Digitalization of intangible cultural heritage in the era of disruption: Utilization of social media in cultural preservation and education in schools

Digitalisasi WBTB di era disrupsi: Pemanfaatan media sosial dalam pelestarian dan pendidikan budaya di sekolah

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Abstract
The rapid advancement of digital technology has challenged conventional models of cultural preservation, particularly in safeguarding intangible cultural heritage (ICH). This study aims to analyze the digitization of ICH in the era of disruption through the utilization of social media as a strategy for cultural preservation and education in elementary schools in Sumenep District, Indonesia. Employing a mixed-methods approach, the research involved 187 elementary students through structured surveys and 17 key informants through in-depth interviews. Quantitative data were processed using SPSS, while qualitative data were thematically coded and interpreted. The findings demonstrate that while students possess a general understanding of ICH, conceptual depth remains uneven, particularly regarding ICH's philosophical, spatial, and identity dimensions. Social media platforms—primarily YouTube, TikTok, and Instagram, play a pivotal role in enhancing students' engagement with cultural content, especially when the content is presented in visual-textual formats. Both teachers and students reported significant positive impacts, including improved cultural awareness, creativity, and appreciation for national identity. However, minor negative implications were also noted, such as distraction and misinformation. The study confirms that social media, when strategically integrated into pedagogy, enhances access to ICH knowledge and fosters cultural resilience among younger generations. In conclusion, the integration of digital platforms into cultural education constitutes an effective mechanism for preserving ICH and cultivating intergenerational cultural continuity in the digital age.

Keyword: cultural and education; digitalization of intangible cultural heritage; social media content

Abstrak
Kemajuan teknologi digital yang pesat telah menantang model pelestarian budaya konvensional, khususnya dalam menjaga Warisan Budaya Tak Benda (Intangible Cultural Heritage/ICH). Penelitian ini bertujuan untuk menganalisis digitalisasi ICH di era disrupsi melalui pemanfaatan media sosial sebagai strategi pelestarian dan pendidikan budaya di sekolah dasar di Kabupaten Sumenep, Indonesia. Dengan menggunakan pendekatan metode campuran, penelitian ini melibatkan 187 siswa sekolah dasar melalui survei terstruktur dan 17 informan kunci melalui wawancara mendalam. Data kuantitatif diolah menggunakan SPSS, sementara data kualitatif dikodekan dan diinterpretasikan secara tematik. Temuan menunjukkan bahwa meskipun siswa memiliki pemahaman umum tentang ICH, kedalaman konseptual masih belum merata, terutama terkait dimensi filosofis, spasial, dan identitas ICH. Platform media sosial, terutama YouTube, TikTok, dan Instagram-memainkan peran penting dalam meningkatkan keterlibatan siswa dengan konten budaya, terutama ketika konten tersebut disajikan dalam format visual-tekstual. Baik guru maupun siswa melaporkan dampak positif yang signifikan, termasuk peningkatan kesadaran budaya, kreativitas, dan apresiasi terhadap identitas nasional. Namun, implikasi negatif kecil juga dicatat, seperti gangguan dan informasi yang salah. Studi ini menegaskan bahwa media sosial, ketika diintegrasikan secara strategis ke dalam pedagogi, meningkatkan akses ke pengetahuan ICH dan menumbuhkan ketahanan budaya di kalangan generasi muda. Kesimpulannya, integrasi platform digital ke dalam pendidikan budaya merupakan mekanisme yang efektif untuk melestarikan ICH dan menumbuhkan kesinambungan budaya antargenerasi di era digital.

Kata kunci: *digitalisasi WBTB; budaya dan pendidikan; konten media sosial*

Introduction

Intangible cultural heritage (ICH) is a way of communicating, traditions, knowledge, crafts, medicine, and other non-physical forms of culture including all artistic objects related to the culture. An example of ICH is the performance of musical instruments, musical instruments and all supporting performances are also included in this heritage because they are mutually supporting elements (Blake 2018). Unlike tangible cultural heritage, where cultural identity is embodied through physical objects, intangible cultural expressions are defined through tacit dependencies and embodied practices (Hou et al. 2022).

ICH can be understood as a set of values and identities that are dynamically generated through the cultural practices of ICH practitioners with their inherited traditional knowledge and skills, society (e.g. other people and communities), as well as the natural environment (e.g. tangible cultural heritage and places) within a specific cultural context (Su 2018). Local ICH was found to materialize and be used in tourism in three different ways: First, as a source of attraction and addition to any tourism offering; second, as a conservation tool, especially when the natural environment has strong cultural significance to the local community; and third, as an enabler to facilitate culture- and nature-sensitive behavior by visitors (Esfehani & Albrecht 2016).

ICH consists of the domain of oral traditions and expressions, including language as a vehicle for intangible cultural heritage, performing arts, social practices, rituals and festive events, knowledge and practices about nature and the universe, and traditional crafts (Fauzi 2022), which are passed down from generation to generation (Purba & Kurnia Putra 2020). ICH requires more protection along with the times (Salsabil et al. 2023). ICH indicates that cultural heritage that lacks materiality, physical form, and visible presence (Melis & Chambers 2021). At cultural heritage sites, ICH not only contributes to social cohesion, and a sense of identity and belonging for residents, but also enhances place identification and travel experiences for tourists (Qiu 2023). ICH can also provide broad economic and socio-cultural benefits (Yan et al. 2024). ICH is intangible/abstract in nature, such as concepts and technology, it can pass and disappear in time with the times. ICH is the living heritage practiced and expressed by members of cultural communities such as in the form of oral traditions, songs, performing arts, rituals, craftsmanship and art, and local knowledge systems (Noho et al. 2020).

