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The Balancing Act of Repurposing Feature Films and TV Series for University Teaching

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Definition: Contemporary educators have increasingly recognised the diversity of their student population and, hence, have attempted to use multimodal teaching methods for additional student learning benefits. One popular example is repurposing film and TV content for higher education pedagogies. However, integrating these materials into teaching effectively often proves more complex than lecturers might anticipate. This entry investigates the merits and challenges of using FF/TV in teaching to determine the factors that impact development of an effective FF/TV pedagogy for student learning, through an interdisciplinary review of the existing literature, followed by a qualitative survey and semi-structured interviews with lecturers across disciplines at Australian universities. Using visual literacy theory, cognitive load theory, and dual coding theory, data analysis reveals that the pros and cons of integrating film and TV in teaching are in fact interconnected, and the main role of the teacher is to pedagogically balance them. Evidence-based and theory-grounded suggestions for application are detailed throughout the discussions.

Keywords: higher education; media education; multimedia learning; higher education pedagogy; film pedagogy; media integration; education and pedagogy; interdisciplinary pedagogy

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1. Introduction

Contemporary educators often opt to use multimodal teaching methods to address the diversity of their student population regarding learning backgrounds, needs, and preferences. Yet, teachers without specific expertise in film or media studies do not always understand the complex implications of using mixed-media, and relying on self-taught or ad-hoc trainings to include films and television content may result in unanticipated outcomes [1,2]. Repurposing the fictional screentexts of feature films and TV series (FF/TV) for teaching is a common practice across all levels of education, but there is little rigorous research or academic development opportunities to establish whether educators understand how beneficial or detrimental this practice can be for student learning [2–4].

The literature on the use of FF/TV in teaching reveals that many educators tend to perceive merits and challenges as two separate domains [5–7]. Several scholars refer to the merits of integrating FF/TV representations into teaching disciplinary content, ranging from practical considerations—such as low costs, ready supply, and the reproducibility or adaptability of teaching methods for different courses—to pedagogical benefits in enhancing cognitive training, providing context, and improving student engagement [4].

For instance, FF/TV are generally noted to appeal to students through their senses and emotions, helping them relate more readily to the subject matter [8,9] by offering a visible life-like representation of abstract concepts and real-life problems [9–11] and capturing multiple perspectives or dimensions of a topic (such as a medical case or a social problem) to showcase the complexities that are difficult for teachers to demonstrate in the classroom, for students to grasp verbally, or even for anyone to encounter in reality [10,11]. FF/TV can also enable the training of various cognitive skills from remembering to critical, analytical thinking, or creativity in problem-solving, perspective-taking, decision-making, ethics, and

empathy training [8,10–17]. Furthermore, the multimodal nature of FF/TV pedagogy is also believed to assist with developing multiliteracies [11,18,19]. When screened in class, the shared film-viewing experience may reduce students' participation anxiety, improve group cohesion, and increase students' participation in class activities such as group discussion [9,20,21].

Including well-chosen FF/TV content in learning materials has also been found to make stressful and cognitively demanding subjects, such as mathematics [6] or theory writing [22], more inclusive and approachable or at least less intimidating for students [23]. In these contexts, the presence of FF/TV was found to help students feel more positive about the subject, enable more active engagement with other learning activities, and improve their performance in assessments. Additionally, integrating FF/TV into learning activities has also been suggested to create a 'safe zone' for exploring 'out there' issues [24] and an inclusive environment in which a variety of learning needs or preferences are accommodated [8,9,12,25]; this appears to be especially the case for learners who are new to the subject/discipline and for at-risk learners by providing a familiar or accessible entry point [5,26].

However, even the most enthusiastic advocates of FF/TV in teaching recognise their potentially detrimental side [8,9,12,27,28]. A key characteristic of FF/TV is their entertainment value, which can distract students from taking the represented issues seriously or mislead them about the actual scale of represented problems [9,27]. Since the craft of FF/TV allows for emotional manipulation of the audience coupled with high persuasiveness, FF/TV potentially provoke unpredictable reactions or interpretations from students [10,29,30] and negatively influence their ability to discern weak arguments [4,9,30]. Given the limited screen time within which complex, nuanced stories must be resolved, FF/TV also tend to oversimplify subject matter, which can sometimes lead to an inaccurate understanding [9,17,28,31]. FF/TV representations can sometimes be controversial or distorted, potentially confusing students. This may further worsen unhelpful student learning tendencies such as passive consumption of FF/TV's perspective [9,32]; reduced ability to discern bias, weak arguments, and inaccurate information [4,9,17,30]; low ability to transfer learned knowledge into real-life situations [15,33]; lack of knowledge about concepts shown in FF/TV that lead to invalid conclusions or generalisations [34]; and lack of background knowledge in audiovisual and film studies concepts [35].

