

Volume 40 Issue 6



Scan

The journal for educators

**Artificial
intelligence and
student writing**

**The power of
audio poetry**

**Dungeons &
Dragons in the
classroom**



Contents

Scan is a leading refereed journal, published monthly between February and November. Scan aims to bring innovative change to the lives and learning of contemporary educators and students. Through Scan, teachers' practice is informed by critical engagement with peer reviewed research that drives improved school and student outcomes across NSW, Australia and the world. Scan aims to leave teachers inspired, equipped and empowered, and students prepared.

[Robot writers in education: Cheating ... or world-beating?](#) **4**

Dr Lucinda McKnight from Deakin University outlines the ways artificial intelligence is changing the nature of writing and explores implications for schools.

[The power of audio poetry in the classroom](#) **7**

Anton Jarvis, audio specialist and English teacher, delivers a generous collection of poetry and short story sound recordings for use in the classroom.

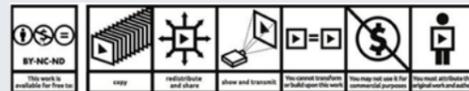
[Exploring the resurgence and educative potential of 'Dungeons & Dragons'](#) **12**

Dr Marcus Carter and Premeet Sidhu from the University of Sydney delve into the educational possibilities provided by the role-playing game 'Dungeons & Dragons'.

[Writer biographies](#) **16**

Copyright: The material in this publication is subject to copyright under the Copyright Act 1968 (Cth), and is owned by or licenced to the State of New South Wales through the Department of Education (the Department). Material published in Scan covers and other third party content in Scan are reproduced with permission, where applicable. Apart from uses in accordance with the Creative Commons licence (below), permission must be sought from editor.scan@det.nsw.edu.au prior to any (other) use.

Creative Commons: The material in this publication is licensed under CC-BY-NC-ND 4.0 and may be printed or download without alteration or abridgment and must retain attribution of the source. The user shall not sell, hire or otherwise derive revenue from copies of the material.



The views expressed in these articles are solely those of the authors and do not represent the views of the NSW Department of Education.

Links to external sites: Links within Scan are provided with the intention of increasing the information available to our readers. The NSW Department of Education has no control over linked websites, and is not responsible for the views, opinions, standards or information expressed on linked websites. The provision of a link does not imply that the NSW Department of Education endorses those websites or the people or companies who own them, and vice versa. Please refer to www.nsw.gov.au/disclaimer#links-to-external-sites for a comprehensive description of the NSW Government's policy regarding links to external sites.

The appearance of advertising on, in or in connection with the NSW Department of Education, and the Scan publication, does not imply any endorsement of the advertised company or product.



Want Scan delivered to your inbox?

[Register for free](#) to be notified when new issues of Scan are available. We'll never share your email address and you can opt out at any time.



Browse our past issues for more Scan articles.



Robot writers in education: Cheating ... or world-beating?



Dr Lucinda McKnight
Senior Lecturer, Deakin University

Dr Lucinda McKnight outlines the ways artificial intelligence (AI) is changing the nature of writing and explores implications for schools.

How is artificial intelligence impacting writing?

As a senior lecturer in curriculum and pedagogy at Deakin University, I have been researching how teachers are facing dramatic changes to society's understanding of what writing is. Already a significant amount of what we read on the internet is created by artificial intelligence (AI) via natural language generators (NLGs). NLGs are machines that can string together words and sentences that make 'sense'. Students can simply enter a few word prompts into an AI writer site, for free, and an essay is created for them in seconds. Like paid contract cheating, in which paid human writers in essay mills write original essays to specifications, this kind of writing is not detectable by standard plagiarism detection software. And any piece of writing can be put into an AI spinner

... both industry and education have been caught out by recent dramatic improvements in the capabilities and availability of AI writers.

which will generate hundreds of different versions through paraphrasing, again undetectably. A single student can get AI to write one essay, and then a version for every class member, in seconds.

It may seem odd then, that the latest guide to contract cheating from global plagiarism software company, Turnitin, does not even mention AI. It seems that both industry and education have been caught out by recent dramatic improvements in the capabilities and availability of AI writers. AI will be a huge disrupter for all roles requiring writing. Even with the tools currently available, robots are producing news reports, sports bulletins, company prospectuses, scripts, novels, poetry and countless other forms of writing. In education, teachers will use it to write lesson plans, assessments and reports. Academics will use it to write articles. Already start-up companies are vying to target lucrative markets with specifically tailored versions of AI writers. This is the future of writing.

Schools, however, are preoccupied with meeting the formulaic requirements of NAPLAN, recently exposed and critiqued by a series of significant reports (see, for example, McGaw et al, 2020 and Perelman, 2018) and research projects (Gannon, 2019; McKnight, 2020). Students are actually being trained to write more like machines that can only follow rules. School writing is becoming more and more limited to formulas like TEEL (Topic, Evidence, Elaboration, Link) and the five paragraph essay (introduction, three body paragraphs and conclusion), which serve to shut down the development of more sophisticated and sustained writing skills and an understanding of the writing process.

