A three-stage process of improvisation for teamwork: Action research

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> This study examines street performing arts students' responses to using improvisation for teamwork during a first year, non-placement, work-integrated learning (WIL) experience. The aim of the study was to investigate: (1) students' perceptions of improvisation and (2) ways in which to design teamwork assessments that utilise improvisation. Data was collected through surveying students and via a recorded, focus group discussion. The results highlighted students' understanding of how improvisation works, how it is learnt and that it requires risk taking. From the findings, specific recommendations for designing teamwork assessments that utilise improvisational processes are made via a three-stage model. While the three-stage model presented in this study is intended to advance the field of performance arts education research, the findings are relevant to learning and teaching where improvisation for teamwork is offered.

Introduction

Innovation, creative thinking, and improvisation are valued employability traits sought by employers, however, opportunities to develop such skills are "rarely nurtured or offered in our education system" (Lemons, 2005, p. 32; McWilliam, 2008; Tomlinson, 2012). It is timely then, for higher education to consider how we might design assessments that promote not only creativity but the process that leads to creativity. At times, this can mean improvisation, allowing students to take risks and to learn-to-be innovators (McWilliam, 2008) for the future. The literature suggests that students can be taught to be creative (Peters, 2013; Penaluna, Penaluna, Jones & Matlay, 2014), but this opinion is also disputed, because creativity can be viewed as something "mysterious… so that even those who are creative are at a loss to explain it" (Best, 1982, p. 280). Despite the different opinions, and given the focus on the importance of creativity skill development to the economy, there remains a pressing need to teach students how to be improvisers, how to think creatively (Marquis & Vajoczi, 2012; McWilliam & Dawson, 2008), and to know which skills to tap into for creative outcomes.

Additionally, the emphasis on creativity as a central feature of modern economies and the workforce is evidenced in policies and reports released by national governments. In Australia, for example, the decrease in demand for resources exports coupled with the fact that Australia cannot compete with the low wages and production costs of other countries, the need to promote "creativity and innovation [to] provide future employment

and prosperity" has resulted (Middleton, 2014, p. 297). If improvisation is about accepting all offers to "encourage risk taking and to build confidence, tolerance and ambiguity" (Lemons, 2005, p. 29), then improvisational skill development is a key element when cultivating a creative work force for the future.

In the higher education literature, there is a modest amount of research that directly addresses the problem of designing assessments for improvisation of teamwork in non-placement, work-integrated learning (WIL) experiences for job-readiness (Hains-Wesson & Campbell, 2014). There are however, a suite of educational research outcomes that consider the benefits of creative arts in higher education, curricular design for establishing creative professionals (Bridgstock, 2011; Dennis, 2013; Essig, 2013) and teaching for creativity. Less interest in teaching for creativity as a team process that focuses on improvisation has been noted. Recent work in teaching for creativity has focused more on the following areas of activity: developing pedagogies for creativity (Middleton & Stevenson, 2011, McWilliam & Dawson, 2008), synthesising liquid and structured teaching for creativity (Das, 2014), producing assessment criteria for creativity (Middleton, 2014), studying which countries rank highest in terms of teaching for creativity by using measures of creative learning ecosystems, quality of education and ability to innovate (Crosling, Nair & Vaithilnigam, 2015), teaching students how to learn in unfamiliarity (Pollard, 2012), developing creative entrepreneurism (Pollard, V. & Wilson, E., 2013) and exploring experiential learning as a means to develop creative capacities (Rampersad & Patel, 2014). This last form of research is most closely aligned with the research underpinning this current paper, which centres on improvisation as a *process* and as an important element for developing creative graduates.

What does improvisation mean for education?

In the case of improvisation, the focus would be on teaching and supporting students to develop a critical sense of what it means to be an improviser and, at best, students would be given opportunities to practise and further develop their improvisation capacity through experiential learning opportunities, welcoming mistake making with the social aspect of creativity foregrounded. As argued by Rampersad & Patel (2014), the experience of students undertaking assessment activities to which improvisation, creativity or innovation is viewed as a *process* rather than as a product, and which involves an experience of the workplace is uncommon. Where improvisation is commonly considered to be relevant, is in the area of performance-based disciplines. Given the shift to creativity in the general economy, the disciplines in which creativity has traditionally been a focus, such as the performing arts, have much to teach. This paper highlights this notion.

Background

In this study, first year, street performing arts students were offered an opportunity to present street acts to a live, diverse and roaming audience as part of their assessment tasks for teamwork. The assessment task was designed and implemented as a non-placement, WIL experience that underwent an evaluation research process, which has been reported

elsewhere (Hains-Wesson & Campbell, 2014). Where this study departs from the previous one, is that we propose a three-stage improvisation model that is useful for the design of improvisation assessment tasks for teamwork as a *process* towards creativity. This is a *learning-to-be* improvisation model (McWilliam, 2008) with a focus on teams, creativity and innovation.

The learn-to-be improvisation model suggested in this paper has three stages: (1) putting ideas forward, (2) working the key idea and (3) the product and its presentation. Each stage has capacities and capabilities which can be implemented as focus points when considering assessment design where improvisation, creativity or innovation are highlighted. As such, we draw from data produced during a three-year project (Hains-Wesson & Campbell, 2014), which focused on street performing arts students' responses to developing a creative performance piece for a remote and rural community, evaluating the assessment design for improvement. In this study we draw on the following: (1) the 'little c' approach (McWilliam & Dawson, 2008) to improvisation, wherein improvisation is understood as a social process in order to propose a model useful for the design of team-based assessment tasks and (2) the learn-to-be (McWilliam, 2008) pedagogical framework that focuses on the benefits and importance of improvisation as an employability outcome that enhances job-readiness.

A particular approach can be used for curriculum development for employability that posits that higher education must support students to develop a professional identity (Pollard, Vincent & Wilson, 2014), which includes being an effective improviser. Students were encouraged pre, during and post the live performance to develop an improvisational identity through undertaking assessment tasks that enabled them to question, 'try-on', critique, adopt, take risks, adapt elements, and capacities and capabilities that were associated with being a professional street performer. We therefore, investigate this particular phenomenon in this paper. To help contextualise the areas of interest we defined improvisation as allowing students the opportunity to be "spontaneous, work with a structure, build on what has already been introduced, and function under the guise of performance" (Lemons, 2005, p. 27).

In the next section, we present the methodology and methods followed by the data collection process and analysis. We then present a discussion and conclusion while illustrating future areas for further research.

Methodology

We chose an action research methodology so that we might learn by doing, improving practice and undergoing investigative research at the same time. We first identified a problem, did something about it, helped to resolve it, and then reviewed how successful our efforts were before undergoing additional investigations for continual improvement