

HOW DO TEACHERS USE VIDEO AT SCHOOL? NEW IMPULSE FROM DIGITAL VIDEO AND OPEN EDUCATIONAL RESOURCES

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Abstract

How do teachers actually use films and other video content in their teaching and learning activities? How do teachers' digital literacy and personal competences influence the integration of video in class activities? Which other contextual factors inhibit or promote it? Does the use of video in class offer opportunities for the development of visual, film and digital literacy? These questions lie at the core of the *FAST – Film A Scuola per Tutti* research project, which surveyed over a hundred teachers from primary and secondary education in Ticino. The survey data were analysed with descriptive statistics and discussed in three follow-up focus groups. The results focus on the connection between private and professional use of videos, on the integration of video in learning and evaluation activities and on the genres and length of video materials mostly used in class. They offer useful insights into the understudied practices of video integration in school education and partly dispel the myth of digital native teachers.

Keywords: video, teacher education, digital literacy, visual literacy

1 ONLINE VIDEO, FILM LITERACY AND SCHOOL EDUCATION

Today's children and teenagers habitually spend a considerable amount of time online [1], and recent studies indicate that, thanks to free services like YouTube, video is possibly the most widely used media online nowadays [2] [3], mostly in passive (viewing) or participatory (commenting, tagging, sharing) modes [4]. Thanks to pocket smartphone or GoPro cameras, the production of short videos – for fun or for school/work, connected with sports, events, partying, etc. – has also become a common practice among young people, and has been labelled an “everyday creativity” [4][5]. The spread of social media has also provided new channels for the creation and diffusion of video materials (Facebook, WhatsApp, YouTube, etc.). The tools by which young people exchange information and acquire knowledge (informal, non-scholastic) probably tend to be those of a visual nature, and traditional, text-based instruments are becoming increasingly disregarded.

This process creates problems for an educational system that is still firmly anchored to traditionally text-oriented methods. Practical experience informs teachers that the gap between the attitudes, interests, and motivation of young people, and the school curriculum is widening to an extent that is perhaps irrecoverable [6]. A second problem is that young people are poorly educated to “critically read” visual materials, i.e. have shallow film and media literacy.

These new developments, deeply connected with the evolution of the Web and of the diffusion of personal connected digital devices, support the claim for making visual and video/film literacy a central concern in both formal and informal education. Integrating this demand into compulsory school education requires a change that should be distinguished by (a) reliable digital media education models; (b) the development of new school programs; and (c) consistent and effective teaching practices, which means (d) implementing initial and continuing teacher training programs in digital, media and film literacy.

1.1 Digital and media literacy models

Starting with the seminal work of Len Masterman [7], the decades-long tradition of Media education provides a number of reference models for framing a structured approach to the development of media literacy, which also includes visual and film literacy [8] [9]. These models have been reprised, extended and adapted to the current digital media environment [10] [11], and in some cases reviewed in the light of emergent digital skills or digital literacy models such as [12] [13]. The process gave birth to recent digital media literacy models, which provide a wide and structured view of the domains and competences involved in the development of effective media consumption and production practices in today's complex media and information-rich environments, such as [14] [15] [16].

In the context of recent digital media literacy models, film literacy is a specific item within the broader dimension of media literacy, defined as “critically read and creatively produce academic and professional communications in a range of media” [16]. Hobbs provides more detailed wording, indicating “analyze and evaluate” and “create” as two distinct dimensions across media languages and techniques [14].

Of course, understanding media and film literacy in this complex context requires a redefinition of both *what* schools need to teach (to include media analysis and production) and of *how* such content could or should be taught and assessed (including a new positioning of video and digital media among instructional media). Such definitions are provided by official school curricula.

1.2 National or regional school curricula

Compulsory school curricula (or programs, or standards, according to the different denominations) are national or regional documents that provide a reference for the organization of teaching and learning activities in schools. Each reflects the schooling and educational culture of its nation or region, and is usually a compromise between different political and cultural views. School curricula implement competence frameworks and a specific understanding of education and learning in formal education institutions.