Future skills for writing with AI

This understanding of process is essential to the writing futures of our students. Process writing, which requires creative brainstorming, drafting, revising,

editing and publishing involves students in writing activities which are authentic and meaningful, for real audiences, purposes and contexts. NAPLAN, in contrast, demands writing for no given audience, on artificial unseen topics, under exam conditions. Even before the arrival of AI

writers, this narrowed writing regime was producing writers with highly formulaic writing styles: I meet these writers daily in my lectures and tutorials. Now this kind of writing is readily done by machines.

The challenge for teachers is to develop their students as confident, critical, creative, courageous, empathetic, highly skilled and adaptive human writers who are educated to break rules, not just comply with them. Learning the basics will always be important. But this will not be enough. Writing effectively now means writing with AI, breaking down the human/machine boundary in ways that go way beyond spellchecking. It will become usual for any initial draft of a piece of writing to be generated by AI, at least in parallel with a human effort, for comparison, synthesis and revision by humans. This human-machine co-writing will not be regarded as cheating, just as spellchecking is not regarded as cheating either. It will be considered to be strategic use of digital resources to maximise the impact of writing. AI's contribution to this partnership will be via split-second dexterity in, for example, researching and presenting information, search engine optimisation, translating into multiple languages, sourcing and incorporating multimodal elements such as images and sound, laying out pages, writing headings and subheadings, and referencing.

Writing effectively now means writing with AI, breaking down the human/machine boundary in ways that go way beyond spellchecking ... This human-machine co-writing ... will be considered to be strategic use of digital resources to maximise the impact of writing.

Humans, with a sound background in understanding algorithmic thinking, can take AI outputs and shape them for real purposes, audiences and contexts.

AI has exciting potential for idea generation, for research, for stunning efficiencies, for making ideas available to diverse audiences in diverse forms and for augmenting human capacities at almost every stage of the writing process.

Skills in evaluating and manipulating text will be highly valued. Knowing when to use AI and when to use human skills will be important. Judging the affordances and constraints of various AI tools will also be vital. Ethics, integrity via the monitoring of the provenance of words, and critical attention to potential bias will be as well.

Assessing writing in an AI world

There will be huge challenges for authentication and assessment in a competitive education system. This could usher in a new era of education with a strengthened focus on learning, responsive to the real world and future focused needs of students. Or it could create a renewed and intensified emphasis on tightly prescribed, unseen, handwritten and exam assessed writing tasks that rejects the possibilities of working collaboratively with AI. If it is the latter, schooling will become even more divorced from the real world and from the working futures and citizenship commitments of students.

AI has exciting potential for idea generation, for research, for stunning efficiencies, for making

ideas available to diverse audiences in diverse forms and for augmenting human capacities at almost every stage of the writing process. This goes way beyond archaic notions of 'cheating', to a posthuman future in which machines and humans merge in writing assemblages. If we try to insulate schools and writing programs from AI, we are likely to be denying students a meaningful education. And if education does invest in AI, it will be essential to ensure that all students have fair and equitable access to its exciting potentials, as further services with inevitable costs become available.

References

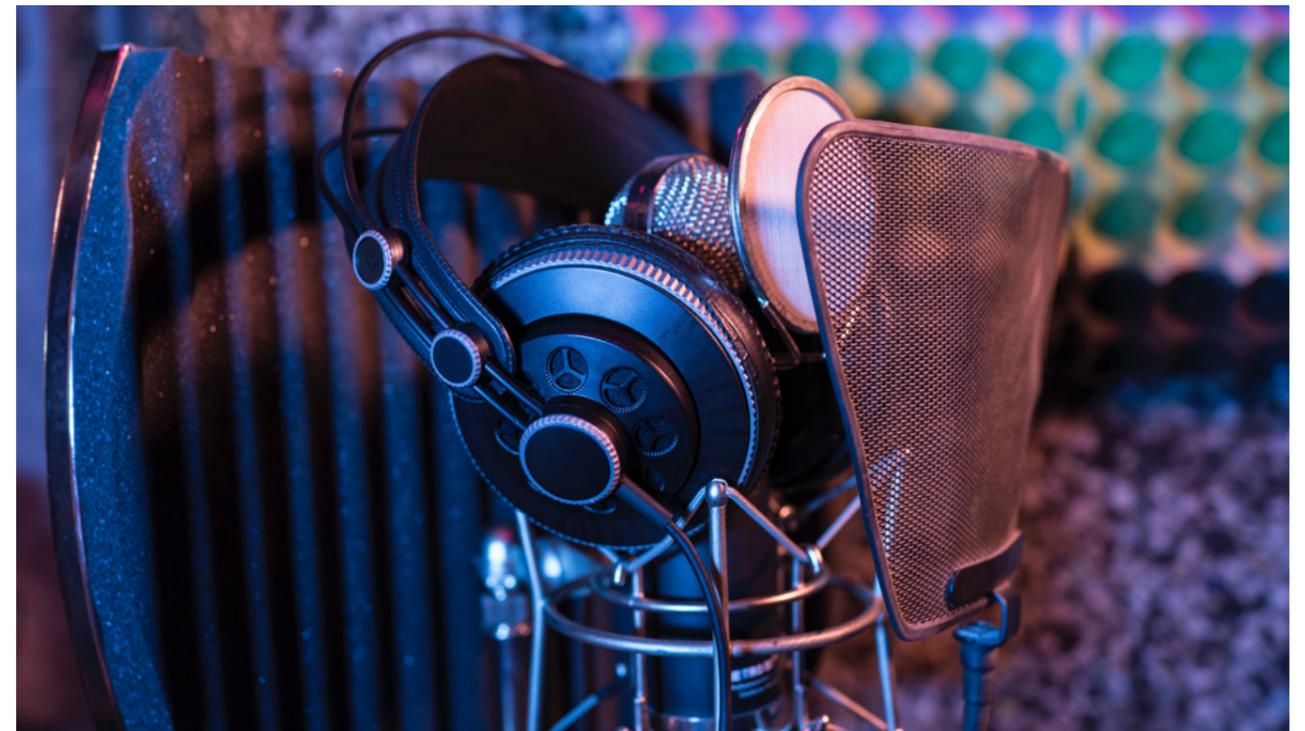
Gannon, S. (2019). [Teaching writing in the NAPLAN era: The experiences of secondary English teachers](#). *English in Australia*, 54(2), 43-56.

