

Using Images to Facilitate Writing for Skills Assessment: A Visual PELA

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Determining the writing skill level of students commencing tertiary education is a key element in predicting their likely study success and in providing appropriate writing development opportunities. Writing tests constructed around written instructions often assume high levels of reading and comprehension skills, which in some instances impose difficulties for students who have varying levels of comprehension and writing skills as shaped by their cultural and ethnic, learning journey experiences and previous formal English language instruction. Many universities have now established Post-Entry Language Assessment (PELA) tools as a means to determining student language skills at the commencement of their studies. Discussed here is a Visual PELA (VP) intended to stimulate student writing of a small passage of text for the purpose noted above. The visual nature of this instrument is intended to provide an alternative approach for visual learners, or those for whom written instructions pose difficulties, to demonstrate their literacy skills. This paper describes the development and initial testing of a VP with a view to it becoming an additional tool for determining writing skills levels for commencing students. A trial of this VP took place with a cohort of mostly international students having English as an Additional Language/Dialect (EAL/D) undertaking higher degree by research studies in an Australian university. The VP used here was founded on the idea of using images to stimulate the writing of a short passage of text where students can find their own context and ideas to write in an imaginative way and thus demonstrate their writing skill on entry to their tertiary studies.

■ **Keywords:** Indigenous Australians, Visual PELA, language and literacy, higher education

With the broadening diversity of students entering tertiary studies and the myriad routes by which students can meet entry criteria, it is incumbent on receiving institutions to ensure that each student admitted has the linguistic capacity to deal with the demands of his or her course of study. Many universities in Australia are now using some form of Post-Entry Language Assessment (PELA) designed to identify students who may be at risk of noncompletion of their studies due to limitations in their English language proficiency. The aim of a PELA, broadly speaking, is to provide a mechanism whereby early intervention can be offered. Most of the PELAs currently in use target writing skills and are pitched at students commencing undergraduate studies. However, many of these are tailored to suit a specific unit/course of study, but may not cater to the needs of those students leaning towards the more creative streams within that course. Often students enrolling in creative courses or those where the use of graphics forms an integral component of the learning material, such as is the case in engineering, built environment and art and design, are visual learners who might benefit from

an alternative approach to that of the traditional PELA. Such an approach might be considered appropriate to Indigenous learners or international students who are not fully confident with their English language comprehension and written expression. The aim here was to create an alternative PELA that could be applied with students in a broad context, particularly for those learners who might respond more readily to visual imagery, or those for whom interpreting written instructions might complicate their understanding of the task.

With increased numbers of international and Indigenous students coming into higher education institutions (Universities Australia, 2011, p. 11) it became evident to these writers that the traditional text-based tools for the evaluation of student learning and writing skills were perhaps not always the most appropriate ways for testing

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students. For many years the authors of this paper have worked with students from diverse cultural backgrounds, many of whom have demonstrated creative ways of utilising images as a basis for storytelling and writing. Together the authors have worked extensively with university students at all tertiary levels of study and have a deep understanding of the writing skill levels evident in the general cohort of courses and regarded as appropriate to the courses in which the students participate. In this study, such tacit knowledge has underpinned our understanding of what should be evident in university entry level writing by students generally and thus what we might expect in student writing generated by a Visual PELA (VP). This in effect provided us with a comparison group against which we could evaluate what we saw emerge from the VP written passages. A broader approach was needed that embraced all learners but gave opportunities to students for whom English language written instructions might be problematic. This led the writers to develop a VP tool focussed on students whose learning style is visually oriented, and who may also be seeking university entry on the basis of alternative preuniversity study streams. The aim was to stimulate student writing using a variety of images, with minimal written instructions, rather than through the use of fully text-based instructions. The VP is aimed at providing students with reduced English language comprehension skills and visual learners with a writing stimulus more aligned to those with imaginative and interpretative learning styles. It is not a substitute for existing assessment tools, but simply an alternative approach to promoting student engagement with writing tasks and thereby makes some determinations about their possible future performance as university students.

The approach taken here involved the development and testing of a VP tool that took the form of a set of everyday images that can be customised to reflect particular cultural groups, with minimal instructions designed to stimulate student written responses. This VP was administered to a small group of higher degree by research (HDR) students who also provided feedback on its use through a survey document and discussion session on the useability and appropriateness of the VP tool.

Increasing numbers of Australian universities are now designing and using PELAs, according to their own perceived needs (Dunworth, 2009) and available resources. The PELA is therefore not a high-stakes test; rather it is a means to identify potential problem areas that might impede students' progress in their studies, and is typically offered as a short writing task. The rationale behind administering a PELA has attracted some controversy; one argument is that if students have already met minimum English entry requirements, they cannot see a reason to then take another English language test on entry to their program (Dunworth, 2009). Yet, the proliferation of possible entry paths (Coley, 1999) can potentially distort the process of establishing consistent cut-off levels. To this end

a PELA can be one way to raise awareness among students of the importance of general English language proficiency as a means to developing academic literacy, but more importantly, can be one way of flagging possible future problem areas. The idea for the VP described here originated from our observation of the difficulties encountered by students who attended workshops or sought assistance with their academic writing and learning skills development through the Academic Language and Learning (ALL) skills unit in the Curtin University Business School. The authors based the development of the VP on their shared experience in supporting students from undergraduate through to HDR programs, in their study and writing skills development. The context for this work involved a multicultural cohort that included Indigenous Australian and international students who have English as an Additional Language/Dialect (EAL/D), and others who were struggling with the demands of academic writing. In the course of delivering study, writing and research development workshops, the authors identified a number of difficulties commonly experienced by students in the study groups. Central to those difficulties were communication problems associated with interpreting and following written instructions related to assignments, and the ability to write in cogent English at an acceptable level of grammatical accuracy. The VP proposed here was developed in response to the need for a fit-for-purpose way of providing a quick and easy snapshot of students' writing abilities as early as possible, in situations where images might provide more effective stimulation for ideas than printed text-based instructions.

