Abstract
Aesthetic literacy can be understood as a mode of cognition or a way of knowing. However, the concept of aesthetics is often absent from conversations about learning and curriculum, particularly in higher education settings. In this paper the nature of aesthetic education is discussed, as are the merits of its inclusion in a tertiary curriculum. The concept of aesthetic literacy is also discussed, along with the challenges associated with the inclusion of aesthetic learning in higher education settings. These issues are explored through the medium of a narrative inquiry study examining perspectives of lecturers who use aesthetic learning in their practices. In this study, all participants are teacher educators, lecturing in pre-service education disciplines. They discuss the aesthetic dimensions of their discipline areas, as well as the successes, challenges and limitations associated with introducing aesthetic learning strategies. The participants come from a range of subject disciplines and give us insight into the ways that aesthetic learning can be addressed in a range of tertiary settings.

Introduction
To begin this paper with a broad statement; Education can be an effective vehicle for the development of inter and intrapersonal skills, social and cultural action, self-expression and aesthetic awareness (Jacobs, 2009). In that statement, the inclusion of ‘aesthetic awareness’ may be surprising to some. Aesthetic awareness is both a process and a product that allows learning to become aesthetically knowledgeable, or allows the learner to be open to engaging in aesthetic experiences. This paper reflects on the nature of aesthetic education in higher education settings and discusses the merits of its inclusion in tertiary units. It also discusses the concept of aesthetic literacy and argues its development should be able to be accessed in higher education studies. Of course, the inclusion of aesthetic education in tertiary settings presents unique challenges. These challenges range from engaging students in a healthy respect for aesthetic literacy to defining strategies for facilitating aesthetic experiences, both of which will be addressed.

The study this paper is concerned with focuses on early childhood, primary and secondary teacher preparation courses, while shedding light on the possibilities for aesthetic learning to be facilitated in other disciplines. This paper uses narrative research to explore perspectives of teacher educators who aim to address aesthetic learning in their practices. Their successes, challenges and limitations in introducing aesthetic learning strategies are also explored.
Understanding aesthetics in education

It is timely to discuss here exactly what aesthetic literacy is and what aesthetic education entails. Having said this, it is not the intention of this paper to engage in a debate on the definition of aesthetics, as can be explored in numerous other literature (for example, Hekkert & Leder, 2007; Donoghue, 2003; Sternberg, Kaufman, & Pretz, 2002; Greene, 1999 to name a few). Rather an exploration of its importance in a tertiary context is of concern here. As with the concept of aesthetics, numerous conceptions of aesthetic education also exist (Peters, Marginson and Murphy 2009; Gale, 2005; Smith & Simpson, 1991). For the purposes of this paper, aesthetic education involves the explicit teaching of skills, knowledge and understandings that enhance the aesthetic experience. Aesthetic awareness can be heightened through aesthetic education, where students engage in expressive experiences where sentiment interpretations and emotional responses are accessed. The dimensions of sentiency are also communicated and realized through these processes (Greene, 1991).

Unfortunately, common perceptions of aesthetic awareness contribute to its diminished importance in dialogues on curriculum and learning. Aesthetic awareness carries perceptions of highly ethereal qualities that are abstract in nature or often associated with high culture (Ross, Randor, Mitchell, & Bierton, 1993). The importance of aesthetic education is further diminished when aesthetics are perceived as private and feelingful (Petock, 1972) responses that can only be engaged on an individual level. One school of thought is that aesthetics are to do with taste and its cultivation (Sawyer, 2008) thereby limiting the experiences as purely subjective. Aesthetics are commonly seen as intangible, even less accessible than the concept of ‘creativity’.

Aesthetic literacy is related dimension of aesthetic education that is deeply connected to aesthetic awareness. The term “literacy” is used intentionally as it refers to the functionality associated with spoken and written language proficiency (Gale, 2005). Aesthetic literacy moves beyond a basic skills inventory into development of knowledge and potential, more centred on imagination and growth, where the learner can be open to wider possibilities and “open windows in the ordinary and banal” (Greene, 1999, p. 70). Having said this, it is important not to set up a combat between the worlds of the critical and the creative, as though they are two distinct modes of cognition that cannot meet. Rather Sawyer (2008) and Woods & Homer (2005) argue strongly for a ‘creative-critical’ approach.