McGaw, B., Loudon, W. & Wyatt-Smith, C. (2020). [NAPLAN review: Final report](#) (pp. 1-180): State of New South Wales, State of Victoria, State of Queensland and ACT.

McKnight, L. (2020). Since feeling is first: the art of teaching to write paragraphs. *English in Education*, 1-16. <https://doi.org/10.1080/04250494.2020.1768069>

Perelman, L. (2018). [Towards a new NAPLAN: Testing to the teaching](#) (pp. 1-50). New South Wales Teachers Federation.

How to cite this article – McKnight, L. (2021). Robot writers in education: Cheating ... or world-beating? *Scan*, 40(6).



The power of audio poetry in the classroom



Anton Jarvis
High school English teacher

Anton Jarvis, audio specialist and English teacher explains the value of using audio recordings in the classroom. He also delivers a generous collection of poetry and short story sound recordings for use in the classroom.

When an English teacher friend suggested I used my radio broadcasting and production skills to record poems to help high school students in their studies, I did not anticipate how many educators would welcome the project and find it useful in their lessons. My intention was to focus on speaking and listening skills by employing audio, rather than have the distraction of video images (as is the case with much of the poetry available on YouTube).

As an English teacher myself, it has been a complete joy finding classic and contemporary poems which are fine examples of the poetic form in its many guises, and which showcase the writers' techniques, powerful ideas and expressive language. Making free audio recordings available for educational purposes has been a real labour of love.

Writing for
Scan

Interested in writing for Scan?

Is your school – or someone you know – doing something innovative or inspiring?

We're currently sourcing content – standard articles, research, and SPARKs (Shared Practice and Resource Kits).

How to reach us

Check out the [Writing for Scan](#) section on our website to view our writer and research guidelines. Then email us with your article idea!

Why focus on audio?

Probably because of my BBC background, I have always enjoyed reading poems aloud in the process of teaching them and encouraging students to read poetry aloud themselves. Voice training means I speak British English with a relatively neutral accent. I do my best to 'perform' the verses and stanzas well, while being mindful of conveying elements such as rhythm, reflection, emotion and humour.

Many English teachers of course stress the fact that hearing a poet's words can really help to convey structure, poetic techniques and the resonance of carefully chosen vocabulary. This is potentially an excellent aid to understanding composers' ideas and creativity. It seems that many classroom practitioners appreciate having a voice which is not familiar to their students reading a poem. One that can be played several times and accessed again for revision.

One of the first poems I recorded was Scottish poet Jackie Kay's 'Brendon Gallacher', a beautiful account of a childhood imaginary friend which I remembered from my UK teaching days. Another was Roger McGough's 'First Day at School' which cleverly conveys a 5 year old's perspective and misunderstanding of the new routine. Edgar Allen Poe's 'The Raven' was one of the most difficult to record because of its length, rhythmic pattern and mysterious and sinister tone. I have learnt more about Australian poetry while creating audio versions of such classics as 'No Ordinary Rainbow' by Les A. Murray and 'The Surfer' by Judith Wright. 'Aboriginal Australia' by Jack Davis, along with others, have added to my understanding of Indigenous perspectives and history of these First Nations peoples. I have particularly enjoyed recording reflective, emotive and amusing poems. Among the most delightful to voice were three of Roald Dahl's

Listening to poems which demonstrate sound devices such as rhyme, onomatopoeia, alliteration, sibilance, assonance, character dialogue and tone can be an opportunity for students to get a proper 'feeling' for the poem ...