The 2003 Convention on the Protection of Intangible Cultural Heritage was adopted by UNESCO to enshrine and preserve humanity's intangible cultural heritage - cultural practices, traditions and expressions - in a global register (DeSoucey et al. 2019). UNESCO has advocated for Intangible Cultural Heritage Tourism (ICHT) due to its multiple benefits, namely to boost the economy and promote sustainable development (Halder & Sarda 2021). Preservation of ICH through digital literacy UNESCO in its 2003 convention, uses the term safeguarding or rescue. In the document, safeguarding is defined as follows:

> "Safeguarding means measures aimed at ensuring the viability of the intangible cultural heritage, including the identification, documentation, research, preservation, protection, promotion, enhancement, transmission, particularly through formal and nonformal education, as well as the revitalization of the various aspects of such heritage."

Based on this definition, it is known that safeguarding can also be interpreted as preservation because the aim is to ensure that ICH can be preserved through various concrete steps. Some concrete steps can be taken through digital literacy such as documentation, promotion, and transmission (Ulumuddin et al. 2018). Accurate identification and protection of ICH can be achieved using high-performance computing methods (Ding 2022). According to the Intangible Cultural Heritage Convention of 2003 (Article 2 paragraph 1), ICH is the practices, representations, expressions, knowledge, skills and tools, (natural) objects, artifacts and associated cultural spaces - recognized as part of their cultural heritage by communities, groups, and in some cases, individuals. This ICH, passed down from generation to generation, is continuously reinvented by communities and groups in response to their environment, their interaction with nature and their history, and gives them a sense of identity and sustainability, thus promoting respect for cultural diversity and human creativity (Noho et al. 2020). The driving force for IPR protection came from African, Asian, and Latin American countries, motivated by cultures centered on living traditions, ultimately leading to the achievement of a 'global heritage balance'. During the

1990s a number of initiatives for IPR protection were undertaken in the context of UNESCO (Lenzerini 2011). Indonesia has 1,340 ethnic groups and 2,500 types of languages, as well as thousands of objects and ICH (Badan Pusat Statistik 2018).

In Indonesia, ICH is currently a concern because its existence is less popular among the public. While ICH such as oral tradition has not received serious attention to be developed into cultural attractions and attractions that are no less interesting than other tangible cultural heritage. Whereas in other countries ICH has been widely developed as a diversification of tourism products to balance tangible tourist attractions. Tourism pressure on cultural heritage sites threatens intangible cultural heritage. The voices of local communities must be studied to understand what and how to preserve ICH because they are the main actors of this ICH (Tan et al. 2018). Education is an effective means of introducing ICH to the younger generation. Efforts to preserve ICH are exhibitions and performances. These two things have something in common, namely to promote ICH to the general public. Tanudirjo (2003) has warned about the importance of community involvement in cultural preservation efforts, including the preservation of intangible culture.

Social Studies as one of the subjects in Elementary School (SD) plays a significant role in developing local cultural learning. Social studies learning in elementary schools is expected to introduce regional cultural heritage. Therefore, teachers are needed who have an adequate understanding of local cultural heritage and can develop cultural heritage education innovations in the learning process. New thinking and methods for the protection and inheritance of ICH (Li & Duan 2019). Studies on the digitization of ICH in the era of disruption, the use of social media in preservation and cultural education in schools are very important to do in supporting the achievement of the fourth Sustainable Development Goals (SDGs), namely quality education. Quality education is an important pillar to educate the nation's life. In order to achieve quality education, education in primary schools has the most vital role in preparing the next generation of quality and competitive nation at local, national and global levels who are able to love and preserve ancestral cultural arts. ICH art is one form of culture produced by a society. Indonesia as a large archipelago certainly produces various forms of art from various regions by bringing cultural characteristics from their respective regions.

Various forms of art produced by each region in Indonesia must be introduced to the community, especially the younger generation, so that they are not uprooted from their cultural roots and lose their national identity. There are four arts that must be patented as intangible cultural heritage Sumenep District. The arts and culture proposed as intangible cultural heritage include Topeng Dalang, Sintong, Muang Sangkal Dance, and Tong tong traditional music. Therefore, this study aims to examine the digitization of ICH in the era of disruption, the use of social media in preservation and cultural education in schools as an effort to preserve cultural tourism in Sumenep District.

Research Method

This study used mixed method research. The number of respondents was 187 primary school students in Sumenep district, Madura, East Java. Table 1 shows that of the 187 respondents, 82 individuals or 39% were aged 20 years. This age dominates the number of respondents who participate in giving their opinions regarding their understanding of intangible cultural heritage. While the other 17.1% and 16% are those aged 21 years and 19 years respectively.

