



# A survey of middle years students' perceptions of aesthetic literacies, their importance and inclusion in curriculum and the workforce

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## Abstract

The ways in which we communicate have expanded substantially. Not only are we expected to read and create print-based text but also those that include images and other modes. To effectively make meaning from contemporary texts, students need to know about aesthetics, that is, how various texts are appreciated and presented. However, evidence suggests that limited attention to aesthetics occurs in schools. The purpose of this paper is to investigate to what extent middle years students understand the importance of aesthetics in their school and work across different professions. To address this, we share data from a survey distributed to two schools and completed by 80 middle years students aged 8–13 years of age. The survey aimed to determine these students' knowledge and understanding of aesthetics and their associated literacies and if they knew of their inclusion in the curriculum. We also asked about their knowledge of aesthetics in different jobs. Findings showed that students are aware of aesthetics in society and work, but they also indicated that they did not feel they had been taught these important literacies at school despite thinking they could improve their grades. These findings suggest that teachers and students may require more development in the area of aesthetic literacies to enhance language and material resources for meaning making. It is hoped that research on aesthetic literacies can provide further insight on their importance in preparing students to be job ready.

**Keywords** Aesthetic literacies · Middle years students · Learning and teaching · Job ready

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## 1 Introduction

The ways in which we communicate and consume information in today's world are increasingly diverse (Callow, 2020; Kusumasondjaja, 2019) and involve knowledge of the presentation of objects and texts, that is, aesthetic features. Not only do we use written and oral language to share but increasingly image, sound and gesture feature in our communication with others (Lim, 2018). Being able to aesthetically present information through these modes is important in expressing meaning for the reader/viewer (Serafini, 2010). Therefore, knowledge about aesthetics is needed when students both appreciate and create different types of texts as it involves the notions of beauty and how we design objects and texts (Barton, 2020). Many philosophers such as Aristotle, Plato and Kant (Stanford, 2020) and arts educators including Dewey (1934) and Langer (1957) explored aesthetics in relation to the concepts of aesthetic experience, judgement and objects (Fleming, 2013). Aesthetic experience refers to the moment when one looks at, hears or touches an external object that evokes an emotive response, for example, joy or beauty. It can also refer to when we perceive, appreciate and also produce art (Dewey, 1950). Aesthetic judgement involves some kind of evaluation of aesthetic objects. Such appraisal can be both subjective and objective, negative or positive. Aesthetic judgements usually include whether we take some kind of pleasure in viewing/listening to different objects/artefacts and requires us to use certain language when explaining such evaluation. The field of semiotics and sub-field of appraisal theory explores appreciation and involves the understanding of aesthetics (van Leeuwen, 2017) and could assist educators in knowing more about how to teach it. Aesthetics education has long been argued as being important in schools due to its necessity in everyday communication and in workplaces in today's world. This paper aims to address the limited body of research on this matter.

Knowledge of aesthetics involves the knowledge of specific literacies. *Aesthetic literacies* involve meaning making through the semiotics of beauty or appreciation of artistic expression. These literacies pervade our everyday lives (Duncum, 2002; Klein, 2018; Pahl, 2014) and feature in many jobs involving the presentation of objects and multimodal communication (White, 2015), yet evidence suggests that they are not specifically taught in schools (Jacobs, 2012). Without knowledge about aesthetics, communication could potentially be ineffective, and businesses, where aesthetics plays a large role, could decrease their profits. Schools are best placed to enhance aesthetic literacies, and curricula often discuss a commitment to meet the aesthetic needs of all students. Teaching aesthetics means that students will be best prepared for the future workforce, given their prevalence in the contemporary workforce.

The curriculum also includes the need to learn about aesthetics, yet there is limited research that explores whether or not they are taught and/or understood by students in schools. This paper therefore shares data from a survey with primary aged students about their knowledge, understanding and presence of aesthetics in their learning.

## 2 Reviewing the literature

### 2.1 Why aesthetics is important for work and society

Aesthetics involve the concepts of beauty, creativity and design. As such, they represent our beliefs and values; we use them to appreciate and judge what is important to us. They have been shown to be important for our cultural and social development (Freedman, 2003), our

disposition to be ethical contributors to society (Stecker, 2005), and directly improve economic wealth, health and wellbeing (Di Maggio & Useem, 1980).

Aesthetics can play an important role in the labour force given many jobs require design and curation (Fiore, 2010) such as architecture, fashion, hospitality, landscaping and even cosmetic surgery. Aesthetics has also been known to improve both employees' wellbeing and organisational culture (O'Neill, 2009), for instance, where plants and natural light become key design features in the workplace environment. In a similar vein, over 80% of people in regional areas report aesthetics having a significantly positive impact on their communities due to having different ways to express emotion (Australia Council for the Arts, 2017) and they can provide cohesion within and across cultural groups, notably through artefacts of those that are marginalised (Taylor, 2007).