... hearing a poet's words can really help to convey structure, poetic techniques and the resonance of carefully chosen vocabulary.

'Revolting Rhymes' and 'On the Ning Nang Nong' by Spike Milligan.

Benefits of aural engagement with poetry

Listening to poems which demonstrate sound devices such as rhyme, onomatopoeia, alliteration, sibilance, assonance, character dialogue and tone can be an opportunity for students to get a proper 'feeling' for the poem, especially if they too read the poem aloud before or after hearing an audio recording. They can interpret the words for themselves in their own speech and practise the articulation of vocabulary and techniques. For instance, Jack Prelutsky's 'Bleezer's Ice Cream' became a rhyming pronunciation competition for my Year 7 class recently. The imagery created in war poems such as 'Exposure' by Wilfred Owen was more powerful to Year 10 students when they had heard and spoken the words. Year 12 students appreciated the complexity of T.S. Eliot's 'The Hollow Men' after its language, sound and flow was heard and then repeated.

Most of the poems on offer here have been recorded in a small second bedroom which has become an office and audio den. There have been a few which were voiced in Sydney's Botanical Gardens, sitting on a bench and taking in the resplendent views for inspiration, or on a rock overlooking the ocean at Cronulla. 'Ode to the West Wind' by Percy Bysshe Shelley was recorded in Warrumbungle National Park in northern NSW to convey the natural setting.

Although too much wind would have been a problem the trusty windsock, which covers the microphone, takes care of most extraneous noise.

The recordings

Since the poem recordings started a year ago, using a professional audio recorder and

editing software, there have been tens of thousands of listens to over 200 poems. They are uploaded to my SoundCloud account and organised into playlists. Just clicking on the relevant link will take you to the poem or playlist, which will then play via speakers or ear/headphones. Much of the poetry was recorded at the suggestion of friends and poetry lovers, but teachers have also made contact via resource groups and forums to request audio versions of HSC texts in NSW and GCSE texts in the UK.

The HSC recordings began with Rosemary Dobson and Kenneth Slessor for the Common Module: Texts and Human Experiences. Soon afterwards there was a suggestion that the T.S. Eliot selection for Advanced Module B could do with bringing to life (someone commented that his own voice was less than sparkling!). Then the Rural Learning Exchange asked me to add the Oodgeroo Noonuccal poems for Standard Module B. Later the Exchange also requested I record Henry Lawson's Short Stories for Standard Module A. As a Brit I was unsure whether my voice would be right, but I enjoyed reading the narratives into the recorder, without resorting to attempting an Australian accent! By way of contrast, the more recent poems recorded include David Malouf's 'Earth Hour' selection for Advanced Module B, the prescribed poems from Contemporary Asian Australian Poets list and 'Harbour dusk' by Robert Gray.

How to access and play the poems

Select the **play** button to listen to an audio poem as a class using speakers. (**Pause** and **repeat** options are also available.) Links can be copied and pasted into documents/presentations/student resources/learning platforms. If you want to search for a poem, you can access the [entire collection on SoundCloud](#) and type the title or poet in the search bar.

Focusing on voice/sound only is a powerful learning tool which gives students an opportunity to hear poets' words spoken and a chance to appreciate rhythm, stress, cadence and intonation. Recorded sound files can of course be heard again and again when studying a poem. It is hugely satisfying therefore that this educational project has become a user-friendly resource for teachers and learners.

General playlists

[The Australian poets playlist \(SCIS 5369001\)](#)

1. Harbour dusk by Robert Gray
2. Bushfire weather by Jeri Kroll
3. Drifters by Bruce Dawe
4. In the park by Gwen Harwood
5. Humility by Ambelin Kwaymullina
6. Aboriginal Australia by Jack Davis
7. Country towns by Kenneth Slessor
8. The past by Oodgeroo Noonuccal
9. If you go softly by Jennifer Kelly
10. Clancy of the Overflow by A B Patterson
11. New accents by Ouyang Yu
12. My Country by Dorothea Mackellar
13. Moonstruck by Kev Carmody
14. Summer's end by Rosemary Dobson
15. Byron Bay: Winter by Robert Gray
16. Home by Miriam Wei Wei Lo
17. Aquarius by David Malouf
18. Meditation on a bone by A D Hope
19. Circular breathing by Jaya Savige
20. We are going by Oodgeroo Noonuccal
21. Out of time by Kenneth Slessor
22. The conversation by Rosemary Dobson
23. Ye wearie wayfarer by Adam Lindsay Gordon
24. An absolutely ordinary rainbow by Les A Murray
25. Ode to a sausage by Kel Richards
26. The double man by Ouyang Yu
27. Aquarius II by David Malouf
28. The surfer by Judith Wright

[Classic poems from wordsmiths of centuries past playlist \(SCIS 5369029\)](#)

