Reverse Thinking for Forward Learning: The Online Reverse Video Challenge as a Conceptual Alternative to Simulated Work-integrated Learning

Mienke Fouché

https://orcid.org/0000-0001-5135-3648 Tshwane University of Technology, South Africa fouchem@tut.ac.za

Abstract

The novel Coronavirus disease (COVID-10) which was declared a pandemic in March 2020 has disrupted learning programmes that rely extensively on workintegrated learning (WIL). This article reflects on the use of the 2016 online reverse video challenge as a remote learning alternative to WIL in the technical theatre stream of the Diploma in Performing Arts at the Tshwane University of Technology (TUT). A reversed intention practice-based assessment (or reverse video assessment) project was designed for the students to approximate the skills required for theatre technicians. This article is a conceptual exploration of the reverse video assessment design that involved exploring trends in reverse footage on online platforms and the professional practice of renowned South African artist and theatre maker, William Kentridge. The needs of contemporary South African students to be "tech-savvy" while faced with limited resources, was aligned with the requirements of the embedded simulated WIL curriculum. The reverse video assessment adopted a design research approach through the lens of play theory to conceptualise the edutainment approach to learning to relieve student anxiety during the pandemic. The assessment focused on three stages of development, namely, abstract thinking, three-dimensional object manipulation, and sequential organisation, which collectively result in a pragmatic creative process. The article will contribute to the remote learning body of knowledge which has come under greater focus during the pandemic. The ongoing pandemic necessitates a remote learning alternative to WIL to ensure continued learning without risking the health of students. The flexible nature of the reverse video assessment allows for the application thereof to different fields and levels of study.

Keywords: remote learning; reverse video; performing arts; work-integrated learning



https://unisapressjournals.co.za/index.php/Progressio Volume 42 | 2021 | #10968 | 17 pages https://doi.org/10.25159/2663-5895/10968 ISSN 2663-5895 (Online), ISSN 0256-8853 (Print) © The Author(s) 2022



Introduction

The novel Coronavirus disease (COVID-19) which was declared a pandemic in March 2020 severely impacted industries on a global scale. The performing arts industry was one of the worst affected. Lockdown restrictions limited theatre and live performances with reduced venue capacity and strict safety protocols. The performing arts industry is often overlooked in governmental budgeting terms, and its contributions to society are often underappreciated and taken for granted. However, the international performing arts industry provides 30 million jobs (Hoek 2021). According to the Parliamentary Monitoring Group (PMG 2020), the South African performing arts industry employs 7% of the country's workforce and contributes 1.7% of the gross domestic product.

The institutions that train performers and technicians for the performing arts industry were also adversely affected by the pandemic. The Department of Performing Arts (DPA) at the Tshwane University of Technology (TUT) in Gauteng, South Africa, is one such example. The DPA relies extensively on placement and non-placement, simulated and professional work-integrated learning (WIL) to train dancers, singers, musicians, actors, directors, scriptwriters, and technicians (in costumes, makeup, lighting, properties [props], sound, scenic art, set design, and management). Consequently, the governmental restrictions imposed throughout 2020 made WIL as a teaching method impossible. Alternative teaching methods were required to ensure the successful completion of the 2020 academic year. The article reflects on using the 2016 online reverse video challenge¹ as a remote learning alternative to WIL.

Contextualisation

Before the COVID-19 pandemic, the DPA used to do embedded simulated WIL in the form of non-placement for performance students, while technician students did embedded WIL in the form of placement. Dean et al. (2020, 10) describe embedded WIL as "practices through simulations, workplace or work-based activities" within a credit-bearing module. Tezcan et al. (2020, 522) add that simulated can be understood as imitating the processes and contexts relevant to a practice. The performance students' embedded simulated WIL took the form of student productions that were attended and critiqued by industry professionals, often as an evaluation panel.

On the other hand, technician students spent two to three months in the industry applying their learning under the guidance of technical theatre companies or professional theatres. A WIL logbook of activities, evaluated by the industry professional, had to be submitted upon completion of the placement period. This placement often had the benefit of students networking with the industry and being assisted with employment upon graduation.

¹ The online reverse video challenge is part of the amateur online performance culture where people participate in a challenge to showcase their skills or bravery.

As mentioned before, the performing arts industry was shut down during the COVID-19 pandemic. Consequently, students could not be placed in the industry and since industry professionals had their own livelihoods to protect, they were less able to engage with learning institutions.

Fortunately, the ever-evolving concept of WIL provides workplace experience opportunities that are not limited to direct placement in the physical workplace or even direct contact with industry professionals (Dean et al. 2020, 5). This evolving nature of WIL allows educators to experiment with creative alternatives that are still authentic workplace activities. Wood, Zegwaard and Fox-Turnbull (2020, 349) posit that a simulated experience can only be considered WIL if there is some input from the industry and not just from the classroom.