Use of Images in Indigenous Learning Strategies

The use of pictures has been one of the key means for conveying meaning and communicating with others throughout history. Images are universally used across multiple languages and cultures to tell us when to stop, where to turn, which toilet to use, where to eat, or where to find information when we travel. Many images used for such purposes have stylised simple text-free forms that convey in instant information about commonly needed services or choices in our lives. A common saying, 'a picture paints a thousand words', when put into an Internet search engine comes up with millions of documents. One such research paper by Hibbing and Rankin-Erickson (2003, p. 769), which documents a study concerning the use of images to improve comprehension, reported that 'If students are not able to develop images because they are using all their mental energy to decode the words or their personal experiences have limited their vocabulary and background knowledge, external visual images can provide the background knowledge and memory to develop understanding'. Not surprisingly then, the use of images forms the foundation of many learning activities that span

childhood to old age; from family learning to university courses.

The use of pictures to implement a VP as discussed here taps into the notion that we all make meaning from the images that shape our lives, without the need for text-based instructions to tell us how to interpret them or make particular meaning. By removing the written language component we allow students to make their own meaning and thereby be creative in expressing what they see in the image. For Indigenous students, in particular, having a visual stimulus for learning may provide some advantage as indicated by findings reported by Kearins (1981) who noted that Indigenous students 'have skills in spatial and visual recall that are superior to White children' (p. 2). Hughes and Moore (1997), cited in Hughes, Moore, and Williams (2004) make note of several learning strengths for Australian Indigenous students, including their visual spatial skills, imagery, learning in context and spontaneous learning; all learning characteristics that can be readily supported through the use of images.

This strength in using images in learning was also shown by Reilly and Goen (2015) to be an effective means to explore ideas and develop analytical skills for reading text and image. In that study the researchers used non-verbal texts and images to encourage students to make meaning from what they saw. They did not seek to reveal a right answer (Reilly & Goen, 2015, p. 64) but instead sought to have students' process information in real time and to write their own interpretation of what they saw in the images. The VP proposed here has a similar goal, just as Reilly and Goen (2015) sought to give students context and immediacy to learning through the use of images. Boulton-Lewis, Marton, Lewis and Wilss (2004) found that Australian Indigenous students favour 'visualization and practical modes of learning'. With such study findings in mind, the authors here contend that the use of images to generate short passages of written text may work well for those Australian Indigenous students for whom developing ideas from an image is easier than working purely from a set of written instructions. One of the key learning strategies for Australian Indigenous students identified by the Queensland Study Authority (2015) is the use of 'nonverbal communication for better comprehension'. Having image-based writing topics represented in a PELA rather than text-based instruction for writing provides an avenue for nonverbal communication in learning. Collins (1993) suggests that Indigenous students learn effectively through observation and imitation, and less well through direct instruction. The use of images in a PELA to provide stimulus material for writing a short body of text for the purposes of determining writing skills levels aligns with such learning styles. Although no definitive Indigenous learning style exists there is general agreement that culture and image play important roles in the learning process.

Research reported by Frigo and Wales (1999) concerning learning by Australian Indigenous students revealed their 'preference for informal learning, a reluctance and reticence to take risks ...' (p. 19). The use of culturally appropriate images in the proposed VP opens the way to customise the instrument to suit different Indigenous student groups and reduce the risk of presenting difficult to interpret written instructions and thereby create opportunities for students to write from their own cultural perspectives. The VP provides a readily adaptable and flexible writing stimulus tool for all learners, but of special value to those with a propensity for visual learning or to those for whom English is not their preferred first language.

When discussing Aboriginal learning styles, Hughes and Moore (1997) contend that where images are used regularly in learning, as may be found in the dreaming, an Aboriginal learner may be likely to develop an imaginative learning style. Having a VP as one of a suite of tools to assess the writing skill level of Indigenous students undertaking university studies may work well for some students who might otherwise have not had the language comprehension skills to perform at their creative best when assessed by the more formal instruction-based PELA tools in current use. This aligns with Hughes' (2004) observation that Aboriginal learners often make effective use of abstract imagery as a learning style. The VP proposed here taps into that propensity to think imaginatively and open the way for students to write about whatever comes to mind; whatever their imagination provides from their interpretation or reading of the images presented. In relation to accommodating Aboriginal learning styles, Rochecouste et al. (2016, p. 12) highlighted the need for universities to allow students to 'represent their ideas in different forms, such as graphically', and suggested that one strategy might be 'to invite art work/graphic representations to express ideas and then introduce writing tasks to describe these visuals'. However, it is important to emphasise the diversity of Aboriginal and Torres Strait Islander perspectives on learning styles and certainly there is no singular Aboriginal learning style.