1. Home thoughts from abroad by Robert Browning
2. Spring by Gerard Manley Hopkins
3. Ode to melancholy by John Keats
4. Remember by Christina Rossetti
5. Ballade a la Lune by Alfred de Musset
6. When you are old by W B Yeats
7. The Dalliance of eagles by Walt Whitman
8. Anthem for a doomed youth by Wilfred Owen
9. Things I want decided by Izumi Shikibu
10. To Autumn by John Keats
11. Hope is the thing with feathers by Emily Dickinson
12. The Jumblies by Edward Lear
13. Neutral tones by Thomas Hardy

14. The farmer's bride by Charlotte Mew
15. Sonnet 29: I think of thee by Elizabeth Barrett Browning
16. Sonnet 18 by William Shakespeare
17. Porphyria's lover by Robert Browning
18. Love's philosophy by Percy Bysshe Shelley
19. When we two parted by Lord Byron
20. Invictus by Ernest Henley
21. The old year by John Clare
22. Cradle song by Thomas Dekker
23. Another friend like me by Jalaludin Rumi
24. The sun rising by John Donne
25. Exposure by Wilfred Owen
26. Charge of the Light Brigade by Alfred Lord Tennyson
27. The raven by Edgar Allan Poe
28. My last duchess by Robert Browning
29. Extract from 'The prelude' by William Wordsworth
30. London by William Blake
31. Ozymandias of Egypt by Percy Bysshe Shelley
32. For the fallen by Laurence Binyon
33. Sonnet 43 by William Shakespeare
34. Clancy of the Overflow by A B (Banjo) Patterson
35. Ode to the west wind by Percy Bysshe Shelley
36. I wish I could remember that first day by Christina Rossetti
37. Sonnet 116 by William Shakespeare
38. Excerpt from 'The wife of Bath prologue' by Geoffrey Chaucer
39. The owl and the pussycat by Edward Lear
40. Crossing the bar by Alfred Lord Tennyson
41. Seven Haikus by Matsuo Basho
42. Leisure by W H Davies
43. Dulce et decorum est by Wilfred Owen
44. Desiderata by Max Ehrmann
45. Ye wearie wayfarer by Adam Lindsay Gordon
46. Count that day lost by George Eliot
47. If by Rudyard Kipling
48. La belle dame sans merci by John Keats
49. Simon Lee by William Wordsworth
50. Jabberwocky by Lewis Carroll
51. He wishes for the cloths of Heaven by W B Yeats
52. Because I could not stop for death by Emily Dickenson
53. Our pipes by Henry Lawson (short story)
54. Shooting the moon by Henry Lawson (short story)
55. The union buries its dead by Henry Lawson (short story)
56. Christmas carol by Christina Rossetti

Poems for Years 7-12 playlist (SCIS 5369053)

1. Bored by Margaret Atwood
2. Kid by Simon Armitage
3. Cut by Sylvia Plath
4. Ode to dirt by Sharon Olds
5. Be specific by Maureen Applegate
6. Human family by Maya Angelou
7. A hot day by A S J Tessimond
8. Dreams by Langston Hughes
9. Introduction to poetry by Billy Collins
10. Climbing my grandfather by Andrew Waterhouse
11. Follower by Seamus Heaney
12. Winter swans by Owen Sheers
13. Walking away by Cecil Day-Lewis
14. Everybody's free (to wear a face mask) the class of 2020
15. The thought fox by Ted Hughes
16. The howling of wolves by Ted Hughes
17. Openin' night by Shel Silverstein
18. Love's a little boy by W H Auden
19. The sound collector by Roger McGough
20. Blessing (Beannacht) by John O'Donohue
21. Dirty face by Shel Silverstein
22. Gathering leaves by Robert Frost
23. Lying in a hammock at William Duffy's farm in Pine Island Minnesota by James Wright
24. Turn on your light by Ben Okri
25. Seven Haikus by Matsuo Basho
26. Aubade by Philip Larkin
27. Bleezer's ice cream by Jack Prelutsky
28. Not my best side by U V Fanthorpe
29. The reader of this poem by Roger McGough
30. The road not taken by Robert Frost
31. Poetry by Pablo Neruda (translated from La Poesia)



A professional audio recorder and editing software were used to record the poems

HSC English playlists

T S Eliot playlist (SCIS 5369091)

1. Preludes
2. Rhapsody on a windy night
3. The love song of J Alfred Prufrock
4. Journey of the Magi
5. The hollow men

David Malouf playlist (SCIS 5369101)

1. Earth hour
2. Ladybird
3. Towards midnight
4. Aquarius II
5. Eternal moment at Poggio Madonna
6. A recollection of starlings: Rome '84
7. Aquarius
8. Radiance

Kenneth Slessor playlist (SCIS 5369075)

1. Wild grapes
2. William Street
3. Vesper song of the Reverend Samuel Marsden
4. Gulliver
5. Out of time
6. Beach burial

Robert Gray playlist (SCIS 5369141)

1. Byron Bay: winter
2. Harbour dusk
3. 24 poems
4. Journey, The North Coast
5. Description of a walk
6. Flames and dangling wire

Contemporary Asian Australian Poets playlist (SCIS 5369137)