Table 1.
Respondent criteria by age and gender

Respondent Criteria		F	%
Age	19 Years	30	16
	20 Years	82	39
	21 Years	32	17,1
	22 Years	23	12,3
	23 Years	20	7,5
Total		**187**	**100,0**
Gender	Male	27	14,4
	Female	160	85,6
Total		**187**	**100,0**

Source: Primary data

There were only 23 respondents or 12.3% who were 22 years old and the remaining 7.5% were 23 years old. In terms of gender, 160 out of 187 respondents or equivalent to 85.6% were female while the other 14.4% were male respondents. In addition, 17 informants were interviewed in depth to obtain more holistic data related to ICH digitization. Quantitative data collection was conducted through structured interviews with 187 primary school students in Sumenep District. The data were collected and entered using SPSS. The data is presented in the form of a table. Meanwhile, qualitative data was collected through in-depth interviews. Data were transcribed and decoded based on themes. Furthermore, the quantitative data in the form of tables and qualitative data in the form of interview quotes were analyzed and dialogued with previous studies relevant to the topic studied.

Results and Discussion

Sumenep District has a lot of cultural heritage. So of course it is important for prospective young people to know, and later can participate in maintaining and preserving the cultural heritage that is owned through education. Local cultural heritage if not guarded and maintained, it is feared that it will gradually undergo a process of extinction due to the influence of globalization. One of the efforts to protect it is by digitizing ICH through the use of social media and cultural education in elementary schools.

Understanding of intangible cultural heritage

The first discussion of this study is about how far respondents understand what is meant by ICH. As seen in Table 2, the data shows that out of 187 respondents, 168 of them or 89.8% stated that they knew and understood intangible cultural heritage, while only 10.2% stated that they did not understand intangible cultural heritage. This shows that the level of knowledge of respondents within the scope of the general understanding of ICH is very high. Respondents' knowledge of this matter is also supported by other understandings that show the same reality with a high percentage of some information.

Understanding related to ICH that shows a high percentage includes: (1) In the context of education, 84.5% of respondents agreed that ICH can strengthen cultural identity for students, and only 15.5% stated otherwise. (2) Respondents understand that ICH is intangible heritage that can be exemplified such as the character & behavior that characterizes each ethnic group, poetry, customs, dances, special foods. Where there are 78.6% who understand this, and only 21.4% who do not. (3) ICH is a "living culture" that contains philosophical elements from community traditions and is still passed down from generation to generation. This definition was understood by 67.9% of respondents, with 32.1% stating that they did not understand this. (4) As many as 62% of respondents understand that ICH is an important heritage in preserving cultural diversity, promoting cross-cultural tolerance and maintaining regional cultural identity. (5) There were 64.7% who stated that their understanding of ICH was a form of preservation that could be taught by teachers to their students, while 35.3% stated otherwise. (6) ICH is understood as cultural heritage that is skill-based, as stated by 55.6% of respondents. (7) ICH is a heritage whose existence is recognized nationally and internationally. This understanding is also quite high with 64.7% stating this. (8) 55.6% stated that ICH is understood as a heritage that cannot be touched but whose existence is known and recognized. This is in line with the previous understanding, that ICH itself can be recognized even internationally.

This understanding is also supported by the statements of several informants as follows:

> "Intangible cultural heritage refers to those elements of culture that are intangible and cannot be touched, but are important in shaping the identity and cultural heritage of a society. This can include cultural practices, knowledge, skills and expressions that are passed down from generation to generation. Examples include oral traditions, dance, music, folklore, religious rituals, and traditional goods-making practices. Intangible cultural heritage plays an important role in strengthening a community's cultural identity and preserving their heritage." (Informant DEA).

"Intangible cultural heritage (ICH) includes intangible heritage such as traditions, knowledge, expressions, and skills that are passed down from generation to generation. It is important in preserving cultural diversity, promoting cross-cultural tolerance, and maintaining the cultural identity of a community. In the context of education, an understanding of intangible cultural heritage can strengthen students' cultural identity and enhance appreciation of various cultural expressions around the world." (Informant VIA).

Table 2.
Understanding of intangible cultural heritage (N=187)

Understanding of intangible cultural heritage	Yes		No		Total	
	F	%	F	%	F	%
Intangible cultural heritage.	168	89,8	19	10,2	187	100
"Culture of life" contains the philosophical elements of a community's traditions and is still passed down from generation to generation	127	67,9	60	32,1	187	100
Culture-related practices, representations, expressions, knowledge, skills, and instruments.	64	34,2	123	65,8	187	100
Cultural relics of a bygone era	52	27,8	135	72,2	187	100
Relics that cannot be touched but whose existence is known and recognized.	104	55,6	83	44,4	187	100
Intangible heritage (example: character & behavior characteristic of each ethnic group, poetry, dance, food, customs, etc.).	147	78,6	40	21,4	187	100
The heritage that shapes people's identity.	91	48,7	96	51,3	187	100
A heritage that enriches the community's cultural identity.	49	26,2	138	73,8	187	100
The spatial heritage of Indonesian culture, which originates from the region of residence.	28	15	159	85	187	100
Heritage that is important in preserving cultural diversity, promoting cross-cultural tolerance, and maintaining regional cultural identity.	116	62	71	38	187	100
In the context of education, intangible cultural heritage strengthens cultural identity for students.	158	84,5	29	15,5	187	100
Enhance appreciation of various cultural expressions around the world.	83	44,4	104	55,6	187	100
Forms of preservation that teachers teach students.	121	64,7	66	35,3	187	100
A heritage that is recreated by people in response to their surroundings, interactions with nature and history.	74	39,6	113	60,4	187	100
Love that is imprinted in various cultural forms, actions, customs, oral stories, and invisible symphonies that unite generations, keeping the roots of cultural identity intact.	11	5,9	176	94,1	187	100
Cultural heritage is a skill	104	55,6	83	44,4	187	100
Legacies that are 2D or 3D	37	19,8	150	80,2	187	100
Nationally and internationally recognized heritage	121	64,7	66	35,3	187	100