For the purposes of this study, we will present here the current situation in Switzerland, a country with nearly 100% penetration of smartphones and Internet connection among teenagers [3], and in which 3 new compulsory education curricula were released between 2014 and 2015, one for each linguistic region (German [17], French [18], and Italian [19]).

These new school programs for the first time officially acknowledge the role of computers and digital media in school education, defining a “general education topic” (i.e., not a subject, but an interdisciplinary learning area) labelled “Media and Technologies”. The implementation of such a topic differs across linguistic regions. In the German-speaking part of the country, the subject *Medien und Informatik* is allocated 1 week-hour in the official schedule, and is assessed with an autonomous evaluation against a set of specific competence targets; in the French-speaking part of Switzerland, *MITIC (Médias, Images, Technologies de l'Information et de la Communication)* is also given 1 week-hour, but is not subject to evaluation. In the Italian-speaking part of the country, the school curriculum specifies *Media e Tecnologia* as an interdisciplinary topic area that should be somehow addressed, but this does not appear in the schedule or in the evaluation system.

With respect to content, the three regional curricula are rather similar, and all include critical media analysis, information literacy, safe Internet use and the creative use of digital media for content production in different formats. Moreover, all regional curricula acknowledge the importance of video as a medium of instruction, for flipped classroom activities, or as content presentation.

1.3 Teaching practices

The translation of national or regional curricula indications into actual learning activities is not a streamlined or fully controlled process – even more so when it involves “new subjects” such as digital and media literacy. This research project started from the question: how are videos and films used either as a medium of instruction, or as a subject for learning film language in the schools of the Italian-speaking region of Switzerland?

Despite the growing importance of video and the availability of low-cost solutions to bring good quality video into the class, to the extent of our knowledge, little research has been done on how video is actually used in teaching practice in compulsory education and high-school. A recent study conducted in Australia [20] found that, despite being time-poor, teachers curate various types of screen content, invest time mostly for identifying, vetting and organizing it, and produce their own educational materials to accompany the screenings. A key concern emerging from this study is access: teachers find it difficult to identify good and reliable content, and refer to the easiest and fastest source – which is more often YouTube than public or commercial production or broadcast organizations, even when they offer school-specific portals such as SBS Learn [21] or BBC School [22]. The instructional situation in which videos are used also varies: in some cases teachers find documentaries or other screen content that becomes central for their instruction, and that they might also re-use from year to year, since it aligns well with the curriculum. In other cases, they take screen content that is only relevant for a defined period of time (e.g., news programs). Finally, “teachers often supplement and

enhance their teaching with *in the moment* screen content” (p.12), which is retrieved shortly before or even during the class.

The European Commission has also published a report about film use in European Schools [23], which focuses more on the connection with the film industry and with the obstacles that prevent teachers from making extensive use of films in their teaching. According to this study, many teachers describe teaching film literacy as an “uncommon and sporadic practice”, also because of the lack of a solid public policy in this domain. Practical restrictions in schools (related to beamers, audio, Internet connection), along with economic and legal issues (teachers must use personal money and resources to purchase the materials they want to show, and do not have clear copyright clearing support) also hinder the use of films in school.

As a summary, we know little of how films are used in schools in general and in our region, and also regarding if and how visual and film literacies are taught in schools. The studies mentioned above indicate that (a) the apparently simple label of “film use in schools” hides a wide variety of teaching and learning practices; (b) teachers search and select screen content from different sources, where ease of access seems to be more important than reliability of quality; (c) there are a number of obstacles that prevent teachers from using more films in the class.

2 METHODOLOGY

The *Film a scuola per tutti – FAST* project was devised in order to collect data and shed some light on how teachers actually use films and other video content in their teaching and learning activities in the Italian-speaking part of Switzerland. The first phase in the project, which is reported in this paper, aimed at collecting data on the following research questions:

1. What video materials do teachers use, in terms of genre, topics and formats?
2. Where do they search for them? According to what criteria do they select them?
3. What role do teachers assign to videos in their teaching?
4. Do teachers use videos also to teach film or media literacy?

