Where Educators Can Benefit From the Wisdom of Clowns

Sean McCusker

Northumbria University, UK

Abstract

There is much discourse around the need for learners to be allowed to make mistakes. This is embedded in established aphorisms such as "It's OK to make mistakes" or "There is no such thing as a silly question". Yet, educators themselves are often reluctant to make mistakes or appear uninformed or 'stupid' themselves. Conventional forms of teacher education which try to instil these values and practices, are largely unsuccessful, not least because Education is increasingly constructed as a mechanistic operation with clear measurable outcomes (Nørgård, Toft-Nielsen and Whitton, 2017) and any pedagogy which deviates from this, creates risk of failure. Into this space Design Thinking is introduced, underpinned by creative and innovative, humancentred and empathetic approaches which encourage the abandonment of preconceptions, promote improvisation and experimentation, challenge assumptions and reframe the issues at hand. The less conventional approach proposed here suggests that teachers can become more able to accept their fallibility and be familiar with risk and failure, through observing and identifying with, a profession whose success is predicated on failure, that of the clown. This article proposes that many of the principles of Design Thinking are second nature to clowns. Through inspection of the principles and practices of clowns, their applicability in the pedagogical domain is emphasised, allowing the recommendation to be made that educators should observe the performances of professional clowns and through this, learn to embody a little of the 'clown spirit' allowing them to be more amenable to failure, fallibility and notknowing.

Keywords: Clown, Failure, Fallibility, Teaching, Connection Empathy

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1. Introduction

The inspection of educational practices through an alternative lens is well established, for example: Ward (2018) discusses Augusto Boal's use of theatre (Boal, 2000) as a pedagogical tool to educate and inspire the audience and the actors as agents of change, Hoult and Gibson (2023) and Ward (2016) use literary analysis as a lens to explore educational policies and practices, Lake, Jackson and Hardman (2015) provide a review and summary of the various applications of the arts in medical education, running through theatre, music and the visual arts as applied in practice, pedagogy and assessment. This paper takes a similar approach to clowning and education as Eisner (2002) proposed for creative arts in education, making the case that the skills needed for clowning are relevant in all aspects of education and pedagogy, across curriculum design, teaching practice, and the teaching and learning environment. In the current context, the term 'clown' is used in the widest sense, including fools, bouffon, jesters and clown characters from various cultural contexts. Whilst it is recognised that fools, clowns and jesters may have played different roles within history and culture in Europe, for example in the plays of Shakespeare, these nuances become less relevant in the wider international perspective, where none of these labels necessarily fit the clown characters which are encountered.

Clowns have played a central role in societies, across cultures and across history, in the royal courts of medieval Europe and of Southern India, the clown societies of Native American and African cultures, or the Holy Fools of the early church. Despite common, modern perceptions, the clown has always played a role in protecting and safeguarding the people and cultures in which they exist. The medieval jester was one of the few who spoke 'truth to power' to the King and so held him in check, at the same time protecting him from the dissatisfaction and dissent of his courtiers as well as protecting the King's subjects from his worst excess. The Koyemshi of the natives of the Southwestern United States, sheltered their people from the incursion of outside cultures through the mockery and satire of the practices of the invasive 'other' (Freese, 1991). The Koreduga amongst the Bamana of West Africa would attend the initiation ceremonies of adolescents entering adulthood and parody the 'undesired' behaviour of the initiate 'boys' (Colleyn and Farrell, 2001). As 'wise fools', the Koreduga play with the meaning and significance of everyday practices, mocking and ridiculing excessive, adolescent behaviour thus demonstrating a world in which boys did not become adults. In their actions, the Koreduga and the Koyemshi challenge societal ideas and conventions (Brink, 1978), demonstrating what is acceptable by enacting that which is not. The masks worn by the Koreduga, whilst providing anonymity and impunity in their public performances, also represent the freedom which these characters had achieved through spiritual completeness (Zahan, 1974). In common with fools, jesters and clowns across cultures, they were free from social conventions, yet their role within society was often as a force for conservatism, maintaining standards and forestalling revolution or societal disruption.