Source: Primary data

Apart from the respondents' understanding of ICH which is considered quite high and diverse, it turns out that there are several concepts or understandings of ICH that are not widely known by most people. As is the case in this study, some respondents feel that they do not understand or do not know about ICH when

it comes to the following matters: First, they do not understand that ICH are practices, representations, expressions, knowledge, skills, and instruments related to culture, and are the legacy of the saman culture in the past. This understanding was not known by 65.8% and 72.2% of the respondents involved in this study, respectively. Secondly, there are 51.3% who do not understand that ICH is a heritage that can shape the identity of the community or 73.8% who do not understand that ICH can also enrich the cultural identity of the community. Even with a percentage reaching 85% who do not understand the concept that ICH is a heritage of Indonesia's cultural space, which comes from the area where they live.

Third, the notion that ICH is heritage that is recreated by the community in response to the surrounding environment, interaction with nature and history, is also not understood by 60.4% of respondents, and only 39.6% understand it. Fourth, intangible cultural heritage is heritage in the form of 2D or 3D, the concept of this form is not understood by more than 80% of respondents. Fifth, ICH is defined as love that is imprinted in various forms of culture, actions, customs, oral stories, and invisible symphonies that unite generations, keeping the roots of cultural identity preserved. The understanding of ICH heritage in this sense is the least understood by most respondents. As many as 94.1% stated that they did not know about this understanding, and only 5.9% stated that they understood the concept of ICH as imprinted love and an invisible symphony in the form of culture that unites generations. As the following informant's statement:

> "Intangible cultural heritage is the love embodied in traditional dances, the history told through ancient songs, and the local wisdom passed down through stories and oral traditions. It is an invisible symphony that brings generations together, keeping the roots of our cultural identity alive over time." (Informant SOU).

The understanding related to the understanding and concept of ICH that has been described above shows that although most people have understood what is meant by ICH, there are still some important concepts that are not understood by most people. This is understandable due to a number of conditions, such as lack of access to information or lack of early understanding in each school.

One of the challenges now faced is finding appropriate forms, as well as efficient methods, to document the ephemeral aspects of intangible heritage (Hou et al. 2022). ICH is faced with a communication dilemma (Xue et al. 2019). Technology has brought many changes and challenges to the preservation of ICH and the development of the tourism industry (Zhang et al. 2018, Eichler 2020, Qiu et al. 2022).

Using social media to access information on intangible cultural heritage

Understanding related to ICH cannot be separated from the great influence of the media, where these media are used as a means or access to information that is most quickly received by students. Table 3 shows that there are several social media that dominate as one of the digital platforms. These social media are also considered to provide the best education in making it easier for students to access information related to intangible cultural heritage. The first digital platform is Youtube, with 82.4% of respondents agreeing that Youtube provides the most complete information in helping to understand ICH. Apart from Youtube, the second digital platform that has other ease of access is TikTok, with 56.1% of respondents stating that they use TikTok social media to find out information about ICH. The third platform used by most students in accessing information about ICH Instragram, which is used by 42.8% of respondents.

The use of these three social media does in fact have a big impact on the acceleration of information and has easy access for its users. Some of the reasons why Youtube, TikTok, and Instragram are the most popular platforms in exploring information related to ICH are: first, all three have high information completeness where there are images in the form of videos, sounds in the form of audio, and descriptions in the form of text that are young to understand, especially if it is the Youtube platform. The impression that can be considered a complete package in providing information that is easily confirmed is also owned by this one platform. Added with a duration limit that can be adjusted to the length of information you want to convey. For TikTok and Instragram themselves, both have a duration limit in uploading all videos, so the message to be conveyed is usually only maximized with a certain duration in the hope that users can capture the main points of the video being shared.

Table 3.
Media used to access information on intangible cultural heritage (N=187)

Media used	Yes		No		Total	
	F	%	F	%	F	%
Youtube	154	82,4	33	17,6	187	100
Tik Tok	105	56,1	82	43,9	187	100
Facebook	13	7,0	174	93,0	187	100
Instagram	80	42,8	107	57,2	187	100
Twitter	12	6,4	175	93,6	187	100
Whatsapp	30	16,0	157	84,0	187	100
Google	26	13,9	161	86,1	187	100
Website	1	0,5	186	99,5	187	100
Buku	1	0,5	186	99,5	187	100

Source: Primary data

Second, platforms such as Youtube, TikTok and Instagram can be accessed by all groups regardless of age or physical limitations. Because the platform design is user-friendly and can be set as needed. So that users feel helped by the existence of social media today. This also applies in efforts to understand intangible cultural heritage, by accessing these three social media we can find all types of information needed in understanding intangible cultural heritage.