The DPA used appropriately qualified industry professionals as external moderators and examiners to maintain a link with the industry during the COVID-19 pandemic. This ensured that the students' projects were seen by professionals and that the students were provided with authentic feedback to reflect on. Additionally, Tezcan et al. (2020, 523) observe that in the creative fields, the benefit of WIL in a curriculum is that it "expands knowledge of work practices and opportunities to benchmark creative work against industry standard". Consequently, it is crucial for creative practitioners to have a portfolio of creative tasks that meet industry standards in order to secure employment.

The reversed intention practice-based assessment (or reverse video assessment) project proposed in the article can be considered an embedded simulated WIL activity. The project was aligned with the curriculum criteria of a credit-bearing module within the learning programme. Furthermore, the project was intended to simulate the processes of the workplace and allow the students to apply pragmatic creative skills. Finally, the project attempted to "benchmark creative work against industry standard" by allowing the students to produce an artefact that could be used in their portfolios.

Methodology

The current study adopted a design science research methodology. Carstensen and Bernhard (2019) situate design science research as a qualitative approach that revolves around the design process as the object of study. The design science research process (DSRP) dually produces knowledge about the process and the produced artefact. According to Peffers et al. (2006, 94), the DSRP follows a six-step process, namely: problem identification and motivation; objectives of a solution; design and development; demonstration; evaluation; and communication. Possible entry points into research are presented by the first four steps. The study determined the entry point for research at step two, where an objective-centred solution was researched to solve the identified problem.

The study identified simulated WIL as a problematic teaching method during the COVID-19 pandemic. Although this problem was narrowed to the performing arts

industry, it is recognised as affecting all learning programmes that rely on forms of simulated WIL. However, the study focused on placement and non-placement embedded simulated WIL as a remote learning alternative. The online reverse video challenge was presented as a potential solution to the problem and served as the research entry point into the DSRP. In the study, the DSRP was underpinned by play theory as related to mass communication.

Stephenson's (1964) concept of play theory of mass communication describes how people engage with media to absorb themselves in, what he terms, subjective play. With reference to Stephenson, Berger (2016) explains that: "[M]ass communication provides 'play' for people and gives them something in common to talk about, which fosters mutual socialisation and integration into society". Furthermore, Stephenson (1964, 50) conceives subjective play as holding the potential for new aspects of the self to arise from the experience. As such, mass communication through play theory presents an understanding that people want to create something, enjoy the process, and share it with others.

The study considered play theory of mass communication as an underpinning to the conceptual process of designing a remote learning alternative to WIL that is aligned with the purposes of the performing arts industry. As such, the conceptualisation process explored the following four topics of interest:

- online reverse video challenge to observe the range of its application;
- professional practice to observe how influential people use reverse footage successfully;
- contemporary South African student profile;
- requirements of the Diploma in Performing Arts technical theatre stream curriculum.

These topics of interest were then funnelled into the design of a practice-based assessment. The study was a conceptual exploration since the application of the conceived practice-based assessment was not evaluated on the students. Thus, there are no ethical considerations to declare since no data was gathered from the students. The reverse videos discussed here were observed in the public domain.

Reversed Intention Practice-based Assessment

Online Reverse Video Challenge

The reach of the online world provides endless opportunities for engagement and connection among people. Free use of and access to channels like YouTube allow anybody to upload footage. The number of views of the uploaded footage is then tracked to demonstrate its popularity. People can create their own YouTube channels to form an online representation (Business Queensland 2020). For some people, their channel is

their source of income. Due to the sheer number of channels on YouTube, however, viewers can easily lose interest if a channel does not produce regular and interesting content.

Video challenges are a popular attraction on YouTube. According to VloggingPro (2021), video challenges are also one of the best ways to grow channels. People would record themselves executing a feat and then upload the video to challenge others to up the ante. Many of these challenges are dangerous and people only attempt them for fame or remuneration (Cash and Schwab-Reese 2020). This type of entertainment is reminiscent of game shows where people are subjected to inane and uncomfortable situations for viewers to enjoy the participants' visceral responses.

Against this backdrop, the online reverse video challenge is one of the more artistically inclined challenges. As the name implies, the process involves recording an action and then reversing the footage. Examples include jumping into a pool, playing leapfrog, or dancing. While reversing a simple action is an interesting exploration of motion, the inclusion of inanimate matter (e.g. objects) elevates the reverse footage to a magical spectacle of the inanimate matter performing physics-defying acts in reverse.

With regard to performance studies, theorists have long since recognised the textural quality of inanimate matter. Lecoq's² movement texturing exercises involve the embodiment of nature dynamics, such as the flow of water, the energy of fire, or with regard to materials and substances, oiliness, dryness, leadenness or silkiness. Students are expected to observe the movement of elements, materials and animals (Lecoq, Carasso and Lallias 2001, 83). This technique facilitates nuanced performance actions as the performer embodies characteristics of other substances or living entities different from the performer's physiology. However, this technique also encourages exploration of the matter itself for conceptualisation purposes.