Being able to recognise and express beauty, creativity and design is more vital than ever, given the reported unpredictability of the future workforce (Thompson, 2016) and the uncertainty in today's world due to natural disasters, global pandemics and political unrest. The importance of aesthetics has also been recognised in relation to cultural heritage and society (National Trust, 2018). Developed aesthetic literacies for children and young people have potential to improve communication and employability given the role they play in today's society (House of Representatives Standing Committee on Employment, Education and Training, 2017).

In educational contexts, many researchers have noted the benefits of learning about aesthetics. Johnson's (2007) work, for example, found that learning about aesthetics improved early language and literacy development. Aesthetics has also been proven to engage students more in creative and inquiry-based approaches to learning (Cremin et al., 2015; Mills et al., 2017). They also support the development of compassion and empathy (Barton & Garvis, 2019).

The problem here is that, despite the acknowledgment that aesthetics are important, very little is known about how they are, might and should be taught. This paper therefore aims to identify if students were taught aesthetics.

## 2.2 Aesthetics in curriculum

Aesthetics feature in many curricula across the world. The Core Common Standards in the USA, for example, state the importance of aesthetics by acknowledging:

an arts-literate individual recognizes the value of the arts as a place of free expression and the importance of observing and participating in the social, political, spiritual, financial, and aesthetic aspects of their communities (both local and global, in person and virtually) and works to introduce the arts into those settings. (National Coalition for Core Arts Standards, n.d., p. 17)

In Australia, students in English are required to discuss the aesthetic appeal of a range of texts. They also learn about aesthetics in Geography where questions are posed about "aesthetic, cultural and spiritual value of landscapes and landforms for people" and in design and digital technologies as students undertake "functional, structural and aesthetic analyses of benefits and constraints of design ideas" (ACARA, n.d.). Aesthetics is also studied in all subject areas in The Arts as students learn how to convey meaning through aesthetic effect. Table 1 shows specific learning objectives for some of these subject areas.

**Table 1** Specific reference to aesthetics in the Australian Curriculum

Year level/s and subject area	Learning objective
Years 6–10 Dance	Aesthetic, artistic and cultural understanding of dance in past and contemporary contexts as choreographers, performers and audiences
Year 3–4 Design and digital technologies	<ul style="list-style-type: none"> <li>Undertaking functional, structural and aesthetic analyses of benefits and constraints of design ideas, for example, to different communities and environments including those from the countries of Asia</li> </ul>
Years 9–10 Drama	Evaluate how the elements of drama, forms and performance styles in devised and scripted drama convey meaning and aesthetic effect
Year 7–10 Earth and environmental science	Ecosystems provide a range of renewable resources, including provisioning services (for example, food, water, pharmaceuticals), regulating services (for example, carbon sequestration, climate control), supporting services (for example, soil formation, nutrient and water cycling, air and water purification) and cultural services (for example, aesthetics, knowledge systems)
Year 3 English	They listen to, read, view and interpret spoken, written and multimodal texts in which the primary purpose is aesthetic, as well as texts designed to inform and persuade.
Year 9 English	Building a knowledge base about words of evaluation, including words to express emotional responses to texts, judgement of characters and their actions and appreciation of the aesthetic qualities of text
Year 7 Geography	Spiritual, aesthetic and cultural value of landscapes and landforms for people, including Aboriginal and Torres Strait Islander Peoples
Years 3–10 Visual Arts	Adapt ideas, representations and practices from selected artists and use them to inform their own personal aesthetic when producing a series of artworks that are conceptually linked, and present their series to an audience.

These learning objectives show the importance of aesthetics in many curriculum areas. Aesthetics are critical, not just in The Arts, but also disciplines that require consideration of creativity, design and beauty in natural and human-made objects, such as encountered in Geography and Science. Further, the Australian Curriculum's General Capabilities of literacy, personal and social capabilities; creative and critical thinking; and ethical understanding (ACARA, 2012) align with the many benefits of learning aesthetics. Australian teachers are expected to teach aesthetic literacies across a range of curriculum areas and capabilities, yet there is little evidence showing how they do this.

### 3 Impetus for the research

The overarching study drawn on for this paper and titled *Teaching Multimodal Texts: A Collaborative Inquiry Approach* aimed to enhance learning and teaching related to multimodal texts, that is, texts that use more than two modes (e.g. gesture, image, language, sound and space) to convey meaning (Barton & McAlister-Visic, 2018). The study involved three schools, years 4 and 6 teachers ( $n = 7$ ) and their classes (approximately 200 students) and was endorsed by an educational system in Brisbane, Australia.

Findings from this larger study showed that teachers initially lacked the confidence and self-efficacy regarding teaching all the modes, specifically how students can manipulate various aspects of each mode to create different meanings in their work (Barton & Ronksley-Pavia, 2020). Through a large set of interviews and focus groups, it was revealed that only when both teacher and students developed a more comprehensive and wider

vocabulary (what we termed meta-language) about each mode, and then discussion and creation of multimodal texts was enhanced. For example, when students were able to express how they used sound and audio in their work (e.g. range of pitch, dynamics, timbre of instruments), they were more likely to create an effective soundtrack accompanying moving image on iMovie trailers. As such, an extension of this project was warranted; one that investigated students' understanding of aesthetic literacies in the curriculum and in different professions given their importance in presenting school assessment and for employability. Three of the participating students from the larger project agreed to complete a pilot survey. Their feedback was incorporated into the final version disseminated to the two schools.