Third, the information accessed can be adjusted to the preferred platform and the creativity of the content creator. If students prefer detailed explanations accompanied by epic visuals, then according to the data in Table 3, Youtube will be the most frequently used social media. Meanwhile, if they want to capture only core information and basic understanding, then TikTok and Instagram are sufficient as social media used to capture initial data that is young to understand.

However, apart from the three media mentioned, there are several other media that can also be used to access information related to intangible cultural heritage. For example, Facebook (7%), Twitter (6.4%), Whatsapp (16%), Google (13.9%), Website (0.5%), and there are also other media outside of social media such as books (0.5%) which are also used in accessing information related to ICH. These media are still an option that can fulfill the need to access information with clear and accountable sources.

Table 4.
Intangible cultural heritage content found on social media (N=187)

Intangible cultural heritage content found on social media	Yes		No		Total	
	F	%	F	%	F	%
Visual content	59	31,6	128	68,4	187	100
Text content	27	14,4	160	85,6	187	100
Visual and text content	154	82,4	33	17,6	187	100
Audio-visual content	2	1,1	185	98,9	187	100
Video content	1	0,5	186	99,5	187	100
Not looking on social media but books	1	0,5	186	99,5	187	100

Source: Primary data

Table 4 shows that there are several ICH contents circulating on social media. The content found on social media is usually dominated by content in the form of visuals and text (82.4%); content that is only visual (31.6%) and content that is only text (14.4%). In addition, there is also content on social media that is only audio-visual (1.1%) or content that is only video (0.5%). There are also those who choose to access information related to ICH outside of social media content, such as utilizing books (0.5%). With some of the reasons expressed, it becomes natural that access to ICH information and students' understanding of this information is easier to obtain if they utilize the help of social media.

Table 5.
Teacher's most favored form of content (N=187)

Teacher's most favored form of content	Yes		No		Total	
	F	%	F	%	F	%
Visual content	48	25,7	139	74,3	187	100
Text content	10	5,3	177	94,7	187	100
Visual and text content	152	81,3	35	18,7	187	100
Audio-visual content	3	1,6	184	98,4	187	100
Video content	1	0,5	186	99,5	187	100

Source: Primary data

The education provided by teachers, in an effort to accelerate students' understanding of ICH, is largely utilizing digital content on social media. In fact, you could say that 99% are all media-based. As well as Table 5, shows data on the percentage distribution of forms of content that teachers prefer in explaining or sharing information related to ICH. Similar to Table 4, the content most favored by teachers is content with visual and text forms (81.3%). They assume that the content can be more easily understood because it can be visualized and added with text explanations that make the information appear complex. Apart from visual and text content, there is also content that teachers prefer in explaining intangible cultural heritage to students. Usually, if there is no content with visual and text, teachers prefer to use visual content (25.7%) or only text content (5.3%). While a small number of them choose to use audia visual (1.6%), or video content (0.5%). All choices of content and learning models used by teachers in explaining ICH, usually adjust the access and equipment owned by the school. This is in line with previous studies which mention that in strengthening it is necessary to integrate various modern technologies (Li et al. 2024).

Table 6.
Students' most favored form of content (N=187)

Students' most favored form of content	Yes		No		Total	
	F	%	F	%	F	%
Visual content	94	50,3	93	49,7	187	100
Text content	1	0,5	186	99,5	187	100
Visual and text content	107	57,2	80	42,8	187	100
Audio-visual content	4	2,1	183	97,9	187	100
Video content	2	1,1	185	98,9	187	100

Source: Primry data

For students, the form of content they see or use is not much different from what is used by teachers (Table 6). Students also find it easier to understand information related to intangible cultural heritage by viewing content in the form of visuals and text (57.2%). If the content is difficult to obtain due to limited access, then students are faced with a choice of content between the two, namely only visual content (50.3%) or content with text only (0.5%). However, there are also students who prefer audio-visual content (2.1%), and there are also those who prefer video content (1.1%).

All choices of content and learning models received by students have their own consequences. It could be that the content received has a positive impact, but it also does not rule out the possibility of a negative impact from these contents. As explained in Table 7, there are several positive impacts felt by teachers and students in utilizing content on social media related to understanding intangible cultural heritage. There are at least four positive impacts that are most dominant, among others (see Table 7): First, ICH content on social media can increase student enthusiasm and activeness, students become more enthusiastic, have character and insight into ICH. This positive impact was felt by 87.7% of respondents and only 12.3% stated otherwise. Second, there were 92.0% who stated below, students became more familiar with regional culture and fostered a sense of preserving Indonesian culture through content on social media. Only 8.0% of the total respondents stated otherwise. As stated by the following informants:

> "Of course the impact is very positive on students at school, where students not only learn lessons at school but also learn the culture of their nation. They can become more enthusiastic and have character and insight into intangible cultural heritage." (Informant RID).

> "The content seen can certainly introduce and remind students that there is really a lot of cultural heritage that really needs to be preserved so that it is not displaced by cultures that are not in accordance with the original character of the local culture." (Informant FIN).

Third, content on social media is a complete learning resource and easy to access, so the digitization of ICH allows wider public access. This was felt by 86.6% of respondents, with 13.4% stating otherwise. Fourth, as many as 92.5% stated that through social media content, students have more creativity in preserving intangible cultural heritage because the references obtained are more diverse. This is also supported by the statements of several informants, as follows:

> "Intangible cultural heritage content on social media can provide wider access to information about culture, history, traditions and related practices. This can increase students' knowledge of Indonesian culture" (Informant LIS).