In modern times, clowns are still seen playing this role, for the benefit of society, in a variety of contexts, outside of the circus ring. They have been seen in hospitals, perhaps most famously through the work of Hunter 'Patch' Adams and the Gesundheit Institute, but also in many organisations around the world (Finlay, Baverstock and

Lenton, 2014), which combine the clinical with the psychosocial and practice healthcare with a belief in the therapeutic benefit of humour. Clowns are to be found in political action, such as the Rebel Clown Collective and ClownBloq and the notorious but short-lived Clandestine Insurgent Rebel Clown Army (CIRCA) (Klepto, 2004), who came to prominence through their actions at the 2005 G8 summit at Gleneagles in Scotland. These rebel clowns reinterpret the act of protest, through absurdity setting out to undermine the position of authority and disrupt through the inversion of norms (Ramsden 2015). More recently, clowns were to be found at the border of Ukraine and Moldova, greeting and entertaining refugees as they fled their homes (Parsley, 2022). These clowns were part of a wider body of humanitarian clowns, including Clowns Without Borders (CWB) found in areas of crisis and conflict. Whilst this may seem incongruous or insensitive, such clowns are well-received by their audiences. These clowns believe it is their duty to appear where they are least expected and often most needed. This insight into the variety of clowns across time and location, demonstrates that clowns are not as simple as the slapstick character seen at the circus on the local green. Clowns have played important roles throughout history and continue to do so. Central to the role of the clown is their responsibility to the societies in which they exist. The suggestion that clowning can be introduced to educational processes, whilst unusual (McCusker, 2021), is no more outlandish than its introduction to healthcare, politics, humanitarianism or any other mainstream activity. The principles of clowning can bring a new approach to addressing established issues and allow them to be viewed in a different light offering opportunities to reconsider how these issues might be addressed.

2. Literature review

Despite early perceptions in the educational domain, that mistakes were to be eliminated (Schleppenbach et al., 2007), more enlightened attitudes have developed, allowing that student mistakes provided opportunities for diagnostic assessment, for example, to identify procedural 'bugs' in arithmetic or verbal problems in mathematics (Brown and VanLehn, 1980; Bell, Swan and Taylor, 1981). There is now wide consensus within teaching and learning that it is acceptable for students to be wrong. Aphorisms such as 'learn from your mistakes' are commonly found in many languages around the world (Rach, Ufer and Heinze, 2013). More recent research suggests that errors provide opportunities for teaching and learning, building character and resilience and playing an important role in the development of effective mental models (Jones and Endsley, 2000) and in the understanding of 'what doesn't work' (Oser and Spychiger, 2005) and providing wider opportunities to facilitate deep learning (Tulis, Steuer and Dresel, 2018). VanLehn (1987, 1988, 1990, and 1999) writes extensively about how learning occurred where students reached an impasse, broadly defined as a situation where the student recognises that their knowledge and understanding is incomplete; getting stuck, detecting an error or expressing uncertainty. VanLehn et al. (2003, p. 16) suggest that an impasse motivates the student to take an "active role in constructing a better understanding of the principle". McMillan and Moore (2020), in reviewing research in the fields of neurology, mindsets, and self-regulation make the case that being wrong is an essential part of enhancing student learning and motivation and plays an important role in the development of a number of positive learning dispositions. Dweck (2006) suggests that students with a 'fixed-mindset' commonly struggle with making mistakes or being seen to be wrong, whereas those with a growth mindset tend to face challenges by considering how they might be overcome and see those same challenges as an opportunity to stretch or develop themselves. However, whilst the benefits of learner error are well established and educators use a range of discursive strategies to create 'error-friendly' environments, they are often less keen to make mistakes themselves, often seeing this as a challenge to their ego or self-esteem (Santagata, 2005). These strategies which encourage improvisation and adaptation are well established in the area of Design Thinking, aligned with Lockwood's (2010) vision of fast learning and rapid prototyping, and within the educational domains of problem-solving, enterprise and creativity, for example (Salamatov and Souchkov, 1999; Dobson and Walmsley, 2021; Laduca et al., 2017). Unfortunately, in the educational domain Design Thinking and associated creative processes may be stymied by resistance and accountability. Structures such as policy, inspectorates, the press and the stakeholder accountability, create environments which make education a predictable and risk-free process. However, Gert Biesta (2015) argues that one of the weaknesses of education is that risk is being taken out of it. Biesta makes the case that education should always involve risk. Attempting to be overly prescriptive and removing risk from an interaction between human beings might result in education being removed altogether.