As a key aspect of New Literacies Studies, aesthetics involves the notion of appreciation by exploring how we make meaning from different types of texts such as film, literature and objects (Mills et al., 2017). Appreciation is also studied in social semiotics and its sub-field of appraisal theory, providing detailed analyses of such texts (White, 2015). Aesthetics also forms a critical aspect of work by artists, in the creation of different artworks by contemplating various elements of design (Dewey, 1950) such as considering the placement of objects in artworks, as well as critical thinking about the role aesthetics plays in analysing and creating art (Roy et al., 2019).

Stemming from social semiotics, appraisal theory includes a sub-system of attitude that includes three semantic dimensions of affect (emotions), judgement (ethics) and appreciation (aesthetics) (Martin & White, 2005). Appreciation involves students reacting to, and evaluating, the impact and quality of objects or texts by commenting on the composition, balance and complexity of a work. Such assessment can also include other systems of cultural and social value (White, 2015). As students in classrooms are expected to compose multimodal texts (Barton et al., 2021), it is critical they know how to appreciate them, that is, how well parts of an object fit together. Positive appreciation uses language such as “well-formed”, “harmonious”, “unified” and “intricate”, whereas “ill-formed”, “unbalanced”, “contorted” and “confused” display negative connotations. Further, the notion of presentation or something being “pleasing to the eye” concerns similar positive and negative descriptions such as “beautiful”, “lovely” and “superb” or “plain”, “ugly” and “dull”. Students must know how to judge and then create well-presented assessment that display an understanding of aesthetics such as in the English curriculum which states students need to know about “the dynamic nature of literary interpretation...their literary conventions and aesthetic appeal” (ACARA, n.d.).

## 4 Research design

A survey research design utilising an online survey was conducted with middle-year students from different schools in Australia. Much research on perceptions of aesthetics was conducted using interviews and observations (in ethnography) to measure aesthetic response capabilities (e.g., Kusumasondjaja, 2019; Johnson, 2007; Marković, 2010, 2012; Polovina & Marković, 2006). Through a process of reviewing literature on aesthetics education, this study aimed to identify ideas of survey items that can facilitate the development of a questionnaire to capture students' perceptions and learning of aesthetics on a larger scale. The survey sought to understand students' experience and perceptions of aesthetics and their learning about aesthetics. It provides both quantitative and qualitative data. In this study, aesthetic experience is defined as “a special kind of subject-object relationship – that is, as a fascination with an object, appraisal of profound meanings of an object, and a corresponding feeling of an

exceptional relationship with an object” (Marković, 2012, p. 4). A student-friendly definition of aesthetic knowledge was used with the participants in the interviews through prompts such as “beauty” or “ugliness”, “how things look to someone’s eye and how it presents” or “how you feel when looking at something.”

#### 4.1 Survey instrument

The survey instrument comprises three sections. The first section captures demographic information about student participants, their gender, year level, the school size in which they are enrolled and other background details which may influence their intuition and knowledge of aesthetics such as their interest in arts, their engagement in extracurricular arts-related lesson or the artistic background of their parent/carer. The second section consists of a series of multiple-choice and open-ended questions to assess participants’ aesthetic experience. Participants were asked to select the attributes in the given list which expressed their state of mind during aesthetic experience of given images of both artistic and non-artistic objects (e.g. natural settings). Artistic objects include drawings or paintings, whereas non-artistic objects were selected from pictures of natural settings such as landforms and landscapes or non-edited photographs of natural events such as bushfires. All artistic and non-artistic pictures used in this study comply with copyright act and permission sought where required. The sets of descriptors of aesthetic experience used in these questions derived from empirical works of Marković (2010) and Polovina and Marković (2006). These sets encompassed descriptors factoring *aesthetic experience* (e.g. awing, exceptional, profound, unique) and *aesthetic tone* (e.g. charming, cheerful, hateful, scary). It was assumed that student participants would understand these descriptor terms thus generating common interpretation. This section also includes (i) a 5-point Likert scale measuring levels of interest (ranging from 1= Not Interested, 2=Somewhat Uninterested, 3=Neutral, 4=Somewhat Interested, to 5=Very Interested) on different forms of arts such as drawing, dance, music and drama and (ii) a 5-point Likert scale measuring levels of agreement (ranging from 1=Strong Disagree, 2=Disagree, 3=Uncertain, 4=Agree, to 5=Strongly Agree) on different statements regarding using the visual as a way to interpret texts (Early & Marshall, 2008). The survey items in this section were generated from selective comments and expressions used in Early Marshall’s (2008) interview findings. These student comments are considered appropriate and assumed to be mutually understood by similar student cohorts like the one in this study. The term “mandala” was used as it is a form of visual representation rooted in Indian and Tibetan Buddhism. It has been widely applied as a learning tool across cultural contexts wherein non-linguistic symbols are used to represent complex constructs. The tool was also used by Carl Jung and Jungian analysts as a way for individuals to gain insights into their unconscious. The use of mandala was effort to accommodate multicultural background of students in Australian classrooms. The last section dedicates to understanding participants’ learning about aesthetics in school settings.