> "Social media can provide rapid information dissemination, active community participation, attractive educational visualizations, progress monitoring, and a wide network in the context of cultural preservation and education in schools through the intangible cultural heritage program." (Informant FED).

This social media has a positive impact. Modernization and digitalization provide a variety of choices and convenience in its use and utilization. The use of technology is an urgency in the inheritance of intangible culture (Skublewska-Paszkowska et al. 2022).

Table 7.
Positive and negative impacts of intangible cultural heritage content on social media on cultural preservation and education in schools (n=187)

Impact of intangible cultural heritage Content on Social Media	Yes		No		Total	
	F	%	F	%	F	%
Positive Impact						
Increase students' enthusiasm and activeness, students become more enthusiastic, have character and intangible cultural heritage insight.	164	87,7	23	12,3	187	100
Students become more familiar with regional culture and foster a sense of preserving Indonesian culture.	172	92,0	15	8,0	187	100
To legitimize/prove that regional culture does exist and needs to be preserved.	59	31,6	128	68,4	187	100
Students can take away the cultural values learned.	146	78,1	41	21,9	187	100
Learning is more effective and efficient, students understand more easily and do not feel forced to memorize intangible cultural heritage.	130	69,5	57	30,5	187	100
Content on social media becomes a complete learning resource and easy access, so the digitization of intangible cultural heritage allows for wider public access.	162	86,6	25	13,4	187	100
Students have more creativity in preserving intangible cultural heritage because the references obtained are more diverse.	173	92,5	14	7,5	187	100
Motivate students to join extracurricular activities related to intangible cultural heritage (example: dance and musical extracurricular activities).	27	14,4	160	85,6	187	100
Make students become more curious and take the initiative to find information and preserve intangible cultural heritage.	88	47,1	99	52,9	187	100
Students become more critical because they can compare information obtained from various references obtained both in digital form and books or direct sources.	142	75,9	45	24,1	187	100
Negative Impact						
The short nature of social media content (short video or text) makes students more confused.	12	6,4	175	93,6	187	100
Social media content is often supplemented with advertisements that are not related to intangible cultural heritage, which can divert focus from students.	7	3,7	180	96,3	187	100
Teachers are concerned if students are exposed to content whose information does not match the facts (disinformation).	26	13,9	161	86,1	187	100

Source: Primary data

In addition to the four positive impacts already mentioned, there are several other positive impacts that make it easier for teachers to explain and convey information regarding the understanding of ICH to students (Table 7). Students can take cultural values learned from intangible cultural heritage related content (78.1%). Through media assistance, utilization of digital platforms, and audio-visual learning models, it is considered capable of increasing students' critical thinking because they can compare information from various references, both in digital form and books or direct sources (75.9%). This is also emphasized through the results of direct interviews with informants, as follows: *"Making students aware of the existence of tangible and intangible culture around them or in Indonesia, students gain new knowledge and take cultural values."* (Informant AIS).

Learning using digital media is considered more effective and efficient, and makes students understand more easily and feel less forced to memorize intangible cultural heritage (69.5%). Making students more curious and have the initiative to seek information and preserve intangible cultural heritage independently (47.1%). In addition, according to them, the existence of content on social media can be used as legitimization or proof that regional culture really exists and needs to be preserved (31.6%). Content about intangible cultural heritage also motivates students to participate in extracurricular activities related to ICH, such as: dance and musical extracurriculars (14.4%). As stated by one of the following informants:

> "Content on social media can be a learning resource that complements subject matter at school, especially those related to Indonesian intangible cultural heritage. Students can easily access and watch videos, pictures, or articles that explain about Indonesian intangible cultural heritage, such as wayang, batik, angklung, rendang, and saman dance." (Informant LID).

As explained earlier, the use of digital media and the existence of intangible cultural heritage -related content does not necessarily have a positive impact. It is also not uncommon for the use of media to have a negative influence or impact on its users. In Table 7, it can be seen that there are several negative impacts arising from ICH content on social media. First, the short nature of social media content (short video or text) makes students more confused. Although the percentage shows a small number, there are at least 6.4% who experience this unrest.

There are also 3.7% who feel that social media content is often equipped with advertisements that are not related to ICH so that it can divert the focus of students. In addition, there were 13.9% who stated that there were concerns from the teachers if students were exposed to content whose information did not match the facts (disinformation). Although the negative impact felt is not as much as the positive impact, this should still be a concern in the future. Because if this negative impact is left unchecked, it can have a greater impact. So that the good intentions that were focused from the beginning to make it easier for students to understand information related to intangible cultural heritage, were not conveyed to students because of the negated impact.

> "There are many negative and positive impacts on the preservation of cultural education at school, namely that students know a lot and can understand existing cultural education, but besides that, if students are not accompanied, it will have a negative impact on misusing social media against others." (Informant MIA).

Intangible cultural heritage (ICH) refers to practices, representations, expressions, knowledge, skills - as well as the instruments, objects, artifacts and cultural spaces associated with them - that communities, groups and individuals recognize as part of their cultural heritage (Wang et al. 2024). ICH labels and can inform marketing strategies for ICH-related destinations (Qiu & Zuo 2023). However, the use of social media for intangible cultural heritage -related content also has a negative impact. In an all-digital world, misuse of content can occur and cybercrime can also threaten its users. For this reason, wisdom from content creators and users is needed to minimize greater negative impacts.