Despite explicit statements, employed to foster 'mistake friendly' environments, in the UK at least, the implicit message understood by most students is that they are to be avoided (Ingram, Baldry and Pitt, 2014). A valid evaluation of a teacher's attitude to errors and mistakes is achieved through observation of their attitude to their own mistakes, rather than those of their students (Lake, 2017). Hatfield, Cacioppo and Rapson (1994) make the point that that students will commonly mimic the emotional response of their teachers, their "publicly expressed affective pathway". In this vein Tainio and Laine (2015) discuss the concept of 'emotional contagion', that is, the sharing of emotions within interactions. Thus, the teacher's response to mistakes and errors makes a significant contribution to the 'error climate' of the learning environment (Steuer, Rosentritt-Brunn and Dresel, 2013). However, such forms of teaching are unusual, both in schools and in the Higher Education context. Despite the rhetoric, many educators are reluctant to embrace failure and be seen as fallible by their students. This presents a challenge for embedding Design Thinking principles in teaching and learning environments and alternative approaches need to be sought to overcome resistance in beliefs, attitudes and behaviours.

3. Failure of Clowns

These insights into the virtues and benefits of failure might be seen as 'deep wisdom' amongst teaching professionals and educators. Even at best, whilst educators recognise the creative spaces afforded to students by the creation of 'error-friendly' environments, the mantle of expertise adopted by many educators and particularly the academic positioning of those within HE, creates challenges for those who wish to explore the 'error-space'. There are few role models and little pedagogic practice to offer guidance to those who wish to start being wrong. Fortunately, this 'deep wisdom' for educators is merely a statement of the obvious for clowns. In the examples given above and in many cultures around the world, the clown makes their contribution to

society through behaving wrongly. Sometimes, this is in the role of safeguarding amongst the Heyoka and the Koreduga, other times as the fool within the carnivalesque (Bakhtin, 1984) subverting and more importantly, inverting power relationships within established hierarchies.

Making mistakes is central to clown performance. It is their readiness to make mistakes and furthermore their reliance on mistakes, which allows them to shape their performance. Through the frustration of the clown's efforts and their ultimate failure, the clown builds their relationship with their audience. Two of the most accomplished clowns of the modern age, Aziz Gual and Nola Rae (Lebank and Bridel, 2015) separately, describe the act of clowning as that of holding up a mirror to the audience, for them to see themselves reflected. Through this recognition of themselves ("their ridiculous selves"), which Gual terms the 'everyman', within the performance of the clown, the clown and the audience build connection and empathy. Gual takes the approach that failure is a formative process. One from which one emerges strengthened. Another clowning great Micha Usov (Lebank and Bridel, 2015) sees failure as opportunity, one for him to extend and go 'above ourselves', beyond normal practices, discovering what can be achieved in these unexplored spaces. This approach shows a way for educators, to invest in and embrace failure, rather than avoiding it or seeking to conceal it. Usov reveals failure to be a means to transcend, to create something 'extraordinary'.