The movement of inanimate matter is not an embodied process, as the inanimate matter has no life. Humans can perform actions because they have intent that manifests in their behaviour, whereas inanimate matter is susceptible to external factors that set the matter in motion. The reverse videos filmed by Andy Elliot³ (2014) demonstrate how the reversed motion of inanimate matter creates the illusion of intent. This illusion results from the matter returning from its displaced state to its original unaffected state. Additionally, in the reverse process, Lecoq's nature dynamics of inanimate matter are emphasised due to unnatural motions.

Jacques Lecoq (15 December 1921 – 19 January 1999) was a French stage actor and acting movement coach. He was best known for his teaching methods in physical theatre, movement and mime which he taught at the school he founded in Paris known as L'École internationale de théâtre Jacques Lecoa.

Andy Elliot is a YouTuber from the United Kingdom who uploads videos on his YouTube channel about crafting projects or artistic performative videos starring himself.

Inanimate matter undergoes a dramatic transformation in reverse footage. Matter can motion from displacement to stasis; from a deconstructed state to a (re)constructed state; from a non-existent to an existent state; or from an exposed to a contained state. Footage of these motions is interesting but takes on a performative quality when coupled with the actions of a human performer. Especially when the motions of matter are left to their physical nature and the actions of the performer are naturalised.

The video filmed by Mr. Reverse (2019a), *This Is the Best Reverse Video I Ever Made!*, depicts the performer capturing a range of objects scattered across a staircase. This footage was created by the performer throwing the objects down the stairs and holding out his arm for a few moments after each toss. In reverse, it appears as if the performer is holding out his arm in anticipation of catching the approaching object. This simple action demonstrates the consideration of the object's anticipated motions.

Another video by Mr. Reverse (2019b), *This Reverse Video Is the Best*, depicts the performer walking around his house and catching objects that fly in his direction with which to execute chores. This footage was created by the performer locomoting backward throughout the house and demonstrating the same object motion anticipation as in the above example. The addition of locomotion in the sequence makes this video noteworthy. This increased movement adds an additional layer of complexity to the performance rather than just extending his arm to create the performance of anticipation. The performer must carefully understand his own motions to ensure that when the motions are performed backward, they correctly appear natural when viewed in the reverse footage. This forethought requires planning several factors, such as: his own locomotion path; his motions; the placement of the objects he interacts with; and the objects' anticipated motions.

The performer would not have achieved the intended performance with the first recording. The performer undoubtedly must experiment and practise due to the number of factors to control while performing (mentioned above). The performer must become acquainted with abstracted thinking and movement execution to achieve the ideal sequence in performance.

The article simplifies the discussion by formulating the term "reversed intention" to refer to movements executed in a backward sequence that are viewed as naturalised forward motions when the footage is played in reverse. Coupling reversed intention with inanimate matter results in a spectacular performance of "normalised" action with the objects executing physics-defying actions.

Professional Practice

Renowned South African artist and theatre maker, William Kentridge (28 April 1955), serves as an example of professional practice that uses reversed intention. Kentridge is "a world-class star in contemporary art, media, and theatre" (Taylor 2019, n.p.). Kentridge is primarily known for his charcoal and ink drawings (Wendel-Poray 2016,

166). However, these often serve as the departure point for larger bodies of work. Kentridge has created various art mediums from the 1980s to the present.⁴ Kentridge used reversed intention in several of his artworks, and six of the most noteworthy will be discussed in the article.

The artwork *Invisible Mending* (Kentridge 2003) is a 90-second video that depicts Kentridge repairing and cleaning a torn self-portrait. Once it has been repaired, Kentridge leaves the frame. After that, his self-portrait drawing changes into a real version of himself and he leaves the scene. The experimented-with action in this sequence is tearing the paper with exaggerated finesse to create the illusion of careful reverse repairing. As the name of the artwork implies, this footage creates a form of invisible mending to return the paper to its original and completely unaffected state. Additionally, the two versions of Kentridge (2014, 20) are a recurring feature in his work which he describes as "the division between making and looking, between the artist as maker and the artist as viewer". He often creates videos that depict this duality of maker and viewer and demonstrate how conflicting and important both aspects are.

The production *Refuse the Hour* (Kentridge 2015) focuses on explorations of time (Dreyer 2016, 339) and features a few projected reversed intention videos. Three of the videos will be discussed here. The scene "Undo Unsay" shows a projection of Kentridge and South African dancer Dada Masilo walking with stacks of books on their heads. Both performers are stuck in a loop of capturing flying books and stacking these on their heads. This action is reminiscent of the zoetrope effect prevalent in Kentridge's exploration of time. The footage was created by Kentridge and Masilo walking backward while throwing the top book off their stacks. The looping of the reverse footage creates the illusion of a perpetual motion of the performers catching flying books.