Background

There are many PELA tools, including online versions in use today. These include, for example the Online Post-Enrolment Language Assessment (OPELA) test used by the University of Technology, Sydney (UTS) and Diagnostic English Language Needs Assessment (DELNA) as used by the University of Auckland, which are generally designed as an efficient means of checking academic English language skills across large student cohorts. The decision to use online or paper versions of the PELA will be determined by individual departments/institutions, according to their own needs and available resources. What is critical however is the intended purpose for which the

PELA is designed, and this hinges around a number of perspectives on the development of academic literacies.

When commencing tertiary studies, students will be faced with the need to develop both academic literacy and discipline-specific language. In order to do this, they will first need to have a minimum general and social communication ability which covers a range of contexts and situations, using the four dimensions of speaking, listening, reading and writing. According to Bachman's (1990) view of communicative language ability, language competence (one of its three key components), can be further broken down into four broad categories; these are, grammatical competence, textual competence, illocutionary competence and sociolinguistic competence. Language competence therefore 'comprises, essentially, a set of specific knowledge components that are utilized in communication via language' (Bachman, 1990, p. 84). Many Australian universities have adopted the term 'English Language Proficiency' or ELP, and have established policies around minimum standards required to complete tertiary studies.

The use of a PELA as a means to determine some aspects of student literacy at the commencement of their university studies is now commonplace. Dunworth (2009) highlighted three different paradigms that exist among universities regarding the use of a PELA. These are: general English language competence (which applies to EAL/D students whether classified as international or local/domestic), academic literacy and discipline-specific language. Arkoudis, Baik and Richardson (2012) identified the connection thus: 'academic literacy is one form of literacy required for success in higher education study and is a subset within the broader term of English language proficiency' (p. 15). Regardless of their linguistic or educational background, however, it is important for all students to develop a general capacity to communicate effectively within a tertiary academic environment. A PELA therefore provides the opportunity to assess all students' awareness of the specific linguistic demands of a particular discipline. There is no doubt that there are a number of elements that need addressing, and in this case, it was our intention to look at general English language competence as the main focus of this initial diagnostic evaluation.

The Higher Education Standards Framework introduced by the Tertiary Education Quality and Standards Agency (TEQSA) stipulates that institutions must allow for the development of English language as a 'key graduate attribute' (TEQSA, 2011). Most universities list high-level communication skills as one of their graduate attributes, and respondents in Dunworth's (2009) study believed that a PELA could assist in assessing 'literacy based components of graduate attributes' (p. A6). Dunworth also found that the benefits to the institution of such a measure would be not just to act as a gatekeeper, but to remind students that language development and commitment to

self-development is critical to success in tertiary studies. Additionally, this move would enhance potential graduate employability, by encouraging language development throughout a degree program, rather than just focussing on an entry score. With increasing competition for international students, many universities set their minimum English language entry requirements quite low (Knoch & Elder, 2013). In many cases, this is allowed to happen so as not to exclude otherwise talented or able students from particular courses, particularly at postgraduate level. However, this means that the linguistic demands of undertaking a tertiary program will pose additional challenges for those students who just meet minimum entry requirements. Much of the PELA literature to date agrees that there needs to be a clear commitment to students and concern that their needs should be met and that they should be offered the greatest opportunity to maximise their potential (Dunworth, 2009; Knoch & Elder, 2013; Ransom, 2009). Having mechanisms in place that prepare and support university students for study has been shown by many studies to enhance student retention and improve learning outcomes, especially for first year experience students (Johnson, 2011) or as in the case here, for students having their first experience of being at university in a new cultural setting.

In 2013, Curtin University (CU) approved the English Language and Learning Policy (ELLP) introducing mandatory PELAs for all new to Curtin students, initially at undergraduate level, with a view to subsequently introducing this to PG level and in some departments and into their postgraduate induction programs. This means that increasing numbers of students are now required to complete a PELA in week one of their first semester. For this reason the process needs to be an effective, easy to administer and provide a rapid turn-around indication of the students' likely need for support. The VP proposed here will be applicable to UG and PG level students by having a simple format that can be adapted to accommodate more sophisticated writing instruction requirements, while potentially maintaining its visual components for content and context of a broad range of topics across any cultural setting. Importantly, the actual assessment criteria and models used for examining the passages of text generated by the VP are the same as those used for other widely implemented written instruction style PELA. All that has changed here is the stimulus for generating ideas to write about.