#### 4.2 Procedure

The online survey was developed using LimeSurvey tool. Ethics was sought through the appropriate procedures at the authors’ university. Two schools were involved, and teachers of years 5–8 invited their students to participate by distributing information sheets and consent forms. Only consenting parents/carers and students were sent the survey link to complete. Students were informed of the purpose of the survey on the front page of the survey, with

instructions provided on completing specific sections throughout the survey. The issue of response rate, critical in the use of online surveys (e.g., Kaplowitz et al., 2004; Mertler, 2001; Sills & Song, 2002), was considered in planning the data collection process. For this study, contact was made with teachers regularly over a period of one term to ensure engagement with students were achieved, also providing the capacity to provide reminders to students to enhance response rates. Through these teacher contacts, the researcher got permissions to go into classroom to briefly share the purpose of the study and foreshadow the administration of the survey pending parental permissions. Survey length was also taken into consideration to maximise the rate of completed responses, limiting it to approximately 15 min to complete.

### 4.3 Data analysis

Descriptive analyses were conducted with the collected data using SPSS version 26. An initial descriptive overview of the demographic/background characteristics of the surveyed students and their responses to views of and learning about aesthetics were tabulated. Reliability tests were conducted with two sets of Likert scaled items described above. The results with Cronbach's alphas of 0.756 and 0.761, respectively, suggested good consistency of responses across items.

## 5 Research findings

### 5.1 Characteristics of the student respondents

A total of 97 students consented to participate in this project and were recorded as responding to the survey by 23 November 2020. Of these only 80 provided workable responses. Consequently, for an initial descriptive account of these data, it was decided to draw upon only those responses.

The majority of the student cohort were female (77.2%), with only 22.8% indicating being male. The respondents represent perspectives of those who attended year 5 (41.8%) and year 6 (55.7%) and only 2.5% of year 8, predominantly from medium-sized schools (97.5%) located in the metropolitan areas (83.8%).

The student respondents also reported different arts-related details as seen in Table 2, including their interest and experience in arts and their parents/carers.

**Table 2** Arts-related background

Section	Question groups	Details	Question types
1	Background demographics	E.g., Gender, year level, school size, school regions, interest in arts, parent's/carer's background in arts, use of social media platforms	Multiple choice, Yes/No
2	Views of aesthetics	E.g., Judging pictures of artistic and non-artistic objects, interest in different forms of arts, using visuals to interpret texts	Multiple choice, Likert scale, short answer
3	Learning about aesthetics	E.g., Learning about arts in school, arts-related curriculum, arts-related jobs	Multiple choice, Yes/No, short answer

The majority of the student cohort showed an interest in artwork or art-related subjects (83.8%), and 43.8% of them attended lessons of arts outside of school. In addition, they did show consideration of the aesthetic of their own profile on social media platform (39.2%). Their parents/carers might not have any influence on their aesthetic interest as only 7.6% were reported to be professional artists, yet 32.5% indicated that they were interested in artistic practice.

Variables are presented as frequencies and percentages of respondents to offer broad sets of findings about student background and aesthetic interests.

## 5.2 Aesthetic experience

The student cohort reported some interest in various forms of arts. *Nature* recorded the highest percentage of interest (i.e. aggregated total of *somewhat interested* and *very interested*) (78.6%) followed by *music* (65.3%). Table 3 provides the results of responses to this area.

Interestingly, 22.7% of the respondents showed no interest in *fashion*, and 17.3% expressed similar sentiment towards *dance*. This may not represent perspectives of all middle school students but gives some indication of their preference to different forms of arts. It could also mean that these particular subject areas were not experienced by students to a large extent.

With regard to specific aesthetic experience, results showed that across four instances where the participants were asked to appraise the images of artistic and non-artistic objects, responses were recorded for all given descriptors, indicating the affective characteristic of participants' aesthetic experience, a strong and clear feeling of unity with the object of aesthetic fascination, and aesthetic appraisal. This was evidenced through participants' selection of diverse descriptors to describe and express their affective responses to the presented objects. Table 4 presents the frequency counts across four instances in which a range of diverse descriptors is used by the participants to express their emotion of aesthetic experience.

As stated earlier, unless both teachers and students have a comprehensive knowledge and understanding of language associated with each mode, then appraising various texts, objects and artworks will be limited (Barton & McAlister-Visic, 2018). It is essential for students to discuss how they make meaning from different types of texts but also how they apply this knowledge in creating their own (Mills et al., 2017). Therefore, to understand how engaging in aesthetic experience can assist with interpretation and appreciation of literacy texts, the participants were asked to rate their level of agreement towards several statements regarding the use of visually symbolic representations to interpret texts. Percentages of responses to these statements are presented in Table 5.