1. Mid-autumn mooncakes by Eileen Chong
2. Some new perspectives by Ee Tiang Hong
3. My Hakka grandmother by Eileen Chong
4. The double man by Ouyang Yu
5. Circular breathing by Jaya Savige
6. New accents by Ouyang Yu
7. Home by Miriam Wei Wei Lo
8. Popcorn by Carol Chan
9. Translucent jade by Maureen Ten
10. Mother by Vuong Pham
11. This is where it begins by Merlinda Bobi



More than 200 poems and short stories are available via SoundCloud

Oodgeroo Noonuccal playlist (SCIS 5369120)

1. Visit to Sun Yat-Sen Memorial Hall
2. A lake within a lake
3. The past
4. Sunrise on Huampu River
5. China ... woman
6. Entombed warriors
7. Reed Flute Cave

Rosemary Dobson playlist (SCIS 5369112)

1. Canberra morning
2. Over the hill
3. Cock crow
4. The conversation
5. Amy Caroline
6. Young girl at a window
7. Summer's end

Henry Lawson short stories playlist (SCIS 5369109)

1. Shooting the moon
2. The union buries its dead
3. Our pipes
4. The loaded dog
5. The drover's wife

Note: Poems are continually added to these playlists. Consequently, the titles and their order may be different to the lists published above.

How to cite this article – Jarvis, A. (2021). The power of audio poetry in the classroom. *Scan*, 40(6).

Exploring the resurgence and educative potential of 'Dungeons & Dragons'

Premeet Sidhu

English/History teacher and PhD candidate, University of Sydney

Dr Marcus Carter

Senior Lecturer in Digital Cultures, University of Sydney



Premeet Sidhu and Dr Marcus Carter delve into the educational possibilities provided by the role-playing game 'Dungeons & Dragons'.



Imagine a time when flare jeans are in vogue, superhero media is dominating screens, and groups of teens are playing the cool new Dungeons & Dragons (D&D) game. No! It's not 1974. It's 2021! But, with so many thought-provoking and engaging videogames on offer, why exactly are students so interested in playing a 47-year-old role-playing game in their leisure time?

In the context of games and learning, the educational potential of non-digital gameplay is often overlooked. The tabletop role-play game 'Dungeons & Dragons' (D&D), first released in 1974, has had one of its biggest years ever during the pandemic. Understanding the enduring

and unique appeal of D&D can help educators recognise the rich learning opportunities made possible with pen and paper roleplaying. As a PhD candidate, Premeet Sidhu, is investigating the modern resurgence and appeal of 'Dungeons & Dragons' and how such gaming experiences can be applied to research in wider areas of game studies, education and media.

What is 'Dungeons & Dragons'?

On an unusually warm Friday night in May, most of NSW is beginning to wind down. Some people are squeezing in a relaxing walk, others are catching up for a gathering with friends, or perhaps, if they're lucky enough, some are keeping cosy under a blanket watching their guilty pleasure of choice on Netflix. But that is not the case for an intrepid group of D&D adventurers! This motley crew is busy preparing for the vicious onslaught of the night ahead ... Ensuring that everyone is well fed and watered before the night's activities take place. The courageous travellers share some witty banter and ritually pre-roll their gameplay dice to get rid of all the bad rolls, or 'natural ones'— a commonplace ritual in the realm of 'serious' D&D play. In their shared imagined reality of the D&D world the players' characters begin to don worn leather armours and prepare their weapons and spell slots. Tonight, they are faced with the one thing they fear the most – failure!

Put simply, Dungeons & Dragons is a game in which groups of players meet in person to tell deep stories and play 'make-believe' with their friends – sometimes using dice rolls to determine the outcome of their actions. Unlike many of its videogame counterparts that often have predetermined narratives, themes, or characters, D&D's flexible ruleset gives players creative agency over the game world they inhabit, thereby enabling them to explore stories that are unique, and that cater to their own

interests and playing styles. In D&D, you can do and be whatever you want.

Created in 1974, D&D was often viewed as a niche and overly complex high fantasy hobby, further maligned when it became embroiled in the 'Satanic panic' of the 1980s. However, the play and reception of D&D has evolved dramatically since then.

D&D's publishers, Wizards of the Coast, have publicly committed to creating a game that presents 'humanity in all its beautiful diversity'. They proclaim, 'we want everyone to feel at home around the game table and to see positive reflections of themselves within our products' (Wizards of the Coast, 2020).

A revamped and more inclusive ruleset that debuted in 2014, along with its humorous depictions in popular media shows like Netflix's 'Stranger Things' and the enormously popular YouTube series and Twitch Stream 'Critical Role', have facilitated the game's biggest year ever, with sales jumping another 33% after a six-year growth streak (Sidhu & Carter, 2020).

Highly popular among teens and young adults, D&D offers an enjoyable and social escape from the stresses of the pandemic, but more than that, it can challenge players to reflect on themselves and their real worlds through rich learning experiences that are organically embedded within the game.