Problems related to less effective teaching methods involving FF/TV are also part of the conversation in the literature [5,6,35,36]. These, however, mostly appear in articles that review primary studies reporting first-hand practice of FF/TV pedagogy and are often detached from the student learning challenges listed above; however, they do address the bigger picture of pedagogy development. In health sciences, for instance, Membrives and colleagues [35] observe that teachers seem to lack methods of assessment beyond their own subjectivity and that the learning outcomes embedded in FF/TV use can be difficult to measure. Through experimenting with inaccuracy-detecting tests in using historical films, Umanath and colleagues [17] warn that some classroom activities might not be effective due to FF/TV's overpowering impact on cognition and memory compared to other instructional materials. Donnelly [8] asserted that much of FF/TV's educational potential remains untapped in teaching and learning due to the lack of training for teachers in using these media.

2. Theoretical Underpinnings

This entry employs an interdisciplinary framework of theories to address the complex and seemingly contradictory effects that FF/TV-assisted pedagogy can have on student learning. These theories include Visual Literacy, Cognitive Load Theory, and Cognitive Theory of Multimedia Learning.

2.1. Visual Literacy

Visual Literacy (VL) is an evolving field that deals with a variety of cognitive skills that involve working with information presented visually (photographs, illustrations, moving images) and describes how those skills can be effectively taught and learned. Although the connection between FF/TV and multiliteracies is not new, only a few educators have discussed the connection between FF/TV and VL in terms of cognitive skills [37]. While the developers of VL theory seem to focus largely on communication within the general instructional context [38], this current entry attempts to explore how this communication operates in the specific context of FF/TV pedagogy [39].

VL might be perceived as a competence [40,41], an ability [42,43], a learned skill [44,45], or a mixture of all three. Filtering through multiple 'points of convergence' [38] (p. 4) (Avgerinou and Pettersson, 2011, p. 4) among various VL definitions, identified five core components of the theory: visual language, visual thinking, visual learning, visual communication, and visual perception (Figure 1).
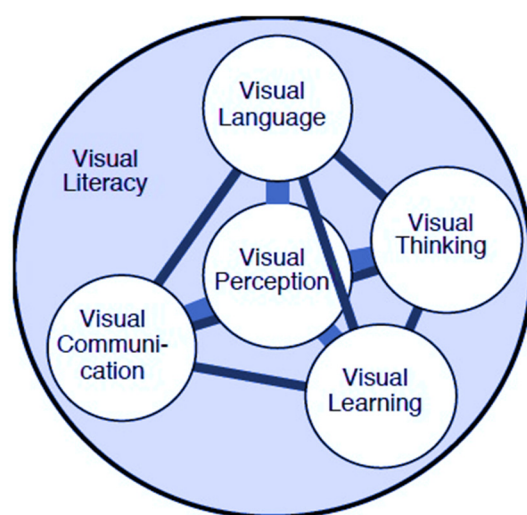

Figure 1. The components of Visual Literacy Theory.

Visual language (VLa), within the context of VL, denotes a language of visuals that intermingles with the verbal language in human communication. Avgerinou and Pettersson [38] conceptualised VLa through three skillsets: reading/decoding/interpreting visual statements; writing/encoding/creating visual statements; and thinking visually. Similar to verbal languages, VLa uses grammar, syntax, and vocabulary [46,47]. VLa is also interdisciplinary in nature and characterised as integral to the other four elements. Without fixed rules for interpretation like mathematical symbols, VLa instead 'attempt[s] equivalence with reality' [38], as it mirrors what it represents and thus has the power to directly communicate the same way real-life experiences do. This entry treats the teaching and learning connected to FF/TV as a case study where our current understanding of VL and VLa plays a vital role in analysing how these screentexts should be repurposed for effective classroom communication (i.e., transfer of knowledge and/or skills) between teachers and students.