**Table 3** Level of interest in different forms of artistic practice

Variable	Values	N	%
Gender	Female	61	77.2
	Male	18	22.8
Year level	Year 5	33	41.8
	Year 6	44	55.7
	Year 8	2	2.5
School size	Medium (300–1000)	78	97.5
	Large (>1000)	2	2.5
School region	Metro (in the city)	67	83.8
	Regional (outside of the city)	13	16.3

**Table 4** Frequency counts of descriptors used in expressing emotion of aesthetic experience

Variable	N	%
Interest in artworks or arts-related subjects	67	83.8
Attending arts lessons outside school	35	43.8
Considering aesthetic feature of own profile on social media platforms	31	39.2
Parent/carer as professional artist	6	7.6
Parent's/carer's interest in artistic practice	26	32.5

The majority of the student respondents showed their agreement (i.e. agree and strongly agree) (53% and above) towards to the benefits of the visuals in engaging them critically and appreciatively with literacy texts. For example, approximately 79% of the respondents agreed and strongly agreed that the visuals encouraged them to get more amusement out of the story. However, a high percentage of uncertainty (32% and above) recorded for a couple of statements gives some indication of students' lack of understanding of the visual and the verbal. This could indicate the need for teachers to discuss more often the links that can occur between image-language resources in diverse texts (Unsworth, 2014) as well as students engaging more in critical analysis of a range of texts.

### 5.3 Learning about aesthetics

In addition to students' aesthetic experience, the survey also aims to understand how students viewed their learning about aesthetics at school. Table 6 provides an overview of their responses.

Overall, 62.5% of the student respondents reported having learnt about aesthetics at school, but only 22.9% were aware that it is part of Australian Curriculum. Interestingly, the majority of the respondents considered the look of their assessment product (86.1%) and believed this could make a difference to their grade (80.6%). Apart from The Arts and Design, not many students were aware of other subjects in which they could learn about aesthetics, such as English or History (20.8%) or Geography (11.1%) as seen in Fig. 1.

This is an interesting finding given the prevalence of aesthetics highlighted across all of these curriculum areas. It could indicate that students are not being taught these particular

**Table 5** Using the visual to interpret texts

	<i>n</i>	% of responses				
		NI	SU	N	SI	VI
Colours	75	2.7	1.3	32.0	41.3	22.7
Paints/materials	75	2.7	8.0	34.7	24.0	30.7
Nature	75	2.7	2.7	16.0	37.3	41.3
Drawing or pictures	74	2.7	2.7	21.6	39.2	33.8
Dance	75	17.3	21.3	16.0	21.3	24.0
Music	75	6.7	12.0	16.0	33.3	32.0
Drama	75	5.3	16.0	20.0	26.7	32.0
Graphic design	75	5.3	10.7	26.7	32.0	25.3
Fashion	75	22.7	9.3	14.7	25.3	28.0
Photography	74	4.1	16.2	29.7	27.0	23.0

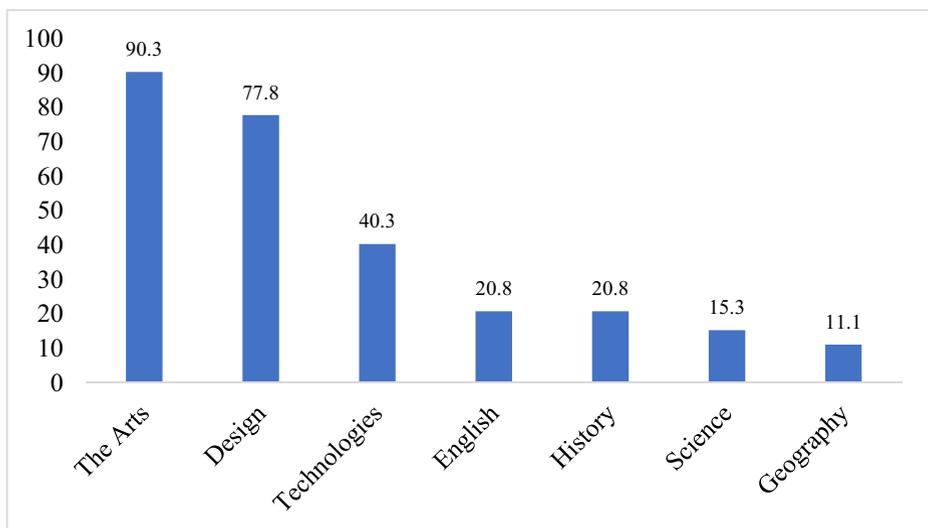
*Note:* NI not interested, SU somewhat uninterested, N neutral, SI somewhat interested, VI very interested