How 'Dungeons & Dragons' can support education outcomes

D&D facilitates appealing and engaging experiences of creative and collaborative storytelling which develop many of the general capabilities outlined in the Australian Curriculum (ACARA, 2021). Playing D&D can foster the development of literacy, critical and creative thinking, and ethical understanding skills.

Literacy

Through the role playing encouraged by D&D, players are developing the knowledge and skills required to access, understand, analyse, and evaluate information, making meaning from activities and discovering ways to apply these to their lives beyond school (ACARA, 2021). D&D players read lexically dense game handbooks filled with tables of rules and jargon, they consume (and sometimes create)

a wide variety of content, and they implicitly modify and modulate their spoken language and expressions depending on their audience and embodied identity.

Some players even spend hours on creative writing to embellish their character's backstory or drawing maps and visual representations of game elements from previous play sessions. Echoing research from Nicholas Mizer (2019), 'as players define and re-define a game world, they must take apart some of its pieces, make new sense of them, and then communicate the new state to one another by reassembling the words and images used to conjure the world' (p 3). Thus D&D can develop student literacies in an innovative and engaging way that allows them to articulate and make sense of imagined and real worlds.

Critical and creative thinking

In addition to the inherent development of literacy, D&D players are also honing their critical and creative problem-solving abilities (ACARA, 2021). In our research into learning experiences in D&D, many players indicated that critical and creative thinking were two of the most important real-life skills learnt through D&D play.

For one of the players interviewed in our research into D&D's resurgence, engaging with D&D allowed them to improve their confidence in critical thinking which, they felt, resulted in securing a job. For other players, D&D was viewed as an opportunity to challenge normative ways of thinking and flex their creativity. In one D&D game we observed, players were required to solve a logic puzzle to lift a wooden door that would allow their characters to progress into the next room of the dungeon. However, through creative discussion and collaboration, players subverted expectations by using their fire spells to start burning through the locked wooden door instead of solving the logic puzzle to open it as intended.

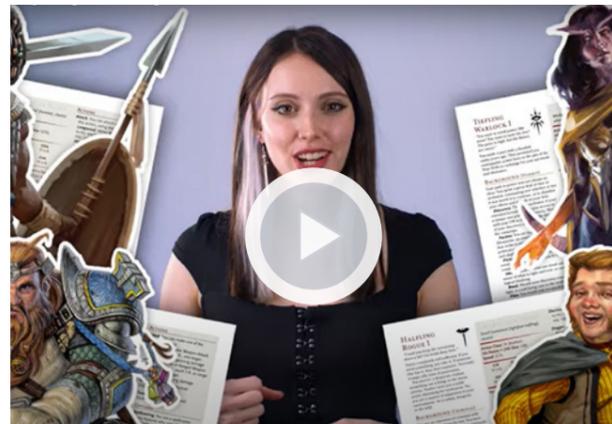
During reflections, the Dungeon Master (DM) indicated that while he had not accounted for his players to simply burn through the obstacle instead of solving the riddle, he had accepted it as a legitimate solution and praised the creativity of the players, asserting it as a memorable moment of the game session. Being able to respond to challenges both

critically and creatively within D&D, sets up players for success in the real-world where they can transfer and apply their creativity and deductive reasoning skills more confidently.

Ethical values

As noted by Pat Thomson (2002), each student brings to the classroom a diverse array of knowledge, experiences, and dispositions based on their unique upbringings. To explore nuanced ethical issues successfully in the classroom, as per the Australian Curriculum, students must 'develop an awareness of the influence that their values and behaviour have on others' (ACARA, 2021). D&D presents many opportunities for players to openly discuss and navigate complex ethical issues.

One prominent ethical debate navigated in many D&D groups is the predisposition of games towards violence. One of the players we interviewed recalled that their group's ethical and moral values have been questioned as [they] slowly began to realise that defiling graves, pillaging, and outright murder weren't good choices. Their thinking followed along the lines of, 'Yes, this bandit has tried to rob us but deep down we can see he is malnourished and desperate. So, we help him out instead.' The group claimed that far more of their games have been about stopping destruction of natural habitat, native animals, and people. They explained, 'We take much more enjoyment from political games these days.' Being able to understand different lived experiences and perspectives, empathising with reasoning that differs to your own, and finding alternative meanings behind actions and outcomes, encourages D&D



YouTube video: '[What You Need to Play Dungeons & Dragons](#)' by Dungeons & Dragons.

players to apply nuanced ethical understanding to the complexities of real-life issues.

Getting started with 'Dungeons & Dragons'

The YouTube video, [What You Need to Play Dungeons & Dragons](#) [3.01], clearly explains what is required to start playing.

D&D is relatively simple to set up and can be played both in person or online depending on your needs.

Equipment

D&D requires minimal equipment to run which makes it ideal to incorporate within the classroom or as an extracurricular activity. All you need is:

- at least two players – one player to narrate the adventure and be the Dungeon Master (DM - usually the teacher/educator) and at least one other player to play through the adventure
- a set of polyhedral dice (either physical or [digital](#))
- the free [basic rules](#) and [character sheets](#)
- imagination.