Another noteworthy scene is Masilo dancing with a large white sheet which is like a giant turbine swirling and lifting pieces of paper to drift upward and away. The reverse footage makes it seem like Masilo is holding on to the sheet and moving with the sheet. This footage was created with Masilo dancing and swirling the sheet while pieces of paper are dropped from above to float down. The movement of the background pieces of paper is a clever environmental effect that gives the viewer a suggestion of airflow within the space.

Carnets d'Egypte (Kentridge 2013) is a 30-minute video, divided into three vignettes that respectively depict two versions of the artist excavating, cataloguing, and acquiring ancient Egyptian artefacts. Only the excavating vignette is conducted using the reversed intention technique. This vignette depicts the two artists observing two drawings

⁴ At the time of writing, Kentridge's oeuvre consisted of over 130 art exhibitions, over 40 productions including film, puppetry theatre, lecture performances and operas, over 20 prestigious art awards, and five honorary doctorates (two from South Africa, and one each from the United States, United Kingdom and Belgium) (Wendel-Poray 2016, 157–167).

covered in black ink on the studio wall. Each artist begins to excavate a drawing and carefully removes the ink with a brush. The ink is sucked into the bristles of the brush and deposited into a container. This 'excavation' reveals the head of a sphinx on the one drawing and pieces of broken artefacts scattered around the second drawing. This footage was created by Kentridge painting over his drawings and in the process effectively destroying the original artworks. This destruction demonstrates confidence that a neophyte artist may not have as they might not destroy their own artworks. Therefore, the original works exist only in the video.

Day Will Break More Than Once (Kentridge 2010) is a six-minute 360° virtual reality performance featuring Kentridge and Masilo. In the video, Masilo twirls and kicks up papers that Kentridge then catches and piles in his hand. This footage was created by Kentridge walking backward and throwing pieces of paper from his hand into the air while Masilo executes her twirling dance sequence behind him.

Time, change and movement are recurring themes in Kentridge's work (Kentridge and Taylor 2018, 116). He explores time phenomenologically as a means of displacement and immersion (Blazwick et al. 2016, 7). The conceptual significance of Kentridge's reverse footage is in the manipulation of time and what it reveals as a palindrome (McDonald 2018, 12). As Kentridge (2014, 105) observes:

The destination of an action can be chased back to its first impulse. The history could be contained in a roll of film ready to be reeled in, called back, re-examined. An action done can be undone. A tear forward becomes a repair backward. You can make a palindrome of an action and its anti-action. An action half-completed, half-repeated. We make Rorschach blots of intentions half-made and half-withdrawn. I start to say something and call the words back.

Regarding reversed intention, Kentridge actively practises and explores his actions to achieve the desired result. Kentridge (2014, 107) explains this process as the flow of "performing, reviewing, rewinding, checking, trying to learn". This process relies on his instincts as an artist and a performer while being both a performer and director of his own work. He needs to both see and feel himself execute the actions to find the intended result. Kentridge (2014, 107) explains his process as follows:

I walk backward, and film myself walking backward, so I can project it forward. It is clearly wrong. The lean is in the wrong direction. I have to lean against the walk, leaning forward when walking backward – the equivalent of leaning backward when walking forward – it is against the natural position where your weight should be. I lean forward as I walk backward, an unnatural action to make a natural illusion [...] I take a book and throw the book. Do I pause before the throw? Or after the throw? So that when the book returns, I am anticipating it, or it arrives of its own accord? Again, the book throwing has to be done many times in different ways [...] Trying to find from the action, from the repetition of action, the rules of the game and how best to play it.

Kentridge studied under Lecoq at *L'École internationale de théâtre Jacques Lecoq* and the influence of Lecoq's teaching is evident in Kentridge's use of inanimate matter (Wendel-Poray 2016, 158). Although Kentridge does not embody the characteristics of other substances or living entities directly, he explores himself and the artwork he creates.

Kentridge (2014, 108) observes that the process of reversing footage has four elements, namely: the actions that are to be seen; the metaphoric suggestion of the scenographic composition;⁵ learning how to perform the actions to be seen; and finally having one's mind expanded to recognise the possibilities of "this potentiality and its loss". This conceptual deconstruction of the process recognises the inherent relationship among the elements.

The actions that the performer is going to perform need to be understood from the viewer's perspective. The metaphoric suggestion of the scenographic composition considers the representation of space, action, and matter and how these affect each other to enhance meaning. The actions that the performer is going to perform need to be understood by the performer at a visceral level. The artists have their understanding expanded by engaging with this process and going through the roles as viewer, theatre maker, and performer. Kentridge's process is relevant in an educational context and professional in the performing arts industry (both as theatre maker and performer). His insights speak to both the performer and the technician with regard to the performative exploration of the self and the conceptual development of the creative process.

Contemporary South African Student Profile

When designing a reversed intention practice-based assessment, the people who are to execute the assessment should be considered.

Contemporary South African students are transitioning from the Millennial generation to Generation Z. According to Dolot (2018, 49), Generation Z is comfortable with modern technologies and likes to use technology in daily activities. Although Dolot's study was conducted in Poland, South African students display a similar ease with using smartphones. According to O'Dea (2020), about one-third of South Africa's population used smartphones in 2020.