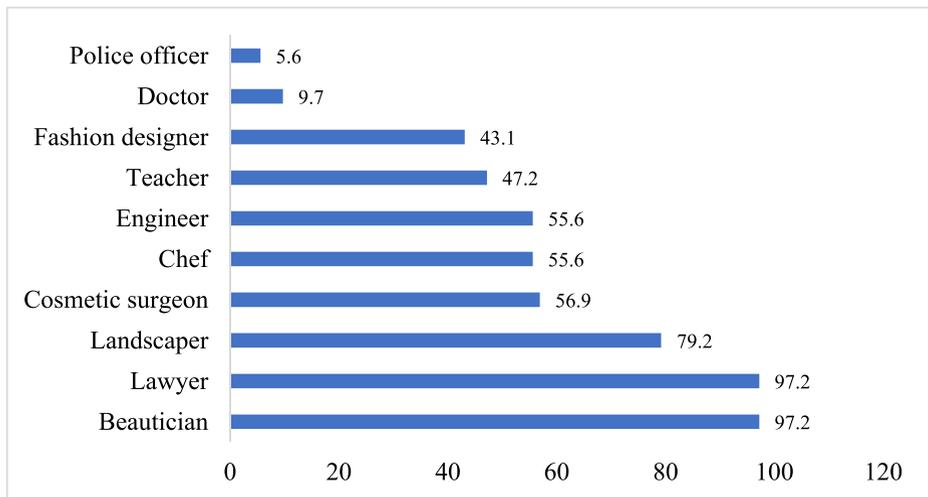
**Table 6** Results of responses to learning about aesthetics at school

Descriptors	N1	N2	N3	N4	Total
Real	13	50	20	53	136
Interesting	44	21	45	22	132
Unique	61	7	33	14	115
Fascinating	26	27	27	21	101
Cheerful	5	0	43	46	94
Scary	31	58	1	0	90
Charming	3	1	33	52	89
Imaginative	42	8	29	10	89
Warm	13	26	19	30	88
Pleasant	9	3	36	38	86
Awing	8	18	15	44	85
Lovely	1	1	26	55	83
Delightful	2	2	33	42	79
Complex	36	23	14	2	75
Unspeakeable	20	34	6	1	61
Irresistible	4	6	17	17	44
Exceptional	12	4	19	7	42
Harmonious	3	10	13	11	37
Hateful	6	26	2	0	34
Profound	16	9	4	2	31
Eternal	10	10	2	7	29
Regular	5	2	7	12	26
Universal	6	6	4	0	16
Disgusting	5	8	2	0	15

learning objectives in English, History, Science and Geography despite each of these requiring aesthetics to be taught across the school years.

Generally, approximately 60% of the respondents were aware that many jobs would require some knowledge of beauty/aesthetics, yet the perceptions of the specific occupations were varied. It is worth noting that whilst being a lawyer was believed to require certain knowledge

**Fig. 1** Results of responses to subjects relating to learning aesthetics



**Fig. 2** Results of responses to occupations requiring a knowledge of beauty/aesthetics

of aesthetics (97.2%), being a fashion designer triggered a different sentiment (43.1%) (see Fig. 2).

## 6 Discussion and conclusion

In sum, key findings from the survey highlight the perspective of the student cohort from both genders, but primarily female, across the first 2 years of their middle school and predominantly from medium-sized schools located in metropolitan areas. The majority of the students showed an interest in artwork or art-related subjects and expressed some interest about various forms of arts, particularly those relating to nature and music.

They demonstrated their aesthetic experience through utilising a diverse range of descriptors in appraising and appreciating both artistic and non-artistic objects. However, they did not show much engagement in using the visuals to interpret literacy texts. This could mean that there is limited learning in their schooling about the interrelation between visual and verbal resources in a range of texts and/or opportunities to critically analyse these texts. Their perceived learning about aesthetics at school deemed to reside in their consideration of the look of their assessment products and its effect on their grades and within the scope of subjects like The Arts and Design. This could be problematic given subject areas such as The Arts and Design are generally elective subjects at some point within the middle years of learning. This means that many students would not receive the necessary learning about aesthetics and may impact negatively on their job readiness as many vocations require deep knowledge and understanding of such literacies.

Further, students seemed to lack understanding of the occupations requiring knowledge about beauty or aesthetics, appraising highly an occupation in law on this aspect as compared to an occupation in fashion design. This raises the concern about their potential misinterpretation of beauty/aesthetics concept in specific workplaces. Of course, we should consider that students may not have understood the purpose of this question or they genuinely believe that beauticians and lawyers need aesthetics as a core part of their professional duties.

Limitations of this study include that the survey was only distributed to two schools and the students who have already consented and participated in the multimodal study completed the survey. Further, only 80 out of 97 were completed correctly meaning further distribution is warranted. Also, the authors realised that more information could be gleaned from interviews and/or focus groups with students so have recently carried these out and are looking forward to reporting on these findings to gain further clarity on this area of investigation.