Gale (2005) further argues that this understanding, with a combination of imagination, knowledge and feeling, lies at the core of aesthetic literacy. It is a vision of learning that cuts across and through disciplines, presenting a core value that deserves more attention in contemporary tertiary curricula. Aesthetic literacy provides an important lens on experience, a way of seeing that transcends the instrumental and disciplinary approaches where we are able to “learn from aesthetically rendered lives what words, paradoxically, can never say” (Eisner, 1985, p. 35). Greene reaffirmed this vision, saying “sometimes I think that what we want to make possible is the living of lyrical moments, moments at which human beings (freed to feel, to know, and to imagine) suddenly understand their own lives in relation to all that surrounds” (1999, p. 7).

While recognising that these experiences deserve a valid place higher education, the poetic and fanciful nature of the language used to describe them can be alienating for some. While
the aim of these writers was to create a heightened understanding of the nature of aesthetic education, their language can intimidate those who are unfamiliar, thereby contributing to the chronic misunderstandings to which aesthetic education suffers. Additionally, the conception of aesthetic literacy presented can strike some as academically ‘soft’ or less rigorous than other literacies. It is difficult to explain to academic hierarchies, administrators or policy writers that they should be concerned with “the living or lyrical moments” (Greene 1999, p. 7). It’s more productive to consider aesthetic awareness as a mode of cognition, process or way of knowing, as learning processes can be more easily understood by educators and administrators and more readily accepted by the general populace.

This paper uses narratives solely in the field of pre-service teacher education. Therefore, some specific comments must be made for this discipline, while acknowledging that aesthetic learning can take place in a range of tertiary settings. Specifically in the area of teacher education, aesthetic literacy is able to be accessed in school classrooms from the early childhood to senior years, developed alongside other literacies with their own distinct knowledge and pedagogies. This cross-disciplinary approach to aesthetic education ensures that it is not the sole responsibility of any one syllabus or curriculum area for it to be addressed, as argued by Gale (2005). Academia usually associates the aesthetic with the arts and humanities, but it can play a crucial role in other disciplines as well. The narratives discussed in this paper give several examples of the prevalence of aesthetic appreciation across a range of subject areas.

However, there are several challenges to the inclusion of aesthetic learning in higher education. Academia is notoriously left-brained, valuing rational and logical thinking modes, which are easily subjected to measurement. Eisner (1985) also warned us some time ago, “aesthetic aspects of human experience are considered luxuries. And luxuries, as we all know, can be rather easily foregone in hard times” (p. 32). In the shadow of the global financial crisis it can be easy for policy writers and politicians to emphasise a 'back to basics' approach that discards the aesthetic experience. Rather than being dismissed or forgotten, aesthetic education should be embraced as an integral component of our curriculum and pedagogy as it forms part of the human experience. Aesthetic education accesses a mode of cognition, and a way of thinking and knowing which can be applied to elements that combine to promote a response that connects us to the human experience. If these modes of cognition are to be applied in educational contexts, it is important that this connection to the human experience not be confined to school classrooms. The significance of exploring the human condition in higher education is similarly imperative.

**Methodology**

The investigation uses narrative inquiry methods as this style of research is highly linked to the context and allows for suitably complex issues to be explored in a manner that can provide paths towards outcomes and informed recommendations. Twelve tertiary educators lecturing in pre-service Education courses across four institutions in Queensland (Australia) were interviewed. Interviews were conducted face-to-face and over the phone. One interview used audio/visual communication technology (Skype). In individual semi-structured interviews participants were asked questions, surrounding three key areas; 1) Participants’ views on the aesthetic dimensions of their disciplines, 2) Their perspectives on the importance of aesthetic learning and 3) Descriptions of the ways they attempt to integrate
aesthetic learning in their courses with commentary on the strengths and challenges associated with teaching within these programs.

The analysis of interviews took place through a modified use of Moustakas’ (1994) method, using the review methods outlined by Chase (1995). After interviewing the subjects a process involving review and organisation of statements, then coding and categorisation of themes was employed. Finally, a reflexive element of analysis was employed; participants were contacted intermittently to clarify issues and elaborate on their responses on matters that emerged through data interpretation. It must be noted that interpretation of the data is not limited to a literal representation, given the many perspectives and contexts contained in the data. Rather, a faithful representation emerges as the 'story-truth' (O’Brien, 1990) is examined.