In Autumn 2017 we developed an online survey for collecting data among pre-service and in-service teachers in the Italian-speaking region of the country. The survey covered the following dimensions:

1. Personal consumption of video and other digital screen content
2. Professional (classroom) use of video and other digital screen content
3. Integration of video into learning activities and in evaluations
4. Factors facilitating/hindering the use of video in class

Moreover, the survey collected the respondents’ profiles in order to allow sample segmentation. Personal data included gender, school level (primary, lower secondary, upper secondary), age, years of service, subjects taught, type of contract and a self-evaluation of language and digital competences.

Invitations to fill in the survey were sent through personal contacts and over a period of 4 weeks. At the end of this period, 118 respondents had completed the survey, distributed as indicated in Table 1.

Table 1. Sample distribution.

<i>School level</i>	<i>In-service</i>	<i>Pre-service</i>	total
Primary	17	33	50
Lower secondary	32	10	42
Upper secondary	24	2	26
total	73	45	118

After a first analysis of the survey data, three focus groups were conducted with 3 to 6 teachers from each school level, in order both to consolidate the interpretation of the results and to identify further development directions. In the following sections we present the quantitative data collected and we support our interpretations with elements from the focus groups.

3 RESULTS

Due to the limited sample size and its non-representativeness (see the *Discussion* section for details), the survey data were analysed with descriptive statistics, focusing on differences across school sectors (primary, lower secondary, high school), years of service (novice, experts), digital competences and personal media consumption profile.

3.1 What teachers use videos?

In general, 77% of respondents used videos in their teaching, but they are unevenly distributed over the different groups. Teachers of higher grades use video more than those teaching in lower grades: all respondents from upper secondary education indicate having used videos in class, against only 60% from primary education.

The analysis of the segmentation by length of service provided a counter-intuitive finding. We actually expected that younger teachers (18-27 years old, including pre-service teachers), supposedly digital natives themselves, would use video more than older teachers, who are more likely to encounter difficulties in managing class technologies. Our data actually indicate that the opposite is the case: less than a half of younger teachers uses video in class, while most older teachers do (Figure 1; $p < 0.05$). This situation might also depend on employment status: pre-service teachers use videos significantly less than in-service teachers of all service durations (Figure 1; $p < 0.05$). During the focus group, some commented that older teachers have more experience, and are therefore more able to select the most appropriate strategy for specific content learning, so they would know best when using a video is worthwhile. On the other hand, pre-service teachers motivated their lower use of videos with the expectations of school managers and their trainers.