These students live a dual existence in that what they experience physically they share with others digitally. More so creative students, as their artistic identity (while still being developed) is nourished by the support of online followers, hence the appeal of Twitter, Facebook, and Instagram. With reference to play theory of mass communication, the digital space is the ideal environment for subjective play. This digital environment serves a threefold purpose for students in the performing arts in that it sensitises students

⁵ Scenographic composition refers to the final multi-sensory experience of the viewer. Scenography considers what the viewer will see, hear and feel while watching the performance.

to the reactions of an audience, allows the students' creative identity to be shared to gain greater notoriety, and serves as an archive or a portfolio of the students' capabilities. Students' digital portfolios potentially allow them to enter the industry with a following before even setting foot on a professional stage. The inclusion of technology and social media in tertiary education seems like a natural fit for today's gregarious and "techsavvy" students.

Apart from students' interests, their infrastructure should also be considered in the design of the practice-based assessment. During the hard lockdown of 2020, students returned home with little to no infrastructure that facilitates remote learning. South African students have the skills to conduct remote learning but are limited by technological resources (Van Deursen and Van Dijk 2019). Mpungose (2020, 4) states that the use "of any available physical resources is not a problem to students (digital natives) in a digital age – the problem is the affordability and availability of those physical resources for e-learning".

Consequently, free software for editing footage on mobile devices is considered. The appeal of creating reverse footage is widespread enough that Google's Play Store has applications created specifically for this purpose. Examples of reverse footage applications are Reverse Movie FX, Reverse Video Maker, Magic Reverse Video & Loop, Reverse Video Player & Editor, Reverse Video Backwards, Rewind App, Backwards App and ReverX. Some of these applications require the user to watch advertisements in-between the footage reversal; however, the application use is still free.

Another benefit of free mobile editing software is the instant result. Students can record the footage and reverse it on the same device and see the reverse footage within minutes. This immediacy allows for maximum engagement and continuous flow of the creative process. The instant footage also allows students to consider on the spot ways in which to improve. This immediate engagement corresponds with Kentridge's process of "performing, reviewing, rewinding, checking, trying to learn". Furthermore, the use of immediate result media, links with an edutainment approach as students can potentially share their practise-based assessment on their own social media platform. In an unprecedented time like the pandemic, students are anxious and more likely to abandon their studies when feeling overwhelmed. As such, the reversed intention assessment is intended to be an enjoyable exploration of creativity.

With regard to the embedded simulated WIL curriculum requirements, Tezcan et al. (2020, 526) state that simulated WIL develops "students' understanding of the industry and civic context of their work, whilst also developing personal attributes and skillsets such as confidence and collaborative practices critical in creative industries". Most educational programmes that use forms of simulated WIL aim to develop similar skills. According to lipinge, Batholmeus and Pop (2020, 534), these skills are problem-solving, critical thinking, willingness to learn, communication, teamwork,

assertiveness, and time management. Concerning the performing arts industry, the ability to collaborate is tantamount. Blain and Minors (2020, 4) affirm the importance of collaboration and state: "collaboration is a bringing together of people, drawing on different skills, insights, and perspectives in order to make something new which would not otherwise be possible".

Accordingly, the reversed intention practice-based assessment was designed based on the above discussions. The reverse video assessment design considered online reverse video trends, professional practice, the contemporary South African student profile, and the embedded simulated WIL curriculum.

Exploring Online Reverse Video Trends

Online reverse video trends are exemplified by challenging videos that are identified as those which include reversed intention and inanimate matter. The reverse video assessment project designed for the students to approximate the skills required for theatre technicians stipulated the following requirements concerning the performance to avoid students submitting simple and easy actions such as jumping over a fence.

Requirements of the Diploma in Performing Arts Technical Theatre Stream Curriculum

Motor Activity and Duration

The practice-based assessment requires gross motor activity, fine motor activity, and engagement with at least five different physical objects. Additionally, a video duration must be stipulated for fairness to ensure that the students submit videos of the same length. A two-minute video requirement provides enough time for a range of actions. The students will be expected to couple the action and object requirements by planning their action sequences and related placement of objects effectively.

Single Take and Rationale

The students' projects must achieve the desired result, as the requirement of recording the entire sequence in a single take is included. This single take requirement means that the final footage must be captured as a single recording without editing. However, since it is unlikely that students will achieve the desired result with the first recording, this requirement encourages several recordings. Multiple recordings allow students to explore different ideas, become engaged with the process, and experiment, sift and edit their ideas.

This requirement also aligns with the professional practice of Kentridge, who immersed himself in practice to explore the process, the medium, and himself. A brief rationale for the reverse video is required to measure the students' engagement with the process. This rationale must describe the significance of the action sequence and the choice of objects used. This requirement observes how much planning and conceptualisation went into the reverse video.