The basic content of visuals may seem universal and natural to recognise, but this commonsense approach belies the complexity at play. Since VL has simultaneous functions that are both cognitive (viewing, thinking, imagining, visualising, inferring, and constructing meaning) and affective (evoking feelings and attitudes), Avgerinou and Pettersson ([38], p. 11) offer recommendations to strengthen the readability of the instructional visuals. They include ensuring the following:

(1)   That the subject matter is familiar to the audience;
(2)   That the subject matter is depicted in a realistic manner;
(3)   That visuals lack excessive detail that may distract from the main message;

(4) That the visual conventions are familiar to the audience.

These recommendations bear close resemblance to the key principles of cognitive load theory (CLT) and the cognitive theory of multimedia learning (CTML).

2.2. Cognitive Load Theory

Also emerging from educational psychology and neuroscience, Cognitive Load Theory (CLT) is favoured by many educators for its strong evidence-based roots and high applicability. CLT is essentially founded on the limited capacity of working memory at a given moment in time and the formation of schemas in long-term memory (i.e., learning) [39,48–50]. It therefore supports explicit or direct models of instruction where teachers provide students with specific and clear guidance. Rather than categorising information based on their modalities (e.g., visual, auditory, spatial), CLT distinguishes information as helpful or unhelpful to the specific requirements of a learning task. Accordingly, CLT describes the cognitive load as having three different interconnected parts: intrinsic/productive load, germane load, and extraneous/unproductive load (Figure 2).
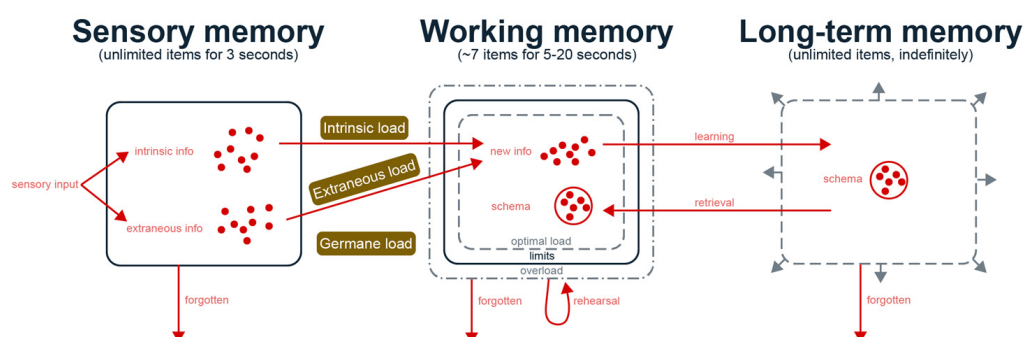
Sensory memory (unlimited items for 3 seconds) · **Working memory** (~7 items for 5-20 seconds) · **Long-term memory** (unlimited items, indefinitely)

sensory input · intrinsic info · extranous info · Intrinsic load · Extraneous load · Germane load · new info · schema · optimal load · limits · overload · learning · retrieval · schema · forgotten · rehearsal · forgotten

Figure 2. Cognitive Load Theory visualisation.

The intrinsic load selects elements of information that are helpful to the task at hand and activates and recalls relevant schemas from long-term memory to help process new information. More recent studies also suggest that intrinsic load is activated through 'good' content of instruction design that can pair effectively with learners' prior knowledge [51–53]. The germane load assists this process by identifying helpful elements from the content and format of the associated instruction to reduce element interactivity (i.e., the complexities among different interacting information elements—[54]) and liberate more WM resources to focus on completing the learning task. The extraneous load identifies and dismisses the unhelpful information in the content and format of learning materials to free up more capacity for the productive processes [51,53–55]. Since intrinsic, germane, and extraneous cognitive loads all function within the limited capacity and duration of the working memory load, good instructional design generally seeks to minimise the cognitive processing required to deal with extraneous load to increase the capacity to acquire helpful schemas for learning.

2.3. Cognitive Theory of Multimedia Learning

The Cognitive Theory of Multimedia Learning (CTML), as pioneered by Richard Mayer [16], is often used alongside Cognitive Load Theory. CTML posits that dual-channel, limited-capacity, and active processing govern learning with multimedia. Mayer emphasizes designing multimedia instruction that aligns with human cognitive functioning to facilitate meaningful learning. CTML integrates dual verbal and visual channels [56–59] and the limited capacity of working memory [16,54,60] Additionally, it introduces 'active processing', emphasising learner engagement in information selection and organisation. This 'active processing' element asserts that meaningful learning occurs when learners engage in cognitive activities such as selecting relevant information, organising it into a coherent structure, and integrating it with prior knowledge [51,52]. This active engagement

is vital, as it dictates the efficacy of multimedia learning by ensuring learners autonomously interact with the content, beyond mere reception.