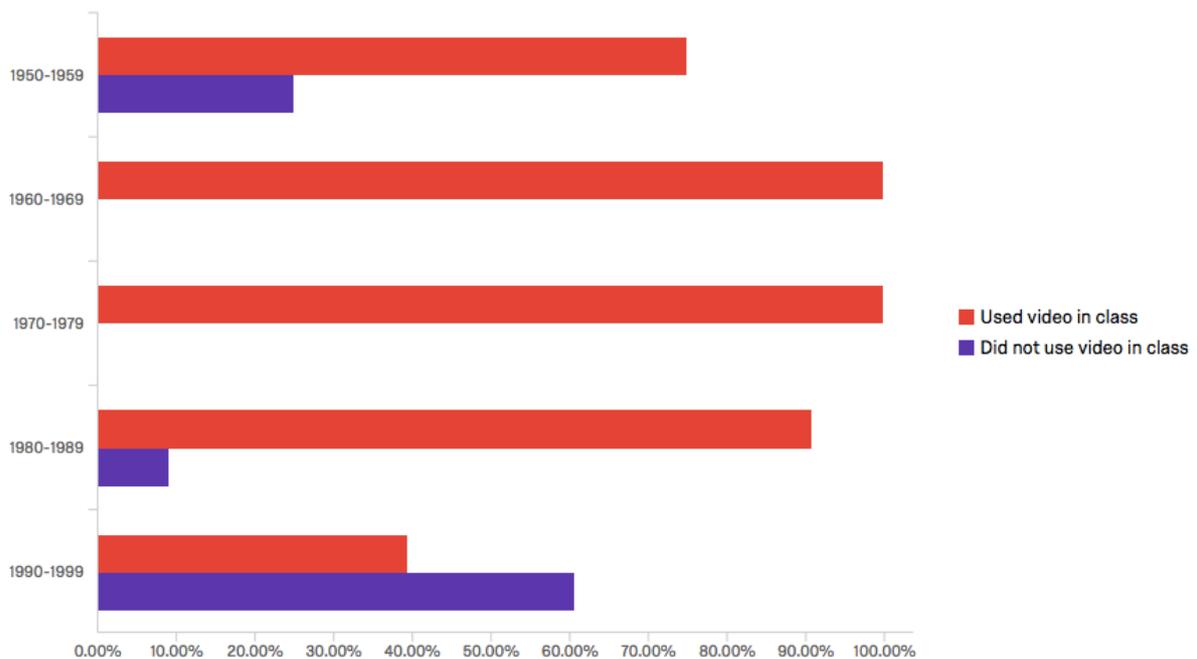


Figure 1. Teachers' use of videos in class by age.

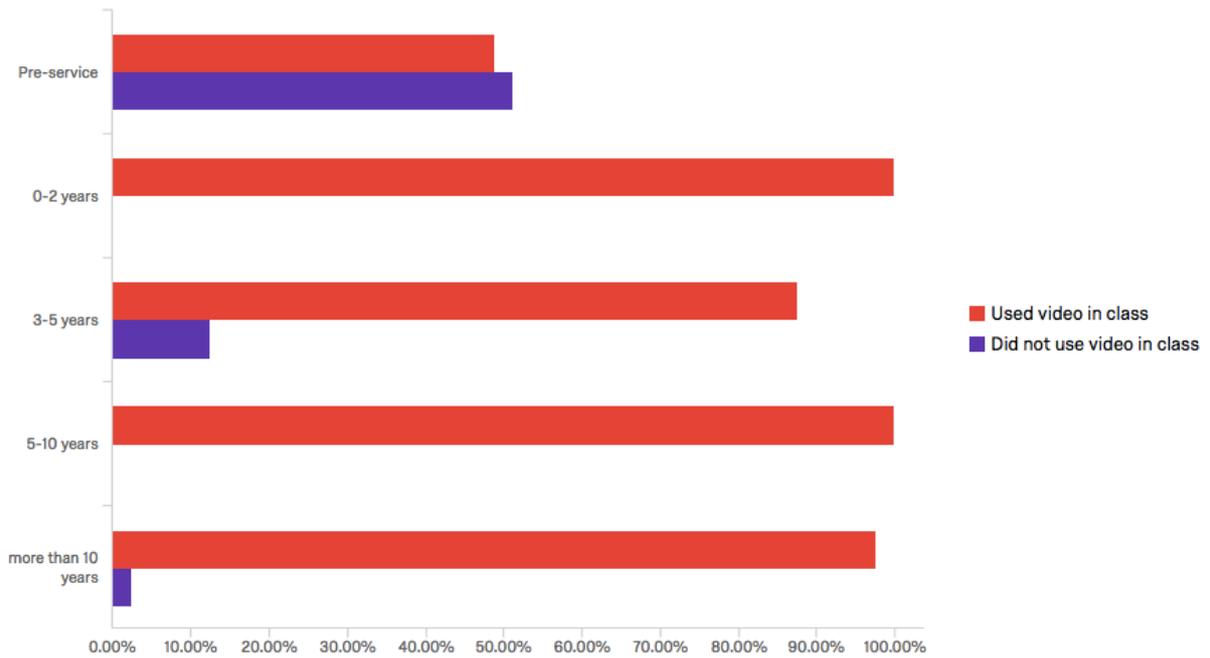


Figure 2. Teachers' use of videos in class by length of service.

Our data also suggests that the amount or type of private media consumption has no impact on the use of video in class: intense free time digital screen content consumers do not tend to use more screen media in class than low-consumers.

On the other hand, the use of video in class seems to have a positive correlation with basic digital competences: teachers who feel more competent in managing computers and internet navigation tend to bring more videos to their classes (Figures 3 and 4). Interestingly, such a relationship did not emerge when checking for specific video-related competences (video editing, etc.).