As with any assessment of language, the PELA needs to be fit for purpose, and therefore aimed at the required level for a particular course of study and for a particular cohort of students; for example Indigenous students, EAL/D students, or international students. Using a VP that can be readily changed by switching to culturally appropriate images having the same basic instruction set provides opportunities for easy customisation. Clearly this will not suit all student groups, but might well be used when

special groups or individuals who may lack advanced reading and comprehension skills are seeking university admission and for whom it is important to consider issues of equity and diversity. Entering a tertiary learning situation environment for the first time involves a compounded problem for Indigenous learners. What must be taken into account is that first, the language of instruction is not their mother tongue; and second, it cannot be assumed that they are competent in Standard Australian English (see Oliver, Grote, Rochecouste, & Exell, 2012, p. 230). Such factors may impede the development of tertiary literacy skills. Some researchers have highlighted the need for students to also learn 'Western academic literacy skills and discipline specific conventions to succeed' (see Nakata, Nakata, & Chin, 2008, p. 138 as cited in Rochecouste et al., 2016). Given that the PELA needs to cover all students, as is currently the case with Curtin's ELLP, and if it is to be fit for purpose, then it follows that there should be separate PELAs for different groups, for example EAL/D students. In other words, one size does not fit all, hence the need to tailor the test for students with specific learning styles. The results will then inform any learning support needed. With the perceived need to expand the scope of the PELA to suit different student cohorts, this requires some flexibility. The path chosen here involved designing an alternative PELA that can be administered as a paper-based or electronic application, as well as being shaped to be relevant to students from diverse educational backgrounds by utilising images that they can identify as being applicable to their situation, and to which they can readily respond.

The format of the VP proposed here is simple. The student is presented with a table that has four columns (see Appendix 1). The first column consists of a set of images beneath each of which is a minimal simple instruction typical of those used in writing assessment tasks. The second column consists of a blank box into which the student writes their response to the image as per the instruction given beneath the image. The third column shows the assessment criteria for the task, and the final column is for the assessor's grade (see Appendix 2). The marking scheme, as shown in Appendix 2, aligns closely with the version currently in place for the undergraduate PELA, which is marked by trained English language specialists. One key change was made in relation to the marking criteria, however. Specifically at postgraduate level, it is considered appropriate to assess Grammar and Vocabulary separately (the current version combines the two). Thus, the proposed version comprises the following five categories: (1) Task Fulfilment, (2), Grammar, (3) Vocabulary, (4) Organisation, coherence and cohesion and (5) Mechanical accuracy (spelling and punctuation). The undergraduate version of the PELA is moderated regularly, both within and between disciplines, and this process would be expected of any additional diagnostic tests that were introduced.

It is proposed that a database of images will be themed to have groups of images linked to associated instructions so that when a particular image is selected for inclusion (either manually or by random computer selection) the corresponding task instruction accompanies it in column one of the PELA. Working in this way allows for consistency in the type of image with the type of instruction and thus can theme the content (but not necessarily the quality) of the student's written response. Similarly, the PELA can be constructed from images that are familiar to student groups from particular backgrounds by using pictures that include local dress, sporting or traditional activities, or icons such as national buildings, costumes, or common activities.

In a learning context, 'images provide access to complex visual information and experiences that cannot be replicated in purely textual terms'. Thus, the image provides an alternative to text in this case. Further, 'looking at a picture usually involves some kind of response on the part of the looker and achieving this kind of emotional engagement with the subject-matter is an important first step in any learning situation' (Mowat, 2002, pp. 5–6). The use of image rather than text in stimulating thought on any topic has become commonplace in society today through the development of the Internet and personal electronic communication devices as the tools for information gathering and communication. A VP therefore aligns well with the way in which many students currently find and share information, for example, when they communicate through social media or video games. Having an image to respond to is a commonplace experience for the current generation of students in their daily communication, so the use of visual stimuli may offer an equitable alternative to learners who respond more favourably to image as part of their learning styles or approaches.

Application of a Visual PELA at Curtin University

CU already utilises a PELA and associated English language intervention protocols to identify and assist undergraduate students in need of language skills development. The PELA requires students to complete a writing task of approximately 300 words which when assessed provides an indicator of their writing skills. Those identified as needing assistance are required (or in some cases recommended) to undertake specific intensive English development courses in conjunction with the core communications units for their respective disciplines. Just as there are many different learning styles (Cools, Evans, & Redmond, 2009; Mainemelis, Boyatzis, & Kolb, 2002; Mumford, 1993) there are various English language proficiency testing tools (Coombe, 2010; Read & von Randow, 2013) which are tailored to specific disciplines or applications. The key is to be able to create a flexible but efficient means of

flagging potential problems early. However it is important to ensure that no student is disadvantaged in any assessment process, therefore complementary alternatives are desirable so as to ensure equity across all background types within a given cohort.

Initially the concept for the VP came from our work with students who appeared to struggle with written instructions, particularly in the early stages of their study. These students often responded well in our workshop sessions and during individual coaching to graphical representations of concepts and ideas when discussing theoretical frameworks and constructs. On the basis of our collective experience in assessing student writing skills as seen in mainstream PELA and student assignment documents that form the basis of our everyday work with UG and PG students, these authors contend that the proposed VP will be well suited to EAL/D students. It will also provide an alternative way to assess the writing skills of visual learners who often enrol in courses such as creative arts, design, engineering, architecture, animation and fashion, where the emphasis is on graphical communication methods. Currently at CU there are increasing numbers of students gaining admission via portfolio entry. These students might also benefit from having a VP to accommodate potential English comprehension issues that impact their understanding of instructions in conventional PELA tools.