2.4. Motivation, Attitude, and Emotion in Learning within CLT and CTML

The relationship between emotions and Cognitive Load Theory (CLT) is multifaceted, with emotions playing a critical role in shaping learning effectiveness, as they can both facilitate and impede cognitive processes [61]. Positive emotions, generally associated with enhancing motivation, are posited to contribute to optimising intrinsic load, fostering working memory function, and facilitating creative and prosocial behaviours. This is supported by the ability of positive emotions to serve as effective retrieval cues for long-term memory [62–65].

By contrast, negative emotions may consume working memory resources, resulting in diminished recall and creativity, and leading to lower-quality learning outcomes [66,67]. The influence of negative emotions extends to academic settings, often linked to stress, anxiety, frustration, and boredom, with a potential to overload the extraneous load and reduce working memory (WM) capacity, thus affecting performance [65,68]. Yet, in learning contexts where emotions are part of the intended outcomes, such as in medical education, the processing of negative emotions is associated with intrinsic load and is necessary for achieving learning goals. Furthermore, certain negative emotions like confusion can stimulate learners' effort and encourage deep learning, potentially aiding in performance improvement and mood regulation [65,69–71].

In terms of memory retention, cognitive neuroscience research indicates that emotional arousal during learning can enhance memory retention and retrieval. Memories associated with emotions are generally more persistent, with negative stimuli engaging more neural activity in visuosensory regions, albeit being more difficult to retrieve later [30].

2.5. Integrating Theories and Empirical Findings on the Effects of Film and Television on Learners

The complex interplay between cognitive load, visual literacy, and emotional engagement emerges as a pivotal framework in understanding the pedagogical potential of film and television media. Empirical research indicates that films not only serve as vehicles for cognitive engagement but also evoke emotional responses that can influence attitudes and perceptions, notably among diverse demographic groups [72,73]. This aligns with cognitive load theory, suggesting that emotionally charged content can either facilitate or hinder learning, depending on how it is integrated with cognitive processes. Studies also emphasise how films exemplify how narrative and emotional engagement can lead to varied attitudinal shifts, underscoring the need for nuanced media selection in educational contexts [51,74,75].

Moreover, the representation of diverse figures in media, such as Black female scientists in video formats, has been shown to significantly enhance feelings of warmth, connection, and identification, thereby promoting inclusivity and interest in fields like STEM [26]. This effect practically underscores the critical role of emotional engagement and representation in media to inspire and retain interest among underrepresented groups, reinforcing the notion that emotional resonance coupled with cognitive load management is crucial for effective learning [76,77]. The ability of well-chosen FF/TV content to adapt to academic, socio-cultural, and generational differences highlights its potential as a tool for creating inclusive and emotionally engaging learning environments [78]. This capacity for adaptation ensures that educational content is accessible and resonant with a broad audience, further illustrating the importance of integrating both cognitive and emotional considerations in the design of educational media.

By synthesising these insights, it becomes evident that FF/TV content, when leveraged within pedagogically sound frameworks that account for cognitive load and emotional engagement, can significantly enhance learning experiences. This blend of cognitive engagement with emotional and narrative complexity not only aids in the retention of

information but also promotes values of inclusivity and access, thereby enriching the educational landscape.

3. Key Findings of a Qualitative Survey and Semi-Structured Interviews with Lecturers

Following the methods outlined in the Supplementary Materials section, a thematic analysis of survey and interview data revealed four main themes of pedagogical issues on which the use of FF/TV made an impact: student engagement, knowledge retention, social learning environment, and the accommodation of differences.

3.1. Student Engagement

Thirty two out of fifty survey respondents (64%) chose 'FF/TV to engage students through emotions, senses and relevance' as a reason to incorporate FF/TV in their teaching. As a result of such engagement, many respondents pointed to FF/TV's other inviting qualities such as enabling 'deeper thought/more nuanced understanding' (50%), promoting 'discussion and student participation' (50%), and motivating 'students to prepare/come to class' (24%). Regarding challenges, the survey asked, 'What kind of problems have you encountered [when using FF/TV in teaching]?' and provided a list of possible options. The following issues identified by survey respondents demonstrated a clear connection between student learning problems and the over-engaging traits of FF/TV:

- That [FF/TV] influence or change students' perception (18 respondents);
- Unpredictable reactions/interpretations caused by emotional distress triggered as an effect of FF/TV (11 respondents);
- Students' passive consumption of FF/TV's subjectivity (10 respondents);
- FF/TV's tendency to oversimplify complex/nuanced subjects to resolve within screen time (9 respondents);
- Fiction–reality tension, leading to controversial representations/distorted portrayals that confuse students (7 respondents);
- FF/TV's high persuasiveness, harming students' thinking abilities (6 respondents);
- That FF/TV's entertaining qualities distract students from taking issues seriously or in the same scale as in reality (4 respondents);
- Students' low ability to transfer learned knowledge into real-life situations (4 respondents).