Implications for classroom practice include that more robust considerations of the inclusion of aesthetic literacies in learning and teaching in schools is needed. It is particularly important to not assume that aesthetic literacies are covered in subject areas such as The Arts but rather acknowledge that aesthetics needs to be taught across a range of subject areas and year levels due to their increased sophistication and application in different vocations. This is particularly important given the number of curriculum areas that mention the study of aesthetics as being important in understanding the presentation and appreciation of objects and/or texts (ACARA, n.d.). One approach would be for both arts and literacy educators to share their knowledge of multimodal communication across the curriculum. Winner et al.'s (2020) work, for example, explores the concept of Studio Habits of Mind (SHofM) which includes the following thought processes in The Arts: stretch and explore, express, develop/craft, envision, understand arts community, observe, engage and persist and reflect. Through a diversity of pedagogical approaches, teachers can support students to consider different artforms, texts or other objects to support their understanding of aesthetics. Even though these perspectives may differ a lot can be learnt by sharing a common language and acknowledging the synchronicity between The Arts and literacy (Barton, 2020).

Questions such as *How do you initially perceive this image? How do you know? What else do you think you need to know in order to consider all perspectives? What do you think the intent of the composer of this text was? What aesthetic features have been used to convey this meaning?* allow students to critically view and analyse texts, an expectation in the Australian Curriculum.

Without students learning about aesthetic literacies throughout their schooling and across diverse curriculum areas, there is a high risk that they may not be job ready by the time they graduate and seek employment. This is particularly an issue for students who may come from vulnerable backgrounds where access to quality arts learning may not be available. With further understanding of what, how and when aesthetic literacies are taught, we are working towards students being best prepared post-schooling.

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## References

- Australia Council for the Arts (2017). The arts in regional Australia: A research summary. Australian Government. <https://australiacouncil.gov.au/advocacy-and-research/regional-arts-summary/>
- Australian Curriculum, Assessment and Reporting Authority [ACARA]. (n.d.). F-10 curriculum. ACARA. Australian Curriculum, Assessment and Reporting Authority [ACARA]. (2012). .
- Barton, G. M. (2020). *Developing literacy and the arts in schools*. Routledge Publishers.
- Barton, G. M., & McAlister-Visic, R. (2018). *Teaching multimodal texts: A collaborative inquiry project – Final report*. Brisbane Catholic Education.
- Barton, G. M., & Garvis, S. (2019). Theorising compassion and empathy in educational contexts. In G. M. Barton & S. Garvis (Eds.), *Compassion and empathy in educational contexts* (pp. 3–14). Palgrave Macmillan.
- Barton, G., & Ronksley-Pavia, M. (2020). Personal and social capabilities in early adolescents' literacy practices at home. *Literacy Learning: The Middle Years*, 28(1), 41–50.
- Barton, G., Lowien, N., & Hu, Y. (2021). A critical semiotic investigation of Asian stereotypes in the short film Bao: Implications for classroom practice. *The Australian Journal of Language and Literacy*, 44(1), 5–16.
- Callow, J. (2020). Visual and verbal intersections in picture books—Multimodal assessment for middle years students. *Language and Education*, 34(2), 115–134. <https://doi.org/10.1080/09500782.2019.1689996>
- Cremin, T., Glauert, E., Craft, A., Compton, A., & Stylianidou, F. (2015). Creative little scientists: Exploring pedagogical synergies between inquiry-based and creative approaches in early years science. *Education*, 43(4), 404–419. <https://doi.org/10.1080/03004279.2015.1020655>
- Dewey, J. (1934). *Art as experience*. Berkeley Publishing Group.
- Dewey, J. (1950). Aesthetic experience as a primary phase and as an artistic development. *The Journal of Aesthetics and Art Criticism*, 9(1), 56–58.
- Di Maggio, P., & Useem, M. (1980). The arts in education and cultural participation: The social role of aesthetic education and the arts. *Journal of Aesthetic Education*, 14(4), 55–72.
- Duncum, P. (2002). Theorising everyday aesthetic experience with visual culture. *Visual Arts Research*, 4–15.
- Early, M., & Marshall, S. (2008). Adolescent ESL students' interpretation and appreciation of literary texts: A case study of multimodality. *Canadian Modern Language Review*, 64(3), 377–397. <https://doi.org/10.3138/cmlr.64.3.377>
- Fiore, A. M. (2010). *Understanding aesthetics for the merchandising and design professional* (2nd ed.). Fairchild Books.
- Fleming, M. (2013). *The arts in education: An introduction to aesthetics, theory and pedagogy*. Routledge.
- Freedman, K. (2003). *Teaching visual culture: Curriculum, aesthetics, and the social life of art*. Teachers College Press.
- House of Representatives Standing Committee on Employment, Education and Training. (2017). Inquiry into innovation and creativity: . [https://parlinfo.aph.gov.au/parlInfo/download/committees/reportrep/024036/toc\\_pdf/Innovationandcreativity.pdf;fileType=application%2Fpdf](https://parlinfo.aph.gov.au/parlInfo/download/committees/reportrep/024036/toc_pdf/Innovationandcreativity.pdf;fileType=application%2Fpdf).
- Jacobs, G. E. (2012). Rethinking common assumptions about adolescents' motivation to use technology in and out of school. *Journal of Adolescent & Adult Literacy*, 56(4), 271–274.
- Johnson, H. L. (2007). Aesthetic experience and early language and literacy development. *Early Child Development and Care*, 177(3), 311–320. <https://doi.org/10.1080/03004430500495576>
- Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004). A comparison of web and mail survey response rates. *Public Opinion Quarterly*, 68(1), 94–101. <https://doi.org/10.1093/poq/nfh006>
- Klein, S. R. (2018). Coming to our senses: Everyday landscapes, aesthetics, and transformative learning. *Journal of Transformative Education*, 16(1), 3–16. <https://doi.org/10.1177/1541344617696969>
- Kusumasondjaja, S. (2019). Exploring the role of visual aesthetics and presentation modality in luxury fashion brand communication on Instagram. *Journal of Fashion Marketing and Management: An International Journal*, 24(1), 15–31. <https://doi.org/10.1108/JFMM-02-2019-0019>
- Langer, S. (1957). *Feeling and form*. Scribners.
- Lim, F. V. (2018). Developing a systemic functional approach to teach multimodal literacy. *Functional Linguistics*, 5(1), 13. <https://doi.org/10.1186/s40554-018-0066-8>
- Marković, S. (2010). Aesthetic experience and the emotional content of paintings. *Psihologija*, 43(1), 47–64.
- Marković, S. (2012). Components of aesthetic experience: Aesthetic fascination, aesthetic appraisal, and aesthetic emotion. *i-Perception*, 3(1), 1–17.
- Martin, J. R., & White, P. R. R. (2005). *The language of evaluation appraisal in English*. Palgrave.
- Mertler, C. A. (2001). *Lessons learned from the Administration of a Web-Based Survey* [Paper presentation]. The annual meeting of the Mid-Western Educational Research Association, .
- Mills, K. A., Stornaiuolo, A., Smith, A., & Zaher, J. (2017). *Handbook of writing, literacies, and education in digital cultures*. Routledge.