All participants are preparing students for teaching vocations across early childhood, primary and secondary sectors (specific roles are specified below). The call for participants was made by email where the project was explained. Therefore, the participant search only yielded responses from lecturers who were sympathetic to the study’s orientation. However, no effort was made to screen potential interviewees; they were simply the individuals who responded positively to the invitation to be involved in the research. The first and only call for participants generated responses from Education lecturers in humanities, sciences, arts, mathematical and technical disciplines who produced a range of responses, therefore the search for participants was not repeated. The following participants were interviewed:

- Participant 1: Science Educator (early childhood and primary)
- Participant 2: Mathematics Educator (secondary)
- Participant 3: English and literacy Educator (primary)
- Participant 4: Physical education (secondary)
- Participant 5: ITC Educator (secondary)
- Participant 6: Music Educator (primary and secondary)
- Participant 7: Arts - Dance and Drama Educator (primary)
- Participant 8: English and literacy Educator (early childhood and primary)
- Participant 9: Mathematics Educator (early childhood, primary and secondary)
- Participant 10: Science Educator (primary and secondary)
- Participant 11: History educator (secondary)
- Participant 12: Literacy and LOTE (Languages Other Than English) educator (early childhood, primary and secondary)

Not all school curriculum areas are present in these participants and some disciplines have more than one participant. It must be noted that this study focuses on highlighting learning strategies within the field of pre-service teacher education. The small sample of participants and amount data collected certainly limit the conclusions that can be drawn when applying the analysis to a wider field. However, within the boundaries of the research topic, the narrative inquiry method enables relevant themes to be exposed while highlighting the importance of 'story-truth' in examinations of the field.

**Importance of aesthetic learning**
The interviews began with exploratory questions about the aesthetic dimensions of their subject areas. Participants were keen to articulate their views, all speaking extensively about
the joy, fascination and enlightening experiences that learning in their discipline entails. A sample of responses follows:

“The entire field is awash with aesthetic experience. Literature, poetry, great dramas, even movies and digital texts: these are some of the hallmarks of advancing societies.”

Participant 3

“It might sound strange to those outside the area, but some equations can be elegant, expressed with beauty and simplicity.”

Participant 2

“Tessellations, either by human design or nature, are fascinating. You can stare at them for hours.”

Participant 9

“I think we hear a lot about how troubled the world is. But in science we get to talk about how magnificent it is too. Rock formations, the ocean, ecosystems, astronomy, the human body and all its systems. These are things we should marvel at and inquire about. Even something as dull as sedimentary rocks - they’re very pretty!”

Participant 1

Reflecting the literature on aesthetic learning, some participants reflected on the importance of ‘lyrical moments’ (Greene, 1999, p. 7) where understanding is arrived at through the aesthetic experience.

“Sometimes we can’t say what we mean in words. Sometimes we need pictures, music, movement, and body language. The arts let’s you access that.”

Participant 7

“The joy of reading is a pleasure that has lasted the ages. I think it’s largely because literature can hold a mirror up to our own experiences, explaining our lives through metaphors and stories which help us to understand ourselves…..and each other, more.”

Participant 8

At other points, participants reflected on the aesthetic dimensions of the cognitive processes involved in teaching and learning in their field. For example:
“Literacy might seem boring. But it is amazingly beautiful to witness a child learn to read.”

Participant 12:

“At the highest levels, maths is very philosophical. It’s astounding to see students attain that level of understanding. It’s like watching the light bulb go on for the first time ever.”

Participant 9

In these initial narratives, several participants explored the stereotypes associated with aesthetic learning that was previously discussed in the literature. Some participants were keen to dispel myths that aesthetics is to do with high culture, the pursuit of perfection, or the individual creation of a masterpiece. Several responses contained earnest remarks that reiterated the ability of all students to engage in aesthetic learning.

“Physical education and health sciences is not about creating elite athletes, and when I talk about the ‘beauty’ of the subject, I think the students think that’s what I mean. And they couldn’t be more wrong. The wonderful thing about PE is enhancing motor skills where they’re lacking, educating people about how to live well and develop team skills.”

Participant 4

“I’m not saying that in my lessons are trying to get people to discuss their feelings over the internet. But we do talk about how technology can enhance our lives and make the world smaller. People who communicate with each other are more likely to help each other and less likely to start wars.”

Participant 5

Though it was the initial section of the interview, the discussion was lengthy as participants spoke, unprompted, about how they saw the prevalence of aesthetics in their respective fields. The participants spoke of the general attributes associated with their field, rather than tying their comments specifically to teacher education. For this reason, no significant differences were found between lecturers’ comments from early childhood, primary or secondary fields. The range of comments is far too wide to be mentioned here, though each comment was unique and insightful. Participant 11 gives some explanation for their talkative responses:

“I’m so sorry, I’m rabbiting on. It’s just that, well, we never get to talk about what we love. It’s always about curriculum, a unit outline, core skills or things like that. I don’t think I’ve ever discussed with a colleague what is important in history, and by that I mean the soul behind it.”