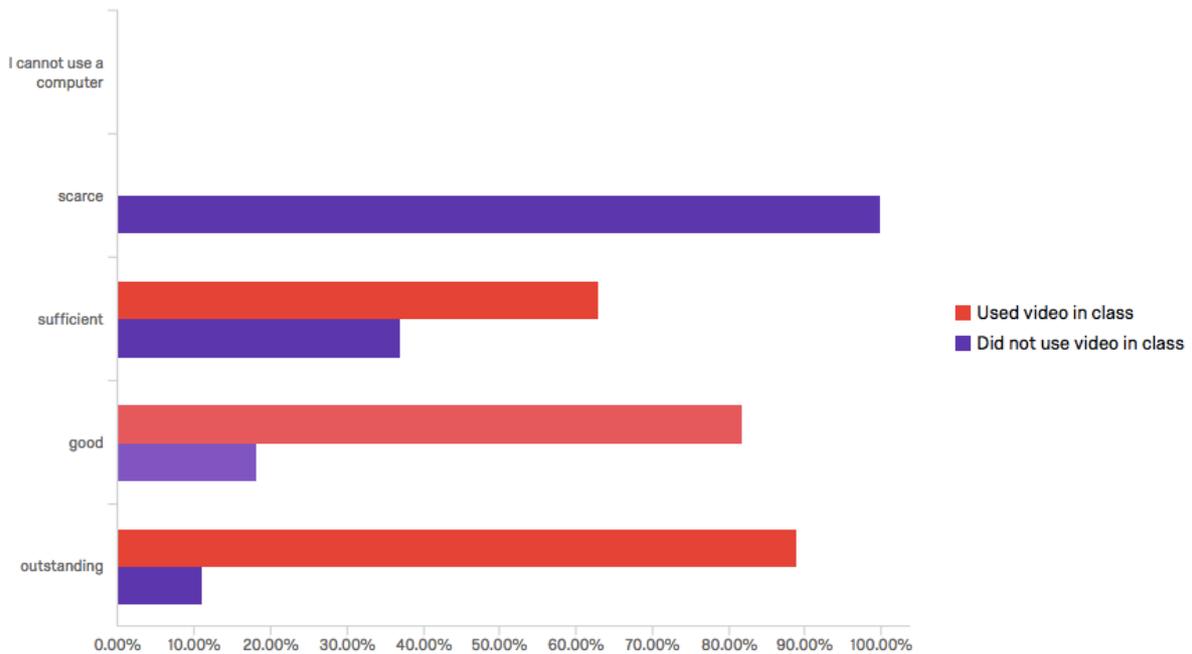


Figure 3. Teachers' use of videos in class by computer skills (self-assessment).