It has been the experience of these authors that many international HDR students commence their studies at CU without undergoing formal English language proficiency testing prior to admission. Often, such students have been deemed acceptable for enrolment on the basis of undergraduate qualifications that are mostly obtained outside of Australia. When commencing their studies at CU it often becomes evident that they are struggling to write at an academic level in cogent English. Having enrolled in this manner means that some students in need of English language support are not identified early in their studies and 'fall through the cracks' unnoticed. Research studies have shown that there is a basic language aptitude threshold below which students may be at risk of not being able to successfully complete a course of study at tertiary level (Johnstone, 2006). Having minimal written instructions to interpret, and just a simple image to stimulate writing, this PELA seeks only to have a student demonstrate the ability to articulate one main idea coherently in a single paragraph. The content of the proposed VP is not necessarily academic, but does require them to articulate their individual interpretation of the image presented. The exercise is designed to stimulate student writing of a passage of text for evaluation as a measure of their literacy skills at the time of testing. Passages written by students using the VP can be assessed using well tried and proven methods including a variety of other language testing tools. The proposed VP is not intended to replace other such tools but to complement these at all levels of university study. As

noted earlier, the evaluation criteria and benchmarks are no different for the VP than those used for mainstream PELA in numerous university settings. Of special interest are students in minority groups such as Australian Indigenous Masters and PhD students who represented just 0.79% of those completing such studies in Australia in 2010 (Trudgett, 2013).

Using the Visual PELA Results

Identifying students in need of support or assistance is just the first stage of what is required to ensure study success. At the HDR level, there is added pressure on students to achieve a standard of academic writing needed for thesis writing and journal publications. The VP tool discussed here acts only as a beginning point for identifying a student's writing skills by starting with a nonacademic topic and writing level. To address this aspect of writing at the HDR level, the VP may be constructed to have students write about images that graphically present conceptual frameworks or constructs that require them to convert abstract themes into coherent paragraphs. Such images might take the form of mind maps and other visual learning tools (Bangert-Drowns, Hurley, & Wilkinson, 2004; Caughlan, 2008) which are already in common use as visual guides for describing findings and in expressing relationships, particularly among EAL/D students. What is sought here is a measure of a student's demonstrated ability to write complete paragraphs, to follow explicit instructions and to be able to articulate evidence of critical thinking, if this is appropriate to their interpretation.

Field Testing of the Visual PELA

Prototype VP forms of the type discussed here were field tested with a writing circle group consisting of five HDR students at CU (see Appendix 1). This process was undertaken with CU ethics approval as part of a broader ongoing study into the efficacy of HDR writing circle groups for improving English writing skills. When issuing the VP to the students, a short survey document was also issued to obtain feedback from them concerning their thoughts on using the VP as a writing stimulus tool. With just five HDR students completing this first use of the VP, the results generated were of course very limited. The students were given a choice of five different images to choose from, each representing an everyday scene depicting an activity or an object which they would typically encounter in their current educational location, for example, sailing on the river, using a thumb-drive/memory stick and online shopping. Although it is acknowledged that cultural assumptions might be made about how students might respond to these images, the focus was intended to be on the linguistic quality of the output. Each image had a simple instruction that began with either 'discuss' or 'compare', in order to avoid responses which simply gave a description. A period of 15 minutes was provided for the participants to decide

on an image and to write a brief paragraph about it. The instructions required the students to write a minimum of five sentences, with the main idea in the first. The aim was to get the students to use the image as a stimulus to formulate one main idea, and to develop that idea within the paragraph in any way they wished, depending on their response to the image. They were also provided with the assessment criteria. The documents thus produced were collected without any identifying information so that the authors remained anonymous to the assessor, who was not present at the session and could not therefore link any written work with a particular participant. Notwithstanding the small numbers, the completed scripts provided a number of noteworthy insights not only into the students' writing skills, but also into aspects of the VP itself that are in need of further development.

Results

Each of the student submissions developed using the VP was examined in detail (see Appendix 2 assessment tool) by both of the researchers with particular analysis being performed on the works by the researcher who has 26 years of specialist English language testing experience and expertise that underpins her knowledge of what constitutes the levels of writing skill accepted as appropriate for tertiary study. That researcher is internationally qualified and recognised in this field of assessment. Such knowledge and expertise underpinned the analysis of the student works in much the same that having a control group might have done if it were available to us.

Analysis of the student works revealed that the first student appeared to embrace the task well by demonstrating a depth of thinking in regard to the image presented. Their writing, although informal and tending to use sentence fragments, showed control of sophisticated grammatical structures in the way they were able to articulate abstract concepts and use less common lexical terms. Given that the participants here were all HDR students, the degree of sophistication seen in this student's work was appropriate to the level of study. The limitations in sentence structure however might suggest problems for them when faced with a more complex or major document, such as a thesis.

Unlike the first student response, the second participant chose to respond to three of the images provided (i.e., did not follow the instructions) and in the first of these appeared to interpret the image in a manner that did not connect well with the instructions, nor did it align with the topic or image content. In writing about the second image they chose, this student embraced the subject matter of the image and then followed the task prompt to produce a well-constructed paragraph that was relevant and accurate, as well as being able to demonstrate sophisticated grammatical structures and lexical terms. It did not come as a complete surprise that a student in this cohort did not

follow the instructions. The group was mostly made up of international (EAL/D) students who may have limited opportunity to interact with English speakers and thus practise their English on a regular basis.