The ‘soul’ that’s described is the essence of aesthetic understanding. It naturally followed that participants responded with the same enthusiasm when asked about the importance of
aesthetic learning. There was certainly no attempt to seduce the participants into concurring with the orientation of this paper. But it’s noted that the sequence of questions did yield rich responses in support of aesthetic learning, as the participants had been switched on to its appealing nature.

When participants described the importance of aesthetic learning, most discussed it in terms of inspiring students to become more intrinsically motivated in their subject:

“Students arrive at maths units with a thousand preconceptions about maths being boring, hard or irrelevant. If we can show them that it can connect to human spirit then we might be able to break down some of those walls.”

Participant 2

“If we show that we're passionate about our discipline, it sends a message that our area is important.”

Participant 5

“They always think they can’t...act, dance, sing, draw, whatever. It’s important because it teaches them that they don’t need to be a master of that art. They can appreciate art, whatever their ability or experience.”

Participant 7

Other responses linked the importance of aesthetic learning to their roles as educators of pre-service teachers. Several participants commented on the need to model aesthetic learning practices while the students were forming their teaching identities.

“Of course it's important. We don't want our schools taught by computers, textbooks or robots. We want people who can teach the children how this is important to their world.”

Participant 12

“The students are so impressionable at this stage. So, I need to give them a message that we don’t teach a subject or a syllabus. We teach love, tolerance, community, peace, citizenship and democracy.”

Participant 11

Having said this, an interesting observation can be made. While participants spoke enthusiastically and at length about the aesthetic value associated with their discipline, they rarely used the term ‘aesthetic’. The term was mainly used by the interviewer for the first half of the interactions, while participants referred to aesthetics as ‘it’ or ‘them’. This matter could have been discussed at more length in the interviews, however, owing to time constraints (the interviews were generally all lengthy) and the fact that most interviews were conducted over the telephone, the researcher was content to allow their responses to speak as a demonstration
of this point. Despite their supportive sentiments, it is curious to question whether they too are the victim of society’s misrepresentation of aesthetic awareness. Do they perceive the word as being fraught with feeling and ‘soul’, which is more difficult to explain in higher education institutions which are traditionally value rational thinking modes? One participant alludes to this dichotomy.

“….but, you can’t be too overt about it because if you constantly talk about the spirit of the subject, it'll be seen as less academically challenging by students... and the university hierarchy won’t appreciate that.”

Participant 4

**Integrating aesthetic learning in higher education settings**
This is where the conflict in higher education is evident. In an environment that regularly uses traditional lectures, examinations, marks and grades, the aims of aesthetic education can be somewhat at odds with the delivery methods to which academia must comply. However, the participants’ narratives showed that there needn’t be conflict between aesthetic learning and other modes of cognition in their classes. Several participants describe the ways that they integrate the ‘creative-critical’ approach (Sawyer, 2008 and Woods & Homer, 2005) as a pedagogy. The aesthetic learning processes are embedded in their teaching practices rather than treating them as a separate entity.

“Arriving at appreciation of the English language is wrapped up in the unit outcomes. It's also impossible to engage with the texts we study, properly, I mean, and not pause to consider the fascination of words.”

Participant 8

“Take, for example, when we’re learning about ecosystems. When you discover how complex and interwoven the phenomenon is, you marvel at how it works and wonder how it got there. It all becomes quite philosophical.”

Participant 1

These examples also reveal to us a common theme that ran through several of the narratives. All of the participants said they saw the value of aesthetic learning and claimed to integrate it into their teaching. But most of their comments focused on engagement with the discipline’s content knowledge or skills as being the path towards aesthetic learning. There was a strong sense that if one was to engage in meaningful study, they would arrive at a place of wonder and fascination. It was almost as if they were describing a way to address aesthetics by osmosis.

“It’s not like I say, ok, now we’re going to examine the beauty of this language, but when we really get into it, they see it for themselves.”

Participant 12
In the ‘aesthetics by osmosis’ approach, the lecturer facilitates a range of learning experiences and the student arrives at their own aesthetic understanding in their own time. Even after prompting, very few participants mentioned specific strategies that they use to develop aesthetic learning or aesthetic literacy. Some examples of those that did use specific strategies are mentioned here:

“As I said before, there are dark parts of history as well as moments of human triumph and really moving demonstrations of the human spirit. It’s really common for us to go into the empathy tasks, or say ‘what would you do?’”