Interviewees confirmed that one popular reason for choosing FF/TV representations for teaching was to create an attention 'hook', partly as a strong first impression to facilitate initial engagement with the academic content.

> *One of the things I believe is you gotta start off like a big bang [. . .] like a hook into the lecture. (L11)*

Qualitative learning tasks and activities, such as class discussion, online forums, and reflective journaling, were regular choices when it came to maintaining that initial engagement throughout the lecture by encouraging reflection and the exchange of ideas.

> *The screen can be used to talk about things that are deep and socially relevant [. . .] often once you find the thing that they're interested in, discussion just explodes. (L2)*

However, many interviewees also reported the flipside of FF/TV's strong engagement as giving rise to emotional bias and distraction during discussions.

> *[Students] might be looking at something you don't want them to look at and distracted by something that's there, or they're talking about the film itself rather that the learning activity. (L4)*

> *[Students] will go off on things they're personally passionate about [. . .] it can get heated. (L2)*

Teachers therefore should mobilise strategies that help refocus students while also teaching them to acknowledge how their own biases influence their 'reading' of FF/TV.

It's important to recognise how, as consumers of film, we also bring with us our baggage in our understanding and interpretation. While dealing with the messages a film tries to convey, we have our own messages that we wish to confirm or deny. (L13)

Some interviewees elaborated on how powerful engagement through FF/TV could yield contradictory learning outcomes for students. They identified their personal experience of FF/TV's persuasive manipulation and explained how they addressed it in their teaching.

I have to say Liam Nelson in Taken: I get swept away in it [. . .] but as academics we have to be able to acknowledge that I like to watch this film, but I know that there can be no facts in them [. . .] that's what I'm desperately trying to help students pick up. (L17)

Teachers need to say, 'That's a fiction, but let's talk about why you're attracted to that' [. . .] it's a non-cognitive thing because film moves past the judgement, around words to feelings and emotions and sensory stuff [. . .] I'm always encouraging students to critically separate what you notice or perceive from how you might interpret that perception. (L13)

Some interviewees offered their suggestions towards reducing the emotional effects of FF/TV on student learning and enhancing students' critical-analytical thinking.

We spend one week in the course on learning film analysis skills [. . .] partly I'm teaching sociology, partly I'm teaching film studies. (L1)

The technique of separating the visual from the audio can be a good way to diminish [the cognitive burden]. (L13)

Often I apply the 'alienation effect' devised by Bertolt Brecht [. . .] basically you get the story at the beginning [. . .so that] audience pay less attention to the affective impact and pay more attention to the cognitive and analytical context. (L18)

While the engaging qualities of FF/TV should and can be utilised as a springboard for thoughts and discussion, lecturers still need to pedagogically address the emotional attraction of FF/TV that may have detrimental effects on student learning.

3.2. Knowledge Retention

Most survey participants acknowledged the positive impact of FF/TV's visual representation of abstract concepts (78% of survey responses) and real-life problems (70%) on student learning, whereas 44% of survey respondents selected 'they help students remember information better' as their reason for choosing FF/TV. However, information retention is also implied in a range of student learning issues with FF/TV reported by survey respondents, which raised the following questions about the quality of that memory/information retention:

- Students' lack of knowledge about concepts shown in films, resulting in them drawing invalid conclusions/generalisations (10 respondents);
- Students' low ability to discern bias, weak arguments, and/or inaccurate information (9 respondents);
- Fiction–reality tension, leading to controversial representations/distorted portrayals that confuse students (7 respondents);
- FF/TV's high persuasiveness and harming of students' thinking abilities (6 respondents).

Similarly, all interviewed lecturers acknowledged FF/TV's multiple pedagogical merits, especially their ability to create long-lasting information retention.