In his Clown Manifesto, Nalle Laanela, advances the tenet that "It's not about acting stupid, it's about daring to be perceived as stupid" (Laanela and Sacks, 2015, p. 15). In this he presents stupidity as naivety, a childlike innocence, open to understanding the world around you. Such clown viewpoints invite us to recognise that taking a risk and being wrong can produce its own rewards. In doing so, educators can create the environment for their students to benefit from all the advantages of being wrong or appearing stupid. The creation of this environment is within the gift of the educator if they are willing to relinquish their authority and accept their fallibility. Just as Tainio and Laine (2015) identify 'emotional contagion' as a potential barrier to an 'errorfriendly' environment, Avner 'The Eccentric' Eisenberg (Lebank and Bridel, 2015) recognises that performers will often communicate different emotions to the ones they intend, that audiences can be sensitive to these emotions, and reflect the emotions they perceive rather than those that are intended. Newton (2013) stresses the importance of the learner's mood and emotions on their cognition and learning and goes on to point out that it is often ignored or even seen as an impediment to learning. Such disregard for the emotional state of the audience must seem very alien to clowns such as Eisenberg, who goes so far as to pay close attention to his breathing, observing that audiences will closely follow the breathing of the performer and through this, he is able to control the tension and emotional responses of his audience. Eisenberg claims that clowns are 'all about failure' and reinforces the idea that failure is not something of which to be afraid. For him it is very much a part of the process of clowning. Those afraid of failure or appearing stupid should note that Eisenberg advocates the importance of failure and the separation of the individual from the act.

4. Caveats

Any discussions which include the phenomena of clowns or advocate fostering their inclusion within wider society will always raise the issue of coulrophobia or 'fear of clowns'. Although not specifically cited within DSM-5 (APA, 2013), studies (Planting, Koopowitz and Stein, 2022) have shown some extreme responses to clowns reported within social media, including disgust, fear, mistrust and even emesis. Sources of this have been attributed to early childhood experiences (Mackley, 2016), or culturally embedded associations with the occult, the divine and transgression (Welsford, 1961; Otto, 2001). These deeply rooted fears, along with more contemporary portrayals of clown as incompetent buffoons (McCusker, 2023a) give rise to suspicion and fear of clowns. However, in the current context it is worth remembering that as outlined earlier, clowns have always acted for the benefit of the societies in which they exist. The bad clowns and evil clowns of popular culture and media, those which we fear, do not serve this purpose and so fail to meet the definition of 'clown'. Instead, these characters merely dress as, or pretend to be, clowns, thus doing true clowns a disservice.

5. Conclusion

The case for clowns presented here is a novel approach to introducing and embedding Design Thinking principles within education processes, through the practices and philosophies of the clowning tradition. There is a case to be made that teachers have much to learn from clowns, there is a space for humour in the classroom and that teachers can learn something about stage presence and performance from the clown. These points may well be valid, but they do not get at the deeper meaning of what it means to be a clown across history and culture. Humour and stage presence can be learned from a number of performers and artistes, but these vary across cultures, challenging the universality of the messages which clowns have for educators. Across the various contexts in which they exist, the clown occupies the unique position of improvisation, vulnerability and failure, not seeking it, but recognising its importance and seeing it as opportunity, opportunity for connection and opportunity for development. The clown teacher, Andrea Jiménez, describes improvisation as winwin, "if you improvise and are successful you have the win of the success, if you improvise and fail, you have the win of the connection with the audience. There is no loss" (McCusker, 2023b, p. 145). Entwined within this view of improvisation and failure is the clowns constant and enduring occupation of the space of not-knowing. In becoming familiar with this uncomfortable space of doubt and disorientation, the clown is well-placed to accompany others in this space as they make their way on their educational journey.

Through this review and reconsideration of education through the lens of the clown, we can see that within the current Higher Education Environment that there is a need for the development of an 'error-space'. We teach in a time where technology shapes much of our environment and plays such an important role in redefining the nature of knowledge and how it is developed and generated. The internationalisation of education, globalisation and borderless communication creates new ways of knowing and of finding out. These new knowledge structures require us to shift our way of thinking about education and create spaces for students to challenge educators and for

educators to learn from students, embracing Freire's vision of the teacher-learner (Freire, 1985). Design Thinking provides a framework and philosophy for effecting this change. However, the clown spirit provides an alternative approach to embedding these ideas in teaching practices. In the circus, the clown is the one act which does not perform for the audience but instead with them. The clown tells the educator that through failure, recognition, connection and empathy, they can join the audience as a learner, embracing a 'libertarian' resolution of the teacher-learner divide.