Participant 11

“It’s like when we look through the microscope. It might be the onion skin, or the insect or cells or whatever. When they first get a look they say ‘oh, cool!’, so we pause there and say ‘isn’t that amazing, look at all the detail you can see.’ Sometimes I get them to describe it, which is a good exercise.”

Participant 10

“When we do analysis, there’s always a section for personal response...I ask about like, dislike, what’s attractive, what’s the best bit. After the analysis, I find that their responses are, well not more objective, but more supported.”

Participant 6

These few examples of direct engagement with aesthetic learning strategies demonstrate a move away from the ‘aesthetics by osmosis’ model, towards an approach that explicitly develops aesthetic literacy that is centred on growth and increasing the understanding of self.

**Challenges for aesthetic learning in higher education**

The inclusion of aesthetic learning in a tertiary setting carries both internal and external challenges. Each participant demonstrated, through their language, what may be the great enemy of aesthetic engagement. Almost consistently, when participants discussed strategies for aesthetic engagement they used the word ‘pause’.

“We pause to consider what the world would be like without music.”

Participant 6

“I pause at the end of reading the text, so they can take in the rhythm of the language without having to find the meaning straight away.”

Participant 3

Presumably, this ‘pause’ is not a momentary halt in the educational proceedings of the lesson. Rather, it is a strategy designed to enhance the learning experience. But the great enemy of aesthetic engagement is time. Pre-service education courses are time-poor and sometimes, the time to ‘pause’ simply isn’t present. The Australian philosopher, poet and cartoonist, Michael Leunig (2006) once lamented the increasing pace of our world, saying
“…it seems to me that speed is revered. And the problem is that certain human things cannot happen at speed. Can you love at speed, can love flourish at speed?”

Other challenges cited by participants included the general constraints of the tertiary environment, including lecture theatre style delivery, examinations, assessment requirements and the like. Aside from these practical and professional considerations, a major challenge to aesthetic learning is identification of its outcomes. When participants were asked how they knew that if aesthetic learning had taken place, most of them revealed that this was one of the more intricate challenges.

“Ooh that’s a toughie…I really don’t know. This is one of those areas where I do my best to teach in a certain way, but I have no way of knowing if it’s made an impact.”
Participant 2

It was at this point that some participants reverted to the common perceptions of aesthetic learning; that it’s an individual pursuit, subjective in nature that cannot be measured.

“Oh, I really think that’s up to the individual to judge. I can’t comment on the students’ feelings because the learning is so personal.”
Participant 10

Misson & Morgan (2006) suggest that we can tell that aesthetic learning has taken place if there is a product that provides some evidence that ‘composition’ has taken place. If the work has been purposefully constructed for the context of aesthetic consumption it is able to become a definable ‘aesthetic text’ (p. 36). These writings may not be applicable in the participants’ contexts though, because they are simply trying to include aesthetic elements in their teaching rather than produce aesthetically assessable products. It should be noted, however, that both arts lecturers were able to speak at length on this matter, citing particular criteria that they use to assess a students’ aesthetic literacy or products of aesthetic learning. Their reflections emphasised concepts like ‘originality’, ‘creativity’, ‘imagination’ or ‘innovation’, which are terms they seemed accustomed to using. Their responses were a timely reminder that some disciplines have significantly more experience with aesthetic learning that can be shared with colleagues. Eisner (1998) further describes the value of this experience.

“The problems of life are much more like the problems encountered in the arts. They are problems that seldom have a single correct solution; they are problems that are often subtle, occasionally ambiguous, and sometimes dilemma-like…. Life outside of school is seldom like school assignments--and hardly ever like a multiple-choice test.” (p. 84).

Continuing the conversation

Gale (2005) argues that

“Aesthetic literacy is not an answer to a question or a solution to a problem, but it is a vital capacity and skill with which to observe, imagine, and engage with all that surrounds.” (p. 4)

In teacher education is appropriate that we address concepts of feeling, interpretation, observation, ambiguity and creative thinking, just as we do in the school curriculum. Aesthetic education provides us with another tool, skill or another way of seeing the world,
their culture and own lives (Gale, 2005). These are vitally important skills for citizens of the 21st century. And as such, there is a similarly strong argument for these modes of cognition to be addressed in tertiary settings outside of teacher education.

A student’s learning experience can also be enhanced if they see its connection to the human condition. There are plenty of challenges associated with the inclusion of aesthetic learning in higher education, but they are not without solutions. The path towards great aesthetic engagement in higher education can be found in collaborative partnerships that share knowledge between disciplines. This, along with a little imagination, will help to perpetuate the joy of learning about our world.

**References**