Contemporary Student Profile

The use of mobile devices and free reverse video creation software is encouraged to consider Generation Z students' interests and their possible lack of infrastructure. Although using an actual camera is not prohibited, students will not receive higher marks for better quality footage. With regard to editing, adjusting colour or sharpness is allowed, but no additional marks will be granted. Editing of the actual sequence is not allowed. These stipulations ensure that students who have access to editing software are not privileged over students who have no such access. The focus of the assessment is on the process and creation of reversed intention and not on video editing.

Furthermore, the use of remote technology ensures that learning continues without the need for face-to-face interaction. Students can submit their completed practice-based assessment via an online learning platform, email, or WhatsApp (if necessary).

The embedded simulated WIL curriculum for performing arts students focuses a great deal on collaboration. Students are required to work in pairs to add an additional layer of complexity to their practice-based assessment, with both partners featuring in the reverse video. This collaboration requirement will require the students to work together to plan, explore, execute, and reflect on the practice-based assessment.

In addition, the practice-based assessment will allow the students to engage in a variety of skills. The conceptual exploration of the process and formulating it into a rationale will engage the students' critical thinking skills and ability to communicate their ideas. Working together to create a reverse video will engage the students' ability to work in a team; communicate with each other; and practise their decision-making skills. The students are required to keep a journal to document the process of developing the practice-based assessment effectively. Students are expected to keep their own journals to observe the experience of the process. The concluding section of the journal requires a reflective discussion on the entire experience.

Finally, remote learning presents the challenge of not knowing if the actual students completed the practice-based assessment. Therefore, it is required that the two students who create the footage also be the performers. This requirement ensures that both students engage in the process.

Reflection

The article argues that the reversed intention practice-based assessment consists of three overlapping stages, namely: abstract thinking, three-dimensional object manipulation, and sequential organisation. These three stages can be related to the four elements observed by Kentridge in his creative process towards developing reversed intention footage. The three stages are discussed below in relation to Kentridge's four elements as a pragmatic and creative process.

Regarding the abstract thinking stage, Apps (2006, 67) states that abstract thinking involves "higher-order, or complex, thoughts" and the ability to "draw conclusions or illustrate relationships among concepts in a manner beyond what is obvious". Abstract thinking is a sought-after skill in the workplace as it is invariably used in problem-solving, particularly with creative or complex problem-solving. This skill is developed through interaction with the external world. Beilin and Pufall (2013, 31) elaborate on the importance of interaction for problem-solving: "The cognitive system can be viewed as an open system whose dynamics are determined to a large extent by exchanges with the environment". With regard to embedded simulated WIL, as students engage with the environment, their experiences are assimilated into their cognitive system and their ability to think abstractly develops.

The article further argues that the reverse video assessment involves abstract thinking as a conceptualisation stage in which students determine what will be performed in the video. This stage relates to Kentridge's consideration of what the viewer will experience. The nature of performance as ontological-concepts-realised-empirically is a collaboration in abstract thinking. The students must consider the entire process to formulate a conceptual significance. The students should plan out a performance sequence in reverse, determine the actions and objects that will be used, and recognise the relationships between the actions and objects. This stage involves considering what the viewer will experience and what the reverse video will communicate.

The three-dimensional object manipulation stage overlaps with the abstract thinking stage as an exploration stage. Alessandroni and Rodriguez (2020) observe that some developmental theorists believe "looking at a certain stimulus or sequentially touching objects" informs conceptual cognition. Moreover, Alessandroni and Rodriguez (2020) state that exploring the function of objects allows people to contextualise the object in the world and how to use the object. As such, this function, context and use of objects connect with communicative abilities for expressing representations of the object for use in meaning-making.

Furthermore, the three-dimensional object manipulation relates to Kentridge's metaphoric suggestion of the scenographic composition that considers the representation of space, action, and matter and how these affect each other to enhance meaning. The inclusion of inanimate matter in the practice-based assessment provides the opportunity for three-dimensional object manipulation towards conceptualisation. Students explore inanimate matter and how it is affected by motion using Lecoq's nature dynamics exploration technique. Physical manipulation of the inanimate matter allows for a better understanding of the matter's capabilities. Developing students' sensitivity towards the conceptual quality of an object helps to develop their artistic sensibilities.

The sequential organisation stage is the final stage where the performer rehearses and experiments with the actions. Skilled actions are a result of precision and timing. Bednark et al. (2015, 1) observe that "the brain must determine both the sequential order

and individual timing of each movement, requiring neural processes for temporal and ordinal aspects of complex movement to be highly integrated". Reversed intention requires additional processing and an unusual way of conceiving movement that is against naturally ingrained motor activity.

The final sequential organisation stage relates to Kentridge's performance actions at an embodied and visceral level. The sequential organisation is central to the execution of an engaging reverse video. This stage requires a complete deconstruction of the movement sequence. This destruction involves deconstructing the inanimate matter and the actions performed. As previously mentioned, the manipulation of the inanimate matter breeds familiarity that logically determines the actions required to perform a sequence. As such, the sequential organisation process is rooted in logic and pragmatism and is the skill that realises the execution of reversed intention.