6. References

- 1. American Psychiatric Association (APA) (2013), *Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR)*, Fifth Edition. Arlington, VA,
- 2. Bakhtin, M. M. (1984), *Rabelais and His World*. Translated by Hélène Iswolsky. Bloomington: Indiana University Press.
- 3. Bell, A., Swan, M. and Taylor, G. (1981), "Choice of operation in verbal problems with decimal numbers", *Educational studies in Mathematics*, Vol. 12, pp. 399-420. https://doi.org/10.1007/BF00308139
- 4. Boal, A. (2000), *Theatre of the Oppressed*. London: Pluto press.
- 5. Brink, J.T. (1978), "Communicating ideology in Bamana rural theatre performance", *Research in African literatures*, Vol. 9, No. 3, pp. 382-394.
- 6. Brown, J.S. and VanLehn, K. (1980), "Repair theory: A generative theory of bugs in procedural skills", *Cognitive science*, Vol. 4, No. 4, pp.379-426. https://doi.org/10.1016/S0364-0213(80)80010-3
- 7. Colleyn, J.P. and Farrell, L.A. (2001), "Bamana: the art of existence in Mali", *African Arts*, Vol. 34, No. 4, p.16.
- 8. Dobson, S. and Walmsley, B. (2021), "Fail fast, fail often... but don't fail this course! Business and enterprise education through the lens of theatre and the creative arts", *Industry and Higher Education*, Vol. 35, No. 4, pp.336-346. https://doi.org/10.1177/0950422220955071
- 9. Dweck, C.S. (2006), Mindset: The new psychology of success. Random House.
- 10. Eisner, E. W. (2002), "What can education learn from the arts about the practice of education?", *infed*, Available from: https://infed.org/mobi/what-can-education-learn-from-the-arts-about-the-practice-of-education/ [Accessed on 19 May 2023].
- 11. Finlay, F., Baverstock, A. and Lenton, S. (2014), "Therapeutic clowning in paediatric practice", *Clinical child psychology and psychiatry*, Vol. 19, No. 4, pp.596-605. https://doi.org/10.1177/1359104513492746
- 12. Freese, A.R. (1991), Send in the clowns: an ethnohistorical analysis of the sacred clowns' role in cultural boundary maintenance among the Pueblo Indians, Doctoral dissertation, New Mexico: The University of New Mexico.
- 13. Freire, P. (1985), "Reading the world and reading the word: An interview with Paulo Freire", *Language Arts*, Vol. 62, No. 1, pp.15-21.
- 14. Hatfield, E., Cacioppo, J., and Rapson, R. L. (1994), *Emotional contagion*. New York: Cambridge University Press.