Efforts to preserve intangible cultural heritage and cultural education in schools through social media

The use of media in the digital era is also felt by schools, especially teachers, in aligning education with learning media that follows modernization. One of them is through efforts to introduce students to ICH, foster student interest in knowledge related to intangible cultural heritage and participate in preserving

intangible cultural heritage both directly and indirectly. Table 8 explains some of the benefits of using social media related to ICH, including: In explaining ICH and increasing students' understanding of ICH, social media is useful with its existence and accessibility that is easier to reach (60.5%). By using social media, learning and information to be conveyed related to ICH is not limited by space and time (39.0%).

Table 8.
Benefits of social media related to intangible cultural heritage (N=187)

Benefits of Social Media	Total	Percentage
Easier accessibility	113	60,5
Unlimited space and time	73	39,0
Unlimited time and space, easier accessibility	1	0,5
Total	**187**	**100**

Source: Primary data

The real benefits felt by social media users, in this case the school, teachers and students, are not far from the role of social media itself. In Table 9, it is explained that teachers at school are greatly helped by the existence of social media. They find it easier to explain and share information related to intangible cultural heritage to students with the role of social media. As many as 47.6% stated that the role of social media was very capable of increasing students' understanding in recognizing ICH. While the other 51.9% stated that the role of social media was able to increase students' understanding in recognizing ICH.

Tabel 9.
The role of social media in improving students' understanding
of intangible cultural heritage (N=187)

The role of social media in improving students' understanding of intangible cultural heritage	Total	Percentage
Highly Capable	89	47,6
Capable	97	51,9
Don't know, because students learn using books only	1	0,5
Total	**187**	**100**

Source: Primary data

The cultural preservation and education efforts made by the school are by utilizing social media, which has a greater influence in the current era. Social media is the only digital media that dominates the dissemination of information and knowledge related to ICH. Table 9 explains that there are several kinds of efforts made to support knowledge and preservation of intangible culture in the school area. Through online learning by showing cultural experts on Youtube, this effort at least attracts positive support from respondents with 73.8% agreeing with this. In addition, students can also be shown images/video visually by playing video tutorials to students directly, this effort is also quite successful with a good response of 93.6% who agree.

Efforts to preserve and educate culture in schools by attending online/offline training related to ICH are also quite appropriate. Although not many agreed (34.2%), participating in this training can broaden students' knowledge about ICH. Schools can also implement efforts by providing facilities and creating interesting and informative ICH-related content, as well as including it in learning materials. By providing facilities and content availability, schools are considered to be more supportive of cultural preservation and education (see Table 10). This received a fairly good response with 66.8% agreeing to implement these efforts. Schools can also share educational content on official school social media and document class projects related to intangible cultural heritage (39.6%). Creating podcasts either specifically for students or with teachers or cultural activists related to ICH and uploaded on official school social media (58.3%), can also help preserve and educate culture at school. In addition, schools can also carry out activities such as educational campaigns that are inserted with intangible cultural heritage content or elements (59.9%). Some of the efforts that have been described are also supported by several informant statements:

"One example of using social media in cultural preservation is through online learning. Through social media platforms, such as YouTube or Instagram, cultural experts can share their knowledge and experiences in creative and engaging ways. Video tutorials, images and stories on social media can help the younger generation to better understand and recognize their culture." (Informant ZIA).

"Creating interesting and informative cultural content. Students can create content related to Indonesian intangible cultural heritage such as videos, photos, stories, or songs, and upload them to social media. This content can help introduce and promote Indonesian intangible cultural heritage to the wider community, as well as preserve it," (Informant RIN).

"Cultural preservation and education efforts in schools through social media involve educational campaigns, interactive content, collaboration with cultural experts, project documentation, online training, use of specialized platforms, and parental and community support. Relevant and engaging content is important to achieve these goals." (Informant DOU).

Table 10.
Cultural preservation and education in schools through social media (N=187)

Cultural preservation and education in schools through social media	Yes		No		Total	
	F	%	F	%	F	%
Various efforts through social media						
Online learning by showing cultural experts on Youtube	138	73,8	49	26,2	187	100
Showing visuals (pictures or videos) by playing video tutorials to students directly,.	175	93,6	12	6,4	187	100
Participate in online/offline training related to intangible cultural heritage.	64	34,2	123	65,8	187	100
Schools provide facilities and create interesting and informative intangible cultural heritage -related content and include it in learning materials.	125	66,8	62	33,2	187	100
The school shares educational content on the school's official social media and documents intangible cultural heritage related class projects.	74	39,6	113	60,4	187	100
Creating podcasts both student-specific and with teachers or cultural activists related to intangible cultural heritage and uploaded on official school social media.	109	58,3	78	41,7	187	100
Education campaigns that are inserted with intangible cultural heritage content or elements.	112	59,9	75	40,1	187	100
Efforts other than social media						
Invite students to participate in traditional celebrations, participate in community art performances, and/or participate in traditional arts extracurricular activities.	66	35,3	121	64,7	187	100
Familiarize students with the culture of their place of residence through the insertion of material	146	78,1	41	21,9	187	100
Learning other regional languages, recognizing various folk songs, learning to play regional musical instruments at school.	103	55,0	84	45,0	187	100
Make friends with all friends regardless of origin	59	31,6	128	68,4	187	100
Wearing batik on certain days	152	81,3	35	18,7	187	100
School organizes events and competitions related to intangible cultural heritage	138	73,8	49	26,2	187	100
Teachers give additional assignments to students to find out at home and are supported by the role of parents in implementing intangible cultural heritage	35	18,7	152	81,3	187	100