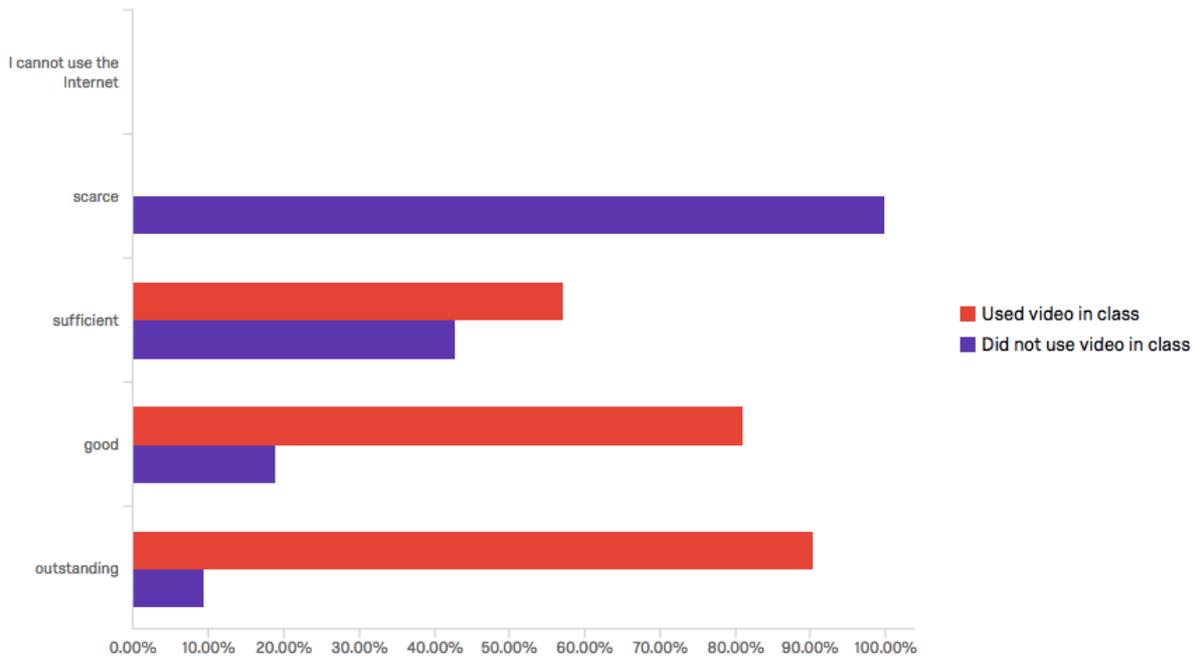


Figure 4. Use of videos in class by internet skills (self-assessment).

3.2 What videos do teachers use?

Documentaries are the most screened genres in classes (38.2%; Figure 5), followed by animation movies, news items and then fiction. Under “other”, teachers listed variations (like “excerpts of feature films”) or instructional films. We remark that adding up “fiction”, “animation” and “other” (which often includes variations of fiction products), we would reach 35%.

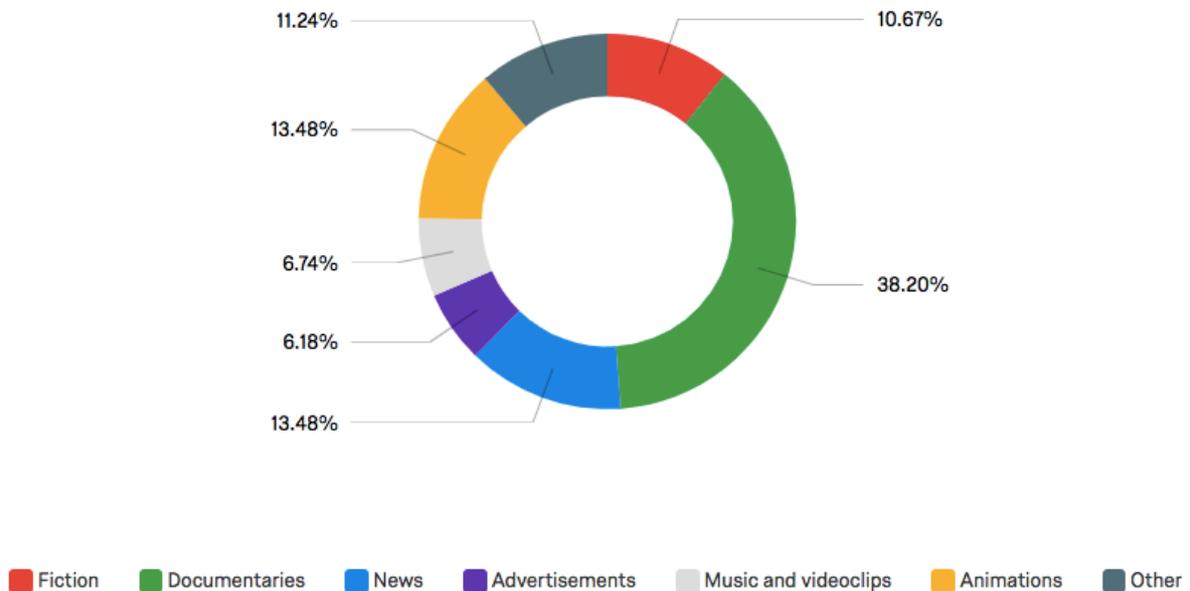


Figure 5. Most used genres.