- 15. Hoult, E.C. and Gibson, M. (2023), "The education and exclusion of heathcliff: a lesson on 'looked after' and 'previously looked after' children in schools from nineteenth-century literature", *Pedagogy, Culture & Society*, pp.1-16. https://doi.org/10.1080/14681366.2023.2177325
- 16. Ingram, J., Baldry, F. and Pitt, A. (2014), "The Interactional Treatment of Mathematical Mistakes", In: Barmby. P. (Ed.) *Proceedings of the British Society for Research into Learning Mathematics: From Informal Proceedings 34-1 (BSRLM)*, March 2014, pp. 67-72.
- 17. Klepto, K. (2004), "Making war with love: The clandestine insurgent rebel clown army", *City: Analysis of Urban Change, Theory, Action*, Vol. 8, No. 3, pp. 403-411. https://doi.org/10.1080/1360481042000313536
- 18. Laanela, P.N. and Sacks, S. (2015), *The clown manifesto*. London: Bloomsbury Publishing.
- 19. Laduca, B., Ausdenmoore, A., Katz-Buonincontro, J., Hallinan, K. P., & Marshall, K. (2017), "An Arts-Based Instructional Model for Student Creativity in Engineering Design", *International Journal of Engineering Pedagogy*, Vol. 7, No. 1, pp. 34–57. https://doi.org/10.3991/ijep.v7i1.6335
- 20. Lake, E. (2017), "To err is human. The management and emotional implications of teacher error", In: Dooley, T and Gueudet, G, (Eds.) *Proceedings of the Tenth Congress of the European Society for Research in Mathematics Education*. Dublin City University: Dublin, pp. 1122-1129.
- 21. Lake, J., Jackson, L. and Hardman, C. (2015), "A fresh perspective on medical education: the lens of the arts", *Medical Education*, Vol. 49, No. 8, pp.759-772. https://doi.org/10.1111/medu.12768
- 22. LeBank, E. and Bridel, D. (2015), *Clowns: In conversation with modern masters*. London: Routledge. https://doi.org/10.4324/9781315719757
- 23. Lockwood T. (2010), "The bridge between design and business", *Design Management Review*, Vol. 21, No. 3, p. 5. https://doi.org/10.1111/j.1948-7169.2010.00072.x
- 24. Mackley, J.S. (2016), "The fears of a clown", Paper presented to: *The Dark Fantastic: Sixth Annual Joint Fantasy Symposium*, UK: The University of Northampton, 2 December 2016, Available from: http://nectar.northampton.ac.uk/id/eprint/11270 [Accessed on 30 August 2023]
- 25. McCusker, S. (2021), "Alias the Jester What Can Clowns Tell Us about Teaching?", Gillespie, A. (Ed.) *Early Careers in Education: Perspectives for Students and NQTs*, Bingley: Emerald Publishing Limited, pp. 3-10. https://doi.org/10.1108/978-1-83982-584-220211004
- 26. McCusker, S. (2023a), "Calling politicians 'clowns' is a disservice to clowns yes, really", *The Conversation*, Available from: https://theconversation.com/calling-politicians-clowns-is-a-disservice-to-clowns-yes-really-194670 [Accessed on 30 August 2023]
- 27. McCusker, S. (2023b), *Pedagogy of the Clown: Clowning Principles in Education*, Cham: Palgrave MacMillan. https://doi.org/10.1007/978-3-031-39221-4

