madrasah ibtidaiyah; the Islamic-education implications therefore remain pedagogical rather than empirically tested value outcomes. Because the analysis is descriptive and based on two existing classes, future research should use inferential statistics, larger and more diverse samples, validated practical-skill rubrics, and direct measures of learning and value-related outcomes in Islamic primary education settings.

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