Such genre preferences seem to be constant across disciplines and school grades, with a tendency for animation movies to be used more in lower grades, and more fiction films in higher grades (upper secondary education).

The length of the video clips screened in class is also relevant: most respondents indicate that they prefer short videos (below 10 minutes, reported by slightly less than 60% of the answers), which are embedded within a sequence of class activities; about 35% indicate that they use clips that in any

case remain within the single class period (from 10 minutes to 45 minutes) and very few use video longer than 60 minutes (i.e., a full feature film). The preference for shorter videos is stronger in lower secondary education (ages 11-14), which is where maintaining attention and discipline is more challenging for teachers.

3.3 Why and how do teachers use videos?

Why do teachers use video? Most of the respondents use it as an integrated learning moment, mainly for introducing or summarizing a topic, or as a stimulus for discussion (Figure 6). Very few indicate using videos in class as an opportunity to work on media literacy or film language. Most teachers (over 80%) indicate that they create supporting instructional materials of their own as a complement or integration to the video. During all the focus groups, the teachers mostly agreed that, even if they could find ready-made materials, they would prefer not to use them as they are, but would like to adapt them to their specific class situation, making their own worksheets and exercises, and inserting them into their way of approaching the topic, or choosing some parts of the proposed materials. In any case, this attitude correlates mostly with the quality of didactic materials found on the internet.

This led to discussion on how to envisage a format for creating a sort of online high-quality instructional video repository, including advice about copyright issues. According to the teachers, the repository should include metadata and facilitate the orientation inside the subtopic variety, include links and references to the national curriculum, and open draft learning materials – a format which clearly goes in the direction of Open Educational Resources [24].

On the other hand, only a few teachers (about 15%) integrate video materials into their evaluations, as a study material or as a piece of knowledge on which they might ask test questions. This marks a clear difference between video and written text, the latter being a common reference for test preparation, and reinforces the common understanding that video – at least in teachers' perception – is still not generally considered to be a “serious” learning source. Of course, the fact that not many teachers include video materials in their evaluations could also be due to the lack of reference models and criteria, which are yet to be developed before they can be disseminated and integrated into evaluation methods.

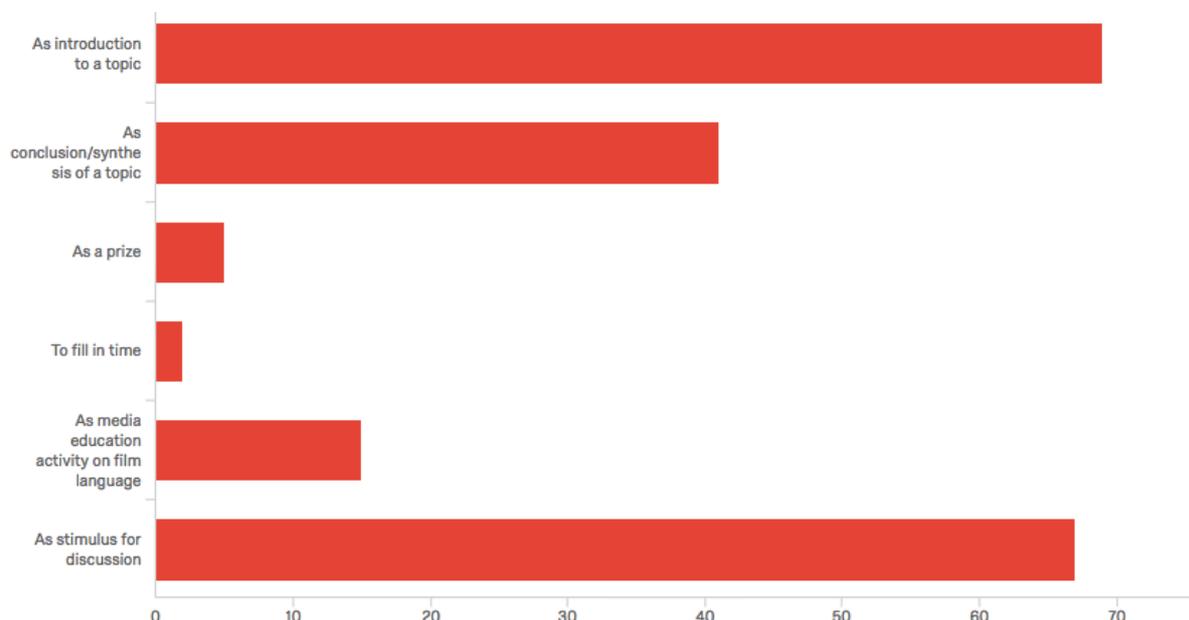


Figure 6. Reasons for using a video in class.