- 28. McMillan, J.H. and Moore, S. (2020), "Better being wrong (sometimes): classroom assessment that enhances student learning and motivation", *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, Vol. 93, No. 2, pp.85-92. https://doi.org/10.1080/00098655.2020.1721414
- 29. Newton, D.P. (2013), "Moods, emotions and creative thinking: A framework for teaching", *Thinking Skills and Creativity*, Vol. 8, pp.34-44. https://doi.org/10.1016/j.tsc.2012.05.006
- 30. Oser, F. and Spychiger, M. (2005), Lernen ist schmerzhaft: Zur Theorie des negativen Wissens und zur Praxis der Fehlerkultur. Weinheim: Beltz.
- 31. Otto, B.K. (2001), Fools are everywhere: The court jester around the world. Chicago: University of Chicago Press.
- 32. Parsley, A. (2022), "Clowns Spotted at Ukraine's Border Making Refugee Children Smile in 'Universal Language' of Laughter", *People*, Available from: https://people.com/politics/clowns-ukraine-border-making-refugee-children-smile-laughter [Accessed on 30 August 2023]
- 33. Planting, T., Koopowitz, S.M. and Stein, D.J. (2022), "Coulrophobia: An investigation of clinical features", *South African Journal of Psychiatry*, Vol. 28, No. 1, pp.1-4. https://doi.org/10.4102%2Fsajpsychiatry.v28i0.1653
- 34. Rach, S., Ufer, S., and Heinze, A. (2013), "Learning from errors: effects of teachers training on students' attitudes towards and their individual use of errors", *PNA*, Vol. 8, No. 1, pp. 21-30. http://doi.org/10.30827/pna.v8i1.6122
- 35. Ramsden, H. (2015), "Clowns, buffoons and the killing laugh", *The European Journal of Humour Research*, Vol. 3, No. 2/3, pp.145-163. https://doi.org/10.7592/EJHR2015.3.2.3.ramsden
- 36. Salamatov, Y. and Souchkov, V. (1999), *TRIZ: the right solution at the right time:* a guide to innovative problem solving. Hattem: Insytec.
- 37. Santagata, R. (2005), "Practices and beliefs in mistake-handling activities: A video study of Italian and US mathematics lessons", *Teaching and Teacher Education*, Vol. 21, No. 5, pp.491-508. https://doi.org/10.1016/j.tate.2005.03.004
- 38. Schleppenbach, M., Flevares, L.M., Sims, L.M. and Perry, M. (2007), "Teachers' responses to student mistakes in Chinese and US mathematics classrooms", *The Elementary School Journal*, Vol. 108, No. 2, pp.131-147. https://doi.org/10.1086/525551
- 39. Steuer, G., Rosentritt-Brunn, G. and Dresel, M. (2013), "Dealing with errors in mathematics classrooms: Structure and relevance of perceived error climate", *Contemporary Educational Psychology*, Vol. 38, No. 3, pp.196-210. https://doi.org/10.1016/j.cedpsych.2013.03.002
- 40. Tainio, L. and Laine, A. (2015), "Emotion work and affective stance in the mathematics classroom: the case of IRE sequences in Finnish classroom interaction", *Educational Studies in Mathematics*, Vol. 89, No. 1, pp.67-87. https://doi.org/10.1007/s10649-015-9591-5
- 41. Tulis, M., Steuer, G. and Dresel, M. (2018), "Positive beliefs about errors as an important element of adaptive individual dealing with errors during academic

- learning", Educational Psychology: An International Journal of Experimental Educational Psychology, Vol. 38, No. 2, pp. 139-158. https://doi.org/10.1080/01443410.2017.1384536
- 42. VanLehn, K., Siler, S., Murray, C., Yamauchi, T. and Baggett, B. (2003) "Why Do Only Some Events Cause Learning During Human Tutoring?", *Cognition and Instruction*, Vol. 21, No. 3, pp. 209-249, https://doi.org/10.1207/S1532690XCI2103_01
- 43. VanLehn, K. (1987), "Learning one subprocedure per lesson", *Artificial Intelligence*, Vol. 31, No. 1, pp. 1–40. https://doi.org/10.1016/0004-3702(87)90080-4
- 44. VanLehn, K. (1990). *Mind bugs: The origins of procedural misconceptions*. Cambridge: MIT Press.
- 45. VanLehn, K. (1999), "Rule learning events in the acquisition of a complex skill: An evaluation of Cascade", *Journal of the Learning Sciences*, Vol. 8, No. 2, pp. 179–221. https://doi.org/10.1207/s15327809jls0801_3
- 46. VanLehn, K., (1988), *Toward a theory of impasse-driven learning*. New York: Springer, pp. 19-41. https://doi.org/10.1007/978-1-4684-6350-7_2
- 47. Ward, S. (2016), Using Shakespeare's Plays to Explore Education Policy Today: Neoliberalism Through the Lens of Renaissance Humanism, London: Taylor & Francis. https://doi.org/10.4324/9781315696850
- 48. Ward, S. (2018), "Boal, Theatre in Education and the promotion of fundamental British values", *Journal for critical education policy studies*, Vol. 16, No. 3, pp.38-67
- 49. Welsford, E. (1961), *The fool: His social and literary history* (Vol. 262). Doubleday.
- 50. Zahan, D. (1974), The Bambara, Leiden: E. J. Brill.