The third of the respondents wrote a complete paragraph that was generally accurate, although characterised by some minor grammatical errors, including the misuse of articles and inappropriate choice of cohesive devices. Overall though, their work demonstrated a sound and appropriate lexical range, presenting well-organised ideas throughout the paragraph. This student appeared to relate well to the image chosen and to implement the instructions provided in a purposeful manner.

Example of text from participant:

Recycling has an essential role to play in determining the overall sustainability of the eco-system.

Working in a similar way to respondent three, respondent four wrote about one image and implemented the instructions to produce a well written paragraph with a high level of grammatical accuracy. The paragraph was well constructed and cohesive in the sense that each sentence built on the topic to provide a clear overall message. The instruction provided with the image of cars banked up on a freeway used here was 'Compare the different ways of getting to work' (see Appendix 1). The student appeared to recognise a need to show judgment and evaluation beyond mere description by incorporating into their text comparative or evaluative elements such as advantages and disadvantages of using different modes of transport. Taking this more lateral approach provided opportunities to demonstrate more sophisticated language structures required for speculation.

The last of the respondents presented a markedly lower level of writing skills. Their sentences were generally fragmented with a faulty structure that resulted in the paragraph neither having a clear topic sentence nor a concluding sentence. The lexis was very general, rather than being specific to the topic, relying on a descriptive approach to dealing with the image presented rather than taking a more considered or opinion-shaped point of view. The VP does not seek to have students write in an academic style, but at the HDR level there is an expectation that the students will show some level of analytical thought rather than a mere descriptive narrative, and will write in a formal, rather than informal tone. In this case, the text was characterised by being written in the first person, having a conversational structure. The image in this instance was of a small commercial recycling company shopfront, and the instruction was to 'Discuss the benefits of recycling'. The student did not respond in an analytical manner, but simply described the scene. Once again, it was evident that the student struggled with the written instruction; whether this was due to inadequate reading skills or comprehension of the instruction is not known. It would appear that there needs to be greater clarity in

the instructions provided with each image to ensure that the student is in no doubt about the nature of the task.

Participant Feedback: Postactivity Round Table Discussion and Survey Instrument

Immediately following the trial session for the VP the participants engaged in an informal round table discussion with the writer to debrief on their thoughts regarding several aspects of the PELA. Being HDR students, all of the group members were keen to discuss their use of the VP as a tool to provide insights into their writing abilities. In addition, each of the students also engaged in the discussion from the perspective of their research discipline areas, which included economics, management and marketing. All of the participants were quite analytical in their comments about the VP. Results emergent from the round table discussions aligned closely with the participants' written feedback in the questionnaire issued at the commencement of the writing task. In the light of this, the following discussion regarding the students' thoughts on using the VP also incorporates what the students wrote as feedback.

Discussion

The first aspect of using the VP to be discussed was the ease of use and clarity of instruction provided in the VP. In the round table, all of the students agreed that the task set was straightforward once they had made their image choice. The feedback survey suggested that choosing the image was easy for some, but time-consuming for others and this reduced their writing time. Two students in the discussion suggested providing more images to choose from so that there was more likely to be something of special interest to them, rather than having to stretch their imagination to write about something they were not familiar with. This is a point that the authors had previously considered and had already decided would be a feature of the final VP format.

Discussed next with the students was the ease with which they were able to quickly write a short passage about the chosen image. There was also much discussion about the nature of the images themselves, with feedback suggesting that the students found that having a picture to stimulate ideas was very effective. No one expressed dissatisfaction with the PELA itself or the nature of the tasks set. The findings section of this paper makes note of the limitations of having a small sample of participants and resulting data, however we feel that this has demonstrated the potential value of the VP and further testing of this VP is needed. Our aim is to develop a viable alternative PELA tool that will augment the suite of tools currently used to determine student writing skill levels at university. Having a VP may encourage imaginative and creative writing that is less encumbered by the burden of having to write in a particular way. We are seeking to have students write in a relaxed and flowing manner to see how they construct

their sentences and employ appropriate grammar. To that end this first trial of the VP had some shortfalls in that some of the students did not write a full five sentences as requested and this limited the extent of analysis of their writing.

When the students were asked if they felt that with more time they could have written more about the images they had chosen, they all agreed they could. In the round table discussion all of the students expressed enthusiasm for writing in response to an image but were more accustomed to having more detailed instructions about the task. The survey feedback confirmed this and in response the authors contend that there is a need for the VP to have more explicit instructions in respect of writing a minimum of five full sentences with punctuation, written in a particular, perhaps more formal style. Also explored in the round table discussion was the students' reaction to being asked to participate in the writing activity, given that they were all busy with their higher degree studies and this was an additional task that would not have any apparent tangible reward. All of the students noted that the activity was a fun thing to do in that it did not have the pressure of their formal thesis or publication writing, and that it allowed them to think laterally about something different to their current focus. A common comment was that the VP writing activity, although simple in nature, allowed them take a different perspective on a topic to explore a new idea. This led to a discussion of how surprise findings in research data can necessitate rethinking of earlier understandings of a topic or process. This open minded way of viewing the VP activity as a tool for provoking new ideas was evident in the fact that all of the participants indicated in the feedback survey and the round table discussion that they did not feel anxious in using the VP.