Finally, these three stages develop skills that become a continuously reflective process to expand artists' understanding and their potential for creative development. This reflective process relates to Kentridge's final element of having one's mind expanded. As such, the abstract thinking, three-dimensional object manipulation, and sequential organisation stages can be conceived as overlapping stages in a pragmatic and creative process.

Conclusion

The article has discussed using the 2016 online reverse video challenge as a remote learning alternative practice-based assessment to embedded simulated WIL. The DSRP was used to identify the challenges of embedded simulated WIL as a problem caused by the global COVID-19 pandemic. The reversed intention concept was used to design a practice-based assessment as a conceptual alternative to embedded simulated WIL. The ongoing pandemic has created a greater need for remote learning alternatives to ensure the continuation of formal education without risking students' health. The article will contribute to the growing body of knowledge on remote learning alternatives.

Trends in reverse footage were explored, and the concept of reversed intention was formulated from these observations. This term refers to normalised action performed backward by creating the illusion of forward action when the footage is played in reverse. This concept was then discussed in several artworks by Kentridge, and his description of his process was observed. Kentridge's insights on reversed intention demonstrate the importance of performative self-exploration and the conceptual development of the creative process. The "tech-savvy" contemporary South African students and the limited infrastructure at their disposal were considered. Finally, the embedded simulated WIL curriculum requirements were discussed in conjunction with the importance of collaboration in the performing arts.

The practice-based assessment consists of three overlapping stages, namely, abstract thinking, three-dimensional object manipulation, and sequential organisation. Abstract

thinking is considered the conceptualisation stage. Students determine what will be performed, the significance of the actions performed, and the objects used to support the actions. With reference to Kentridge, this stage also requires students to consider what the viewer will experience, and as such what the performance will communicate. The three-dimensional object manipulation stage requires students to explore the physical properties of the objects used in the performance and experiment with the objects' capabilities. Lecoq's nature dynamics exploration assists in finding conceptual significance in the objects. The three-dimensional object manipulation stage develops students' artistic sensibility. Finally, the sequential organisation stage requires students to deconstruct the movement process and sequentially reconstruct it as reversed intention. This process is deemed as reflective in that each stage overlaps with another and continuously informs practice. In accordance with Kentridge, if students actively engage with this three-stage process, their minds will expand to recognise the potential for intellectual and artistic expression.

References

- Alessandroni, N., and C. Rodriguez. 2020. "The Development of Categorisation and Conceptual Thinking in Early Childhood: Methods and Limitations." *Psicologia: Reflexão e Crítica* 33: a17. https://doi.org/10.1186/s41155-020-00154-9
- Apps, J. N. 2006. "Abstract Thinking." In *Encyclopedia of Aging and Public Health*, edited by S. J. Loue and M. Sajatovic, 67–69. Boston: Springer. https://doi.org/10.1007/978-0-387-33754-8 2
- Bednark, J. G., M. E. J. Campbell, and R. Cunnington. 2015. "Basal Ganglia and Cortical Networks for Sequential Ordering and Rhythm of Complex Movements." *Frontiers in Human Science* 9. https://doi.org/10.3389/fnhum.2015.00421
- Beilin, H., and P. B. Pufall, eds. 2013. *Piaget's Theory: Prospects and Possibilities*. New York: Psychology Press. https://doi.org/10.4324/9780203763155
- Berger, A. A. 2016. *Messages: An Introduction to Communication*. Abingdon-on-Thames: Routledge.
- Blain, M., and H. J. Minors. 2020. "Introduction: Defining the Territory: Collaborative Processes, Issues and Concepts." In *Artistic Research in Performance through Collaboration*, edited by M. Blain and H. J. Minors, 3–10. London: Springer Nature. https://doi.org/10.1007/978-3-030-38599-6_3
- Blazwick, I., S. Breitwieser, P. E. Tojner, and M. Balshaw. 2016. "Introduction." In *William Kentridge: Thick Time*, edited by I. Blazwick and S. Breitwieser, 6–8. London: Whitechapel Art Gallery.
- Business Queensland. 2020. "How YouTube Works." Accessed February 11, 2022. https://www.business.qld.gov.au/running-business/marketing-sales/marketing-promotion/online-marketing/youtube/how