One of the perks of using visual media is also creating a really strong impression on people that will make lasting memories. (L13)

Students actually remember film scenes pretty well. They relate those scenes to the points that they want to make in class discussion and essay. (L16)

Several interviewees also elaborated on why FF/TV have that effect, which involves their realism and affectivity,

We watch films with our eyes, we also hear, but research showed that we actually react with our whole bodies and sometimes phenomenologically you might feel like the film touches you in certain ways [. . .] watching a film [is] not reality, but it feels like reality. (L1)

All those short clips are a way to engage my students with a range of feelings, discourse dynamic, encouraging my students to observe the behaviours between the different characters in the scenario. (L13)

However, in the repeated experience of interviewees L1, L5, and L17, students mostly remember only what the film portrays, despite their attempts to dismantle the inaccurate information. These lecturers concluded that, without a carefully strategised and sufficiently memorable pedagogy, these audio–visual materials could easily overpower text-based and verbal instruction:

For several years I showed a film and then I spent the course demolishing most claims in it [. . . but] when I asked [students] in quizzes, that crappy black and white thing we showed in Week 1, for many students, remained the more powerful image even after 3 months of doing my course. (L5)

I've been very unsuccessful at dispelling this film. I don't think [students] understand the various other perspectives. I think the techniques that go with the use of film matter most: I don't have outside speakers, interesting exercises, or a whole semester to dispel the film [. . .] you'd have to work much harder. (L17)

I get [students] to look at films with different voices [. . .] and explain to them how they're not actually telling the same story even though it's presented as the same story [. . .] but when I asked them in an assignment about those films, they'd just totally take the film as 'Oh this is the truth'. (L1)

3.3. Learning Environment

A few survey responses (either directly or indirectly) recognised the following advantages of FF/TV regarding humour and other positive qualities that helped create an enabling learning environment:

- Contain humour, which relaxes and engages students better (28%);
- Motivate students to come to class (24%);
- Reduce stress and participation anxiety (12%);
- Create a safe communal zone (6%).

While such qualities might have a soothing effect on student wellbeing, it is also potentially distracting, resulting in students not 'taking issues seriously or in the same scale as in reality' (four survey respondents). These undesirable effects of FF/TV might even be accidentally strengthened by some educators' non-optimal use of the media in the classroom (Hobbs, 2006), such as employing FF/TV as 'fillers' (two survey respondents).

As confirmed by some of the interviewed lecturers, the humour or light tone used by some FF/TV to communicate difficult issues was found to be helpful in alleviating some alarming attitudes among contemporary student populations.

Even in the humanities, you're dealing with a lot of apathy and cynicism [among students] apathy is 'I don't care', cynicism is 'I don't really believe you'. (L2)

Many students are depressed already [. . .] you just got to be happy in class, happy with other students, happy with the content—not because the content is easy but happy in dealing with the difficult social issues through film. (L16)

[FF/TV are] fictionalised, but I think the fictionalisation actually helps students to see these things in reality because a TV show with scripted comedy is actually making comments on the reality of the situation. (L12)

Similar to L3's idea of bringing students with their different information-processing abilities together to enable collaborative learning, another benefit of using FF/TV in the educational context is to assist learning within a community through creating a shared

experience by watching the material as a group. Several interviewees emphasised the importance of this communal experience in reconciling—at least to a degree—the previously discussed challenges of using FF/TV in teaching.

If you've all watched the film together, you'd have that shared experience that you can talk about, and compare it to other experiences that the students might have all had. (L1)

On the other side of the coin, screening FF/TV in class can also create an excuse for some students to skip attending lectures and watch the FF/TV themselves, which could potentially lead them to misinterpretations and unexpected triggers if they miss the instruction and/or preparatory tasks. Such concerns might shape teachers' sceptical attitude when dealing with student complaints about triggers as previously discussed:

I've had students who say, 'Sorry I've fallen behind but that thing was really triggering'. I said, 'You were away for 8 weeks before that, so I don't think it was that thing that is really the issue here'. But you got to be really careful how you phrase that [. . .] some students said [a film] should be removed from the curriculum because it's glorifying sexual predators. 'No', I said, 'that's the direct opposite of what it's doing, but because you didn't come to the lecture, you don't see that'. (L2)

Alternatively, some teachers may opt to assign FF/TV viewing alongside some other tasks as homework to supplement the limited class or tutorial time. However, they reported that it not only defeats the purpose of a shared learning experience but many students also skipped the work.