3.4 Enablers and obstacles

The survey finally asked respondents to rank elements that would make it easier for teachers to use videos in class more often. The results are shown in Table 2 (a lower figure indicates higher ranking, i.e., more relevance).

Teachers of all scholastic levels appear to agree that the key elements are “good quality contents” and “ease in finding”. The second important aspect is the duration of the clip, which ideally should be

rather short, so that the didactic time available is not affected too much. The aspect related to the quality of the instruments available in class (beamer, screen, computer) also emerges. On the other hand, appreciation by colleagues or senior staff members, and links to the curriculum, do not appear to be motivating factors. So teachers who are willing to experiment video use in class clearly do not worry about these aspects at present.

Table 2. Enablers (in bold the most selected).

	<i>Total</i>	<i>Primary</i>	Lower secondary	Upper secondary
Good quality projection and audio system in class	3.0	2.6	3.2	3.7
Ease in finding clips of suitable duration	2.6	2.7	2.5	2.2
Ease in finding good reliable video content	1.9	2.0	1.9	1.6
Appreciation from superiors and colleagues	6.7	6.8	6.6	6.7
References in the national curriculum	6.0	6.1	5.9	5.8
More flexibility in the yearly program	5.1	5.0	5.0	5.2
Availability of ready-made class materials	3.6	3.7	3.6	3.3
Appreciation from parents	7.2	7.0	7.1	7.6

4 CONCLUSIONS

4.1 Discussion

This paper presents the quantitative and qualitative findings from a small-scale exploratory study about the use of films and other video materials in class by teachers in primary schools, lower secondary schools and high schools in Ticino. Overall, 118 teachers participated in the survey data collection, and three follow-up focus groups were held in order to refine the interpretations of the results.

The survey participants are self-selected from a pool of invited teachers. Consequently, the analyzed sample is non-randomized and relatively small, so that the data we presented should not be intended as representative of a larger population, and the results we discussed only provide local findings.

Despite this we can say that the study confirms the experience of the authors of this paper collected in workshops and training activities conducted on the topic. Also, the results provide useful insights on the integration of video materials in actual teaching and learning and on which elements would favour a deeper integration. Also, the need for a more structured approach to film (and in general, media literacy) emerges clearly.

4.2 Outlooks

The next phases in the FAST project include a collection of video materials already successfully used by teachers (good practices) and the identification of new, high-quality materials found in existing portals and online, with the goal of creating an online reference website for high-quality instructional video materials.

A key partner in this endeavour is Radiotelevisione della Svizzera Italiana (RSI, the regional branch of the Swiss national public service television), whose digital archives contain a collection of documentaries related to history, geography, natural sciences etc., from which a series of high-quality videoclips will be selected.

In addition to assembling the repository of quality videos, in this phase the project will also focus on creating a didactic support setup consisting of materials available in a recognisable format and in open source modality (following an OER approach), in order to provide materials that teachers can easily adapt. It will also be possible to add tutorials for teachers, so that they can utilise the instruments and contents in the best way possible.

At the same time, the project plan includes the development of a continuing education programme for in-service teachers, allowing them to acquire, in a structured manner, the necessary media and film literacy competences, and the related methodological and didactic expertise for working with and adapting the materials. This action will be combined with a discussion with the management of pre-service teacher education programs, to assess the opportunities to integrate more digital and media literacy activities.

The findings of this exploratory study represent a solid discussion basis for all these activities, with the intent to promote the development of more digital and media literacy in schools and in the teaching profession.

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