- Cash, S. J., and L. Schwab-Reese. 2020. "When Adolescent Offline Risks Behaviors Go Online." In *Technology and Adolescent Health: In Schools and Beyond*, edited by M. A. Moreno and A. J. Hoopes, 57–78. Cambridge: Academic Press. https://doi.org/10.1016/B978-0-12-817319-0.00003-7
- Dean, B., V. Yanamandram, M. J. Eady, T. Moroney, N. O'Donnell, and T. Glover-Chambers. 2020. "An Instituitional Framework for Scaffolding Work-integrated Learning Across a Degree." *Journal of University of Teaching & Learning Practice* 17 (4): 1–16. https://doi.org/10.53761/1.17.4.6
- Dolot, A. 2018. "The Characteristics of Generation Z." *E-mentor* 2 (74): 44–50. https://doi.org/10.15219/EM74.1351
- Dreyer, E. 2016. "Of Clocks Ticking: Heterotopic Space, Time and Motion in William Kentridge's *The Refusal of Time* (2012)." *Communicatio* 42 (3): 338–360. https://doi.org/10.1080/02500167.2016.1167755
- Hoek, S. 2021. "State of the Arts: How the Pandemic Affected SA's Art and Culture Scene." Accessed September 2, 2021. https://www.dailymaverick.co.za/article/2021-02-24-state-of-the-arts-how-the-pandemic-affected-sas-art-and-culture-scene/
- Iipinge, S. M., P. N. Batholmeus, and C. Pop. 2020. "Using Simulations to Improve Skills Needed for Work-integrated Learning before and during COVID-19 in Namibia." International Journal of Work-Integrated Learning, Special Issue 21 (5): 531–543.
- Kentridge, W. 2014. *Six Drawing Lessons (The Charles Eliot Norton Lectures)*. Vol. 55. Cambridge, MA: Harvard University Press.
- Kentridge, W., and J. Taylor. 2018. *William Kentridge: That Which We Do Not Remember*. Sydney: Naomi Milgrom Foundation.
- Lecoq, J., J. G. Carasso, and J. C. Lallias. 2001. *The Moving Body: Teaching Creative Theatre*. Translated by D. Bradby. New York: Routledge.
- McDonald, J. 2018. "William Kentridge: Right Into Her Arms." In William Kentridge: Right Into Her Arms, 8–13. Annandale: Annandale Galleries.
- Mpungose, C. B. 2020. "Emergent Transition from Face-to-Face to Online Learning in a South African University in the Context of the Coronavirus Pandemic." *Humanities and Social Sciences Communications* 7: a113. https://doi.org/10.1057/s41599-020-00603-x
- O'Dea, S. 2020. "Smartphone Users in South Africa 2014–2023." Accessed September 3, 2021. https://www.statista.com/statistics/488376/forecast-of-smartphone-users-in-south-africa/

- Peffers, K., T. Tuunanen, C. E. Gengler, M. Rossi, W. Hui, V. Virtanen, and J. Bragge. 2006. "Design Science Research Process: A Model for Producing and Presenting Information Systems Research." In *1st International Conference, DESRIST 2006 Proceedings*, 83–106. Claremont: Claremont Graduate University.
- PMG (Parliamentary Monitoring Group). 2020. "Theatre Industry on Impact of Covid-19 Pandemic on Theatre Sector." Meeting Summary. Accessed September 2, 2021. https://pmg.org.za/committee-meeting/31245/
- Stephenson, W. 1964. The Play Theory of Mass Communication. Piscataway: Transaction.
- Taylor, J. 2019. William Kentridge: Being Led by the Nose. Chicago: University of Chigaco Press.
- Tezcan, N., I. Durakovic, C. Smith, E. Lloyd, and S. D'Arcy. 2020. "Scaffolded, Simulated Work-integrated Learning in Design Education: Beyond the Live Project." *International Journal of Work-Integrated Learning* 21 (5): 521–529.
- Van Deursen, A. J., and J. A. van Dijk. 2019. "The First-level Digital Divide Shifts from Inequalities in Physical Access to Inequalities in Material Access." New Media Society 21 (2): 354–375. https://doi.org/10.1177/1461444818797082
- Wendel-Poray, D. 2016. "Le Théâtre est son double." In *William Kentridge: Thick Time*, edited by I. Blazwick and S. Breitwieser, 157–167. London: Whitechapel Art Gallery.
- Wood, Y. I., K. E. Zegwaard, and W. Fox-Turnbull. 2020. "Conventional, Remote, Virtual and Simulated Work-integrated Learning: A Meta-analysis of Existing Practice." *International Journal of Work-Integrated Learning* 21 (4): 331–354.

Videos

- Kentridge, W., director. 2003. *Invisible Mending*. Animated 16 mm and 35 mm film, transferred to 7-channel video.
- Kentridge, W., director. 2013. Carnets d'Egypte. Single channel HD film in seven fragments.
- Kentridge, W., director. 2015. Refuse the Hour.
- Kentridge, W., director. 2019. Day Will Break More Than Once. HD 360 virtual reality film.
- Mr. Reverse. 2019a. *This Is The Best Reverse Video I Ever Made!* YouTube. Accessed September 2, 2021. https://www.youtube.com/watch?v=H4mpMKJFN_E
- Mr. Reverse. 2019b. *This Reverse Video Is the Best!* YouTube. Accessed September 4, 2021. https://www.youtube.com/watch?v=FC4RgefY1i4