[Students] are expected to see the film on their own outside of class time but there is substantial evidence that quite a few students don't see the films. (L8)

3.4. Accommodation of Differences

As the findings so far demonstrate, the multitude of viewpoints, agendas, or voices in FF/TV representations is not always easy for students or even educators to clearly discern. Although there was no direct indication in the survey, several interviewees raised the idea that such multitude or complexity of FF/TV is in fact valuable to accommodate the increasingly diverse student populations and their learning requirements.

The student population is increasingly diverse in culture differences, age and gender [. . .] forms of popular culture, particularly film and TV, can be a really useful way of getting complex issues across and getting discussion going. (L15)

No story is just entertainment: there's always a theme and agenda [. . .] I'm teaching [students] to see the things that are being communicated to them so that they in turn can communicate through their work. (L2)

Film is [. . .] synaesthetic—you'll be asked to master a lot of cognitive and sensory resources at once to understand a film [. . .] to unpack the invisible work behind it and work out how many senses are being employed and in what way to achieve a certain effect. (L8)

We're all meaning-making human beings so we will constantly impose meaning, focus on one thing to the extent of missing something else, having blind spots. The big learning for [students] is to suspend judgement on making too soon assumptions. (L13)

Moreover, the multiple modalities and origins of FF/TV productions could accommodate various learning factors—students' strengths, weaknesses, interests, learning goals, or attitudes towards certain topics. Although some interviewees casually used the generalised and controversial term 'learning style' [79,80], their collective encounters offered unique insights into diverse influences and pedagogical approaches to help train students in the literacies associated with different learning factors.

I've trained in 4MAT that recognises 4 different learning styles and also teaching styles [. . .] some would privilege more the written form, but others would privilege more the

visual and sensory and symbolic ways [. . .] I have a bias against practical tips, so I have to force myself to give simple step-by-step ideas because I'm into big-picture thinking a lot. (L13)

Not everybody will want to or can express their opinion straight away [. . .] so getting different types of learners to work together is really useful to [those] who might struggle to provide an immediate response [. . .] hopefully the other members of the team will be able to model for them a way of engaging with the text, through teamwork, collaboration, and sharing of ideas. (L3)

I teach by talking about it, by showing it, and then by doing it [. . .] I've been told that everyone needs to hear things three times in three different ways to learn it. (L6)

While learning theories support the logic behind using FF/TV pedagogy to accommodate learning diversity, this multifunctionality of FF/TV can sometimes complicate the increasing need to accommodate sensitivities motivated by students' backgrounds, such as culture, race, gender, age, or religion, that can also be common causes of emotional or political triggers. Despite taking the utmost care when handling the mass consumption of FF/TV representations by their students, and potentially even when overseen by their parents, many interviewees still reported unfortunate incidents.

A student with Indigenous background was emotionally triggered by some content [. . .] the lecture was prefixed by trigger warnings [. . .] but this student hadn't engaged with the lecture, so they weren't aware. I guess there could have been more training for me to repeat the warnings more. (L12)

I was tutoring in a course [. . . using] German cinema, one of the students' parents took exception to one of the films that we showed [. . .] in terms of sexuality. (L15)

This has also contributed to the decline of FF/TV use in university pedagogy, as some lecturers perceived more deeply rooted yet new and challenging problems such as generational sensitivity, fear, and intergenerational discrepancy:

The last year or two is the first time I've had students saying 'I'm triggered by this' [. . .] on one level if it's hurting people then they shouldn't be exposed to that, but on the other side of the coin, the drama does confront real issues—how do we talk about that without showing those issues in some way? (L2)

It was mentioned to me in a seminar in 2018 that [. . .] there was an increase in tendency in literal interpretation by students [. . .] it helps explain why some things just don't work out the way I expected. (L5)

4. Discussion

Originally created for the entertainment industry, FF/TV representations are designed to capture the audiences' attention and emotion, create long-lasting memories within an entertaining atmosphere, as well as connect with audiences from different backgrounds [8,17]. These coincides with the desirable characteristics of instructional materials. However, the two contexts—entertainment and education—call for two significantly different set of standards for engagement, information retention, social environment, and intercultural communication. Specifically, participants in this entry collectively provided evidence for contradicting effects that FF/TV could have on student-learning within these four themes.