Additionally, there is a plethora of supplementary materials available. While these resources are not necessary to run an engaging game of D&D, most of the tools mentioned below can enhance your games and support both players and DMs throughout the adventure:

- Officially published [Wizards of the Coast material](#) such as:
 - all-inclusive starter sets for beginners
 - the 'core rulebooks' which include the Player's Handbook, Monster Manual, and Dungeon Master's Guide
 - prewritten adventures
- [DMs Guild](#) is a website that offers player-made D&D content and pre-written adventures that are usually free or come at small cost which supports the designer(s)
- [D&D Beyond](#) is an online digital toolset and game companion for 5th edition D&D
- Local game stores can also provide:
 - physical adventure grids and battle maps
 - miniature character and monster figurines
 - ways for D&D players to connect with each other and join other groups.

Target audience

D&D can be adapted for a variety of different purposes, players, and ages. For younger adventurers (aged between 8-12 or in primary school) Wizards of the Coast has published [The Young Adventurer's Collection](#) which introduces key characters, creatures, language, and locations relevant to D&D in an easily readable manner. Adventurers over the age of 12 (or in high school) would be able to engage with most of the mainline D&D content with discretion.

Additional considerations

Though much of D&D's appeal is derived from being able to explore anything that the players can imagine, we recommend having a conversation with everyone before beginning the campaign to establish any boundaries there may be regarding game experiences, themes, or content that players would explicitly like to explore or avoid.

Conclusion and additional resources

Across the curriculum and in all key learning areas, students are encouraged to engage with a variety of texts and modes that allow them to make meaning in ways that are imaginative, creative, interpretive, critical, and powerful. While there is growing use and research of game-based learning within classrooms, the value of students' leisurely gaming practices and literacies outside of the classroom are often overlooked.

As the interest and playing of games like D&D continues to increase, it is important as educators to be able to acknowledge and utilise the rich gaming literacies and experiences present in our students 'virtual school bags' (Thomson, 2002) to reflect on and inform our own teaching pedagogies and practices.

If you would like to use D&D within your classroom or teaching pedagogy, the following resources offer a valuable starting point:

- [D&D for beginners: Learn about the game](#)
- [Learning Dungeons & Dragons YouTube playlist](#)
- [Teaching with D&D Resources.](#)

Finally, if you are already running D&D within the classroom or as an extracurricular activity, please reach out to us! We would love to hear from you and include your experiences within our research.

References and further reading

Australian Curriculum Assessment and Reporting Authority (ACARA). (2021). [Critical and Creative Thinking](#).

Australian Curriculum Assessment and Reporting Authority (ACARA). (2021). [Ethical Understanding](#).

Australian Curriculum Assessment and Reporting Authority (ACARA). (2021). [General Capabilities](#).

Australian Curriculum Assessment and Reporting Authority (ACARA). (2020). [Literacy](#).

Mizer, N. J. (2019). *Tabletop role-playing games and the experience of imagined worlds*. Palgrave Macmillan.

Sidhu, P., & Carter, M. (2020). [The critical role of media representations, reduced stigma, and increased access in D&D's resurgence](#). In *Proceedings of DiGRA 2020* (pp. 1-20).

Thomson, P. (2002). *Schooling the rustbelt kids. Making the difference in changing times*. Allen & Unwin.

Wizards of the Coast. (2020). [Diversity and Dungeons & Dragons](#).

How to cite this article – Sidhu, P. & Carter, M. (2021). Exploring the resurgence and educative potential of 'Dungeons & Dragons'. Scan, 40(6).

Writer biographies



Dr Lucinda McKnight

Dr Lucinda McKnight is a senior lecturer in pedagogy and curriculum at Deakin University, Melbourne. She has a background as a software producer and project manager of national digital education projects. She has research interests in the teaching of writing and the preparation of English teachers for a future in which forms of communication will be rapidly changing.



Anton Jarvis

Anton Jarvis is an audio specialist and English Teacher. He moved into education after a 15 year career in radio. He has taught English in secondary schools in the UK and Australia, and English as an additional language to adult international students. Anton hugely enjoys reading and voicing poetry. His radio program experience comprised feature making, interviewing, news reporting, production, writing for broadcast and presentation, and included a documentary that won a UK Radio Academy award in 2003.



Premeet Sidhu

Premeet Sidhu is an English and History teacher and is a PhD student at the University of Sydney. Her PhD focuses on understanding the modern resurgence and appeal of 'Dungeons & Dragons'. Her current research interests include investigating how meaningful player experiences in both digital and non-digital games can be applied and considered in wider areas of game studies, education, and media.



Dr Marcus Carter

Dr Marcus Carter is a Senior Lecturer in Digital Cultures at the University of Sydney. His research focuses on play and digital games, with current research projects on children's digital play cultures and emerging mixed reality technologies. He is the former president of the Digital Games Research Association of Australia and author of books such as 'Treacherous Play' (MIT Press).