It was clear from the feedback that we need to refine the instruction elements of the VP to ensure clarity of the task for the students, and at the same time offer a greater range of images for them to choose from, so as not to disadvantage individuals from particular backgrounds. This would not only cater to cultural approaches, but to individual interests. It is the plan of these authors to run a large scale (approximately 100 higher degree students) implementation of the VP in several schools at CU, particularly those focussed on the arts and Indigenous studies where the importance of images in learning and culture is well established. Results from such an implementation would provide far more meaningful data that would allow better testing of the efficacy of the VP as a tool for stimulating writing for the purposes of assessing the students' skills and preparedness for advanced academic writing in higher degree studies.

Findings

This study was implemented with a small cohort of respondents in order to test the efficacy of a new tool for

stimulating the writing of a passage of text as a means to evaluating the writing skills of new to university students. The small cohort limited the study findings but nonetheless we feel that some valid conclusions can be drawn in relation to student acceptance of this PELA format. In addition, analysis of the study data demonstrated that the use of images can generate passages of text that are sufficient for evaluations using the usual criteria and standards applied to text-based tasks used in traditional PELA. The development of the VP was undertaken to find an alternative way to elicit student writing of a short passage of text that could be used to determine their writing level as one aspect of assessing their preparedness for university study. The focus here was on HDR students' responses to being asked to write a short passage, and their performance in doing so when presented with an image to provide a topic or context, and a simple instruction. We sought to target general English language proficiency, as opposed to academic literacy, from the perspective that we can 'teach' them academic literacy, as well as the language of the discipline. We chose to use an image, rather than written content for the topic with the intention of making the task more open to visual learners, as well as removing one level of interpretation in a narrative that may for some EAL/D learners compound the difficulty of the task. The VP is intended only to be one part of the process of identification of potential barriers to higher degree study. It is not intended to be a teaching tool, given that students will eventually develop their writing skills as part of their normal learning journey. If this PELA can help us to identify students who are likely to have writing difficulties, then we can offer writing development strategies or services to them at the start of their studies, rather than having to do retrospective language and learning development when students are already under pressure to produce a thesis or academic paper for publication.

To make the VP an effective tool for having students write in a focussed way we must be explicit about what we want them to write by making clear that they need to produce a single paragraph with a suitable topic sentence, that is, a coherent unit. A minimum of five sentences is needed. Instructions that go with the images in the VP need to make it clear that we do not want the students to produce only descriptive text, but instead they must respond to the given instruction, while using the image as a stimulus. Such an approach will be particularly suitable for those who respond well to visual learning styles such as in the creative arts disciplines. Having an image as a writing stimulus may also help students who have no knowledge/vocabulary pertaining to subject matter that might have otherwise been presented in text-only form in other PELA tools. In the case of the VP proposed here, it is a simple matter to have two types of task for each picture presented and again quite simple to provide more than one picture for the task instruction given. This gives students a choice in what they write about. This versatility of the VP

proposed here rests with the ease with which images can be alternated in order to offer a range of options to suit choices by different cultures, or to be 'culture neutral' so as to mitigate (at least as much as possible) against potential bias, and to provide ease of understanding to those who use it. The user can make whatever they like of the image; the instruction will focus the task but not direct their imagination or interpretation of the content or topic that the image might have for them. We are aiming to have students demonstrate their ability to write complete paragraphs, to follow explicit instructions, to think laterally given a visual stimulus and to develop one single idea using complete sentences. The VP will provide a means for students to demonstrate that they can respond to abstract concepts and articulate them into clear text.

Conclusion

In using the VP we found that the paragraph produced by each student provided insights into their ability to write coherent sentences around a suggested topic, shaped only by a simple instruction that was readily understood by the higher degree student participants in this study. By examining what the students wrote, from the perspective of English language structure and grammar, we were able to make a preliminary assessment of their writing skills, their ability to understand basic instructions, and perhaps some measure of their creativity or imagination when viewing images. This very limited testing with a limited cohort of students of the use of a VP provided useful information about how students react to this form of writing exercise, as well as insights into their abilities to follow simple instructions, interpret an image and write in cogent sentences. However, future samples would require a greater cross-section of disciplines and courses. We contend that with further development, the use of a VP will be of value in determining student skills for courses in the arts, graphics oriented disciplines and for cultural groups for whom the image is a key communication tool.

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Appendix 1: Visual PELA used for Field Testing

Note: The version of this VP issued to the students incorporated a wider column two (Labelled—*Write your paragraph here:*) area than shown here. The column was narrowed in this document to align with the page margin settings.