Almost all the lecturers who integrated FF/TV into their teaching were aware of and directly mentioned the student engagement benefits. This engagement comes from an array of factors, from the mass-consumed audio–visual narrative format's diverse and relatable content to the strong emotional investment. Learning contexts in which FF/TV viewing is not strategically framed by effective instruction can accentuate unhelpful students' learning habits and weaknesses, thus leading to sub-optimal learning outcomes. Lecturers who seemed aware of these risks reported using methods that indirectly applied visual literacy principles (e.g., explicitly teaching film analysis skills alongside disciplinary content

knowledge) and cognitive load and multimedia learning principles (e.g., image–sound separation) as well as brought together extrinsic motivation (i.e., engaging FF/TV content) and intrinsic motivation (i.e., connections to students' personal experiences and values) in a qualitative assessment method.

Given the current CLT research that indicates the connection between emotional activation and memory retention and retrieval [30], as well as VL principles around realism and familiar visual language for strong readability [38], it was no surprise that FF/TV were deemed a good choice for assistance in the formation of students' schema. However, the diverse experiences of lecturers with FF/TV highlighted the need to examine the accuracy of information retained by students upon watching FF/TV, especially when compounded by students' insufficient film literacy (e.g., little/no background knowledge about film studies, weak abilities to discern bias/misinformation, and confusion between fiction and reality) reported by both survey and interview participants. Lecturers therefore should ensure that the selected FF/TV content is coherent with and complementary to their course content, rather than contradicting, and aim to train students in film literacy prior to FF/TV exposure [17].

Though not all participants showed an awareness of FF/TV's abilities to create a learning-friendly environment for students, those who did demonstrated an understanding of how negative and positive emotions contribute to learning effectiveness and the relationship between emotion and motivation [65,66,81]. While there are many benefits of an FF/TV-assisted communal low-stress learning environment, even for stressful topics, there is still a balancing act that must be performed, with students' tendency to take FF/TV use lightly as a frivolous form of learning materials, as well as their slacking learning behaviours.

As recommended by VL scholars, for the visual instructional materials to achieve high readability for viewers, viewers need to be familiar with the visual language used in such materials [38]. However, the findings on FF/TV's emotional triggers suggest the importance of understanding how familiarity manifests in different individuals due to their personal backgrounds—positive or negative [82]. If positive, FF/TV's multimodal nature can be helpful in accommodating different learning preferences, as some participants argued. If negative, lecturers need to consider the effects of negative emotions on students' extraneous cognitive load, such as how it might slow down their capacity to process information and learn [66,67]. Since contemporary students increasingly identify as experiencing psychological distress across disciplines, cultures, and backgrounds [83], there is a pressing need for educators to factor student wellbeing and mental health into their pedagogical design. This means that superficial trigger warnings and using assessment results to monitor learning outcomes do not suffice. Rather, educators should seek to create an engaging, informative, and safe learning environment, taking into consideration the atmosphere, content, instruction, and student motivation to engender mutual understanding, trust, and support [25].

The richness in perspectives, modalities, and literacies of FF/TV representations clearly requires a pedagogy to balance the benefits and risks of FF/TV's attributes in relation to student learning. Processing such diverse educational offerings is cognitively complex and demanding, especially for lecturers and students who might be inexperienced or unfamiliar with the multimodal approach. Therefore, rather than relying on school education or assumed media competences in younger generations, lecturers should proactively train students in visual and film literacy, as well as put warnings of potential triggers in place, prior to exposing them to FF/TV. Literacy training can be conducted through lecturing or providing guiding questions, resources, collaborative tasks, and activities to help reduce the cognitive load of studying films simultaneously with disciplinary content. Trigger warnings can be integrated meaningfully into instruction—not only to inform but also to highlight content relevance and, hence, the necessity of learning from potentially difficult FF/TV representations.

5. Closing Remarks

Delivering a pedagogy that involves existing multimedia content such as FF/TV to groups of students with potentially different backgrounds, needs, and preferences, without fully understanding how these media achieve their effects on the audience, is like tossing a coin: the outcome could be either heads or tails. In this entry, the complex interplay between feature films and television series (FF/TV) in educational settings was examined, revealing dual effects on student learning. Integrating FF/TV into teaching can engage students, enhance information retention, foster a social learning environment, and accommodate diverse learning styles. However, the interdisciplinary nature of FF/TV requires educators and learners to possess an understanding of visual storytelling's impact on cognitive load. Educators are urged to apply principles from visual literacy, cognitive load theory, and multimedia learning to thoughtfully incorporate FF/TV into pedagogies. This entry underscores the importance of intentional instructional design to leverage the benefits and mitigate the cognitive challenges of using FF/TV as educational tools, likening uninformed application to a gamble with unpredictable outcomes.

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