Source: Primary data

"Culture can be preserved through social media by sharing information, videos or images related to local culture. Schools can organize online campaigns to raise awareness and get students and parents involved in cultural activities. Social media can also be used as a platform for discussion and collaboration between teachers, students and local communities regarding cultural preservation." (Informant VEL).

"Cultural preservation and education efforts in schools through social media can be done by creating educational content, holding online campaigns, webinars and live streams, using collaborative platforms, garnering community support, and creating podcasts or YouTube channels. This approach allows schools to reach a wider audience and make a greater impact in cultural preservation." (Informant FER).

Apart from relying on the power of social media, schools can also still make many other efforts to support the acceleration of students' understanding of ICH. Schools can also continue to actively disseminate information related to ICH, by implementing various concepts both online and offline. These efforts can certainly also be done by involving all parties in the school as well as support from parents. The efforts that can be made as shown in Table 10, among others: Inviting students to participate in traditional celebrations, joining community art performances, and/or joining traditional art extracurriculars (35.3%). Teaching students to be willing to make friends with all friends regardless of their regional origin (31.6%). Teachers give additional assignments to students to find out at home and are supported by the role of parents in implementing ICH (18.7%). Although these three efforts have a small response, they are still very possible to do. Because every effort will always have its own response, and the acceptance of each student can also provide different assessments. This is supported by the informant's statement as follows: *"By giving them additional tasks to find out at home, it can also be applied during extracurricular activities by inviting students to play traditional games, for example."* (Informant LIR). Another informant also said, *"By familiarizing students with the culture in their own homes through material insertion and inviting students to participate in traditional celebrations."* (Informant ICA).

The strength of each effort made will attract its own interest for students, so schools, especially teachers, must always rely on the novelty of ideas to develop several other options. Efforts that can be developed and have a better response are to familiarize students with the culture in their place of residence through the insertion of material (78.1%). This effort is considered quite effective, because students do not feel burdened during the learning process. In addition, teachers can also invite students to learn other regional languages, recognize various regional songs, learn to play regional musical instruments at school (55.0%). Invite students and school staff to wear batik on certain days or events (81.3%). Schools can also hold events and competitions related to ICH (73.8%), this can be seen as an effort that is more contemporary and easily attracts students' attention. Because students will feel encouraged and feel facilitated through their creativity and active participation in the event.

The efforts made by this teacher are to preserve and protect intangible cultural heritage from extinction, ICH and spiritual heritage are part of the achievements of human civilization that give them identity (Masoud et al, 2019). With the development of globalization, ICH is increasingly threatened (Lin & Lian 2018). Compared with natural and tangible cultural heritage, the inheritance and development of ICH relies more on people's perception and identification, and extensive communication has enormous value for protection, innovation, and sustainable development (Cao et al. 2024).

The preservation of cultural heritage is currently a very important aspect. Knowledge of the past, ancestors, and their way of life can be obtained through cultural heritage. The rapid development of 3D technology allows for more reflection. The rich cultural heritage, both tangible and intangible, can be preserved for future generations due to the use of advanced 3D technology. 3D provides a means to document, restore and present cultural heritage items. It is not only buildings or monuments that count. An important aspect of our culture is ICH, including acting, crafts, or storytelling, which is passed down from generation to generation. The results show that for ICH, the most frequently used technologies are: 3D visualization, 3D modeling, Augmented Reality, Virtual Reality, and motion capture systems (Skublewska-Paszkowska et al. 2022).

Conclusion

This study found mechanisms that can be used to support efforts to preserve ICH and cultural education, which can be done through several activities at school and through social media, including: utilizing ICH content on social media by playing it during lessons in class. Content related to ICH can be utilized for additional assignments, such as exploration assignments. Teachers who have ICH insight also introduce and relate it to students' daily lives. Teachers can also apply it in the teaching and learning process by presenting additional information, creating class discussions, or relevant tasks to increase students' understanding of the subject matter regarding ICH.

The mechanism for utilizing social media content can also be visual, text, or visual and text. Additional tasks, such as the type of exploration tasks described earlier, can help students analyze or identify what they see or observe. They can discuss the results with their peers or study groups, so that they can exchange their opinions with each other. In addition, a mechanism that can also be applied is to utilize the role of parents in providing additional assignments. Parents can help students jointly review lessons that have been learned at school, besides that students will also get direct supervision from parents.

Broadly speaking, social media has brought new colors to the world of education. One of them is by making learning more interesting in improving students' abilities, especially in understanding ICH heritage material. Because an active learning process can accelerate students' understanding. Another thing that must also be considered is the condition that some students will feel bored if learning is only centered on the teacher, while with the existence of social media learning in the form of content can attract students in a more enjoyable learning process. These efforts are for the sake of preserving ICH. ICH protection is a very important task for the government and society.

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