<p>Select ONE picture from those shown below.</p> <p>Write ONE paragraph (minimum 5 sentences) in response to the instruction provided below each of the pictures you have chosen.</p> <p>The first sentence for each paragraph should represent your main idea.</p>	Assessment criteria	Grade
<p>1</p>  <p>Discuss the importance of working together</p>	<p>Write your paragraph here:</p>	<ol style="list-style-type: none"> 1. Task Fulfilment 2. Grammar 3. Vocabulary 4. Organisation, coherence and cohesion 5. Mechanical accuracy (spelling and punctuation)
<p>2</p>  <p>Discuss the importance of education for everybody</p>	<p>Write your paragraph here:</p>	<ol style="list-style-type: none"> 1. Task Fulfilment 2. Grammar 3. Vocabulary 4. Organisation, coherence and cohesion 5. Mechanical accuracy (spelling and punctuation)
<p>3</p>  <p>Discuss what you would write as a message to put in this bottle.</p>	<p>Write your paragraph here:</p>	<ol style="list-style-type: none"> 1. Task Fulfilment 2. Grammar 3. Vocabulary 4. Organisation, coherence and cohesion 5. Mechanical accuracy (spelling and punctuation)
<p>4</p>  <p>Compare the features of sailing competitively with sailing for leisure.</p>	<p>Write your paragraph here:</p>	<ol style="list-style-type: none"> 1. Task Fulfilment 2. Grammar 3. Vocabulary 4. Organisation, coherence and cohesion 5. Mechanical accuracy (spelling and punctuation)
<p>5</p>  <p>Discuss the benefits of recycling</p>	<p>Write your paragraph here:</p>	<ol style="list-style-type: none"> 1. Task Fulfilment 2. Grammar 3. Vocabulary 4. Organisation, coherence and cohesion 5. Mechanical accuracy (spelling and punctuation)

Appendix 1 (cont.)

6



Compare online shopping with shopping in a mall

Write your paragraph here:

1. Task Fulfilment
2. Grammar
3. Vocabulary
4. Organisation, coherence and cohesion
5. Mechanical accuracy (spelling and punctuation)

7



Compare the different ways of getting to work.

Write your paragraph here:

1. Task Fulfilment
2. Grammar
3. Vocabulary
4. Organisation, coherence and cohesion
5. Mechanical accuracy (spelling and punctuation)

Appendix 2: Assessment Criteria for the Visual PELA

Task fulfilment	
Grade	Descriptor: essays in this category . . .
4	Answer the question relevantly in sufficient detail and length, and in the appropriate register.
3	Answer the question relevantly and in the appropriate register, but may lack detail or length.
2	Answer the question only partially or in a limited way, and may lack the appropriate register.
1	Answer the question minimally and may lack the appropriate register.
0	Do not address the task at all or misinterpret the task.
Grammar	
Grade	Descriptor: essays in this category . . .
4	Are free from grammatical errors.
3	Have only minor or occasional grammatical errors.
2	Have grammatical errors in complex forms
1	Have numerous grammatical errors which impede communication
0	Are unable to achieve the task set because of grammar limitations.
Vocabulary	
Grade	Descriptor: essays in this category . . .
4	Have a wide range of contextually appropriate vocabulary
3	Have a range of contextually appropriate vocabulary
2	Have a limited vocabulary which may include inappropriate usage.
1	Have a very limited vocabulary which is generally inadequate for the task set.
0	Are unable to achieve the task set because of lack of vocabulary

Appendix 2 (cont.)

Organisation, coherence and cohesion	
Grade	Descriptor: essays in this category . . .
4	Are logically organised, express ideas coherently and use a range of appropriately connected sentence types.
3	Have an overall logic and develop idea(s) coherently, and include a range of sentence types which are usually appropriately connected.
2	May lack overall organisation/idea(s) not developed coherently. Sentences may be limited in type or inappropriately connected.
1	May lack overall organisation or the development of idea(s), but include some connection between the ideas expressed.
0	Lack overall organisation, thematic unity and coherence in and/or between sentences.
Mechanical accuracy (spelling, punctuation)	
Grade	Descriptor: essays in this category . . . (Note: do not penalise typos or common misspellings).
4	Are free from spelling or punctuation errors
3	Contain very few spelling or punctuation errors
2	Contain occasional spelling and/or punctuation errors
1	Contain several spelling and/or punctuation errors
0	Contain so many errors in spelling or punctuation that overall comprehension is impeded.
Overall grade The overall grade is obtained by adding up all the totals for each criterion and dividing by 2. This gives a mark out of 10.	
Grade	Descriptor: students achieving this grade . . .
9–10	Do not require any assistance to further develop academic writing skills and/or use of the English language in an academic context.
7–8.5	Are likely to benefit from further development of academic writing skills and/or use of the English language in academic context.
6.5	Will benefit from assistance in development of academic writing skills and/or use of English language in an academic context.
0–6	Will need additional assistance in the development of academic writing skills and/or use of the English language in academic context.

About the Authors

Craig Baird is an academic in the Research and Development division of Curtin Business School at Curtin University, Perth, Western Australia. He has extensive teaching experience in education, computer education, educational development and academic development. His PhD focussed on ways students develop expert knowledge when working with industry professionals and innovative technologies. Craig's research interests include: blended learning using online technologies in classrooms and remote settings. His work in academic development is focussed on enhancing the quality of university teaching and learning and in providing ways to reduce student plagiarism through informed practice.

Patricia Dooley has had more than 25 years of experience working at Curtin University. Much of that time has been spent teaching students for whom English is an Additional Language. Patricia has also been involved in language testing for more than 20 years. Her masters study investigated the link between English language proficiency and future academic success, while her doctoral study investigated students' perceptions of a pathway program. Both involved data collected at Curtin University. Her current role is focussed on developing English language skills and an evidence-based analysis approach to study and assignment writing, for students in the Faculty of Humanities.