- National Coalition for Core Arts Standards [NCCAS] (n.d.). National Core Arts Standards: A conceptual framework for arts learning. USA.
- National Trust (2018). *National Trust of Australia (Victoria) Strategic Plan 2018–2022*. [https://www.nationaltrust.org.au/wp-content/uploads/2018/03/2017\\_strategic\\_plan\\_DIGITAL.pdf](https://www.nationaltrust.org.au/wp-content/uploads/2018/03/2017_strategic_plan_DIGITAL.pdf)
- O’Neill, M. (2009). Future work and work trends. Knoll Workplace Research. [https://www.knoll.com/document/1352940439397/WP\\_future\\_work\\_work\\_trends.pdf](https://www.knoll.com/document/1352940439397/WP_future_work_work_trends.pdf).
- Pahl, K. (2014). The aesthetics of everyday literacies: Home writing practices in a British Asian household. *Anthropology and Education Quarterly*, 45(3), 293–311. <https://doi.org/10.1111/aeq.12069>
- Polovina, M., & Marković, S. (2006). Estetski doživljaj umetničkih slika [Aesthetic experience of paintings]. *Psihologija*, 39(1), 39–55.
- Roy, D., Baker, W., & Hamilton, A. (2019). *Teaching the arts*. Cambridge University Press.
- Serafini, F. (2010). Reading multimodal texts: Perceptual, structural and ideological perspectives. *Children's Literature in Education*, 41(2), 85–104. <https://doi.org/10.1007/s10583-010-9100-5>
- Sills, S. J., & Song, C. (2002). Innovations in survey research: An application of web-based surveys. *Social Science Computer Review*, 20(1), 22–30.
- Stanford Encyclopedia of Philosophy (2020). Plato’s aesthetics. <https://plato.stanford.edu/entries/plato-aesthetics/>
- Stecker, R. (2005). The interaction of ethical and aesthetic value. *The British Journal of Aesthetics*, 45(2), 138–150.
- Taylor, J. (2007). Seeing the inside: Bark painting in Western Arnhem Land. .
- Thompson, G. (Reporter). (2016). Future proof. [television series episode]. In S. Ferguson (Presenter), *Four Corners*. Australia Broadcast Corporation. <http://www.abc.net.au/4corners/stories/2016/07/04/4491818.htm>
- Unsworth, L. (2014). Multimodal reading comprehension: Curriculum expectations and large-scale literacy testing practices. *Pedagogies: An International Journal*, 9(1), 26–44. <https://doi.org/10.1080/1554480X.2014.878968>
- van Leeuwen, T. (2017). Multimodal literacy. *Metaphor*, 4, 17–23.
- White, P. R. (2015). Appraisal theory. In K. Tracy (Ed.), *The international encyclopedia of language and social interaction* (pp. 1–7). John Wiley and Sons.
- Winner, E., Hetland, L., Veenema, S., Sheridan, K., & Palmer, P. (2020). Studio thinking: How visual arts teaching can promote disciplined habits of mind. In P. Locher, C. Martindale, & L. Dorfman (Eds.), *New directions in aesthetics, creativity, and the arts* (pp. 189–206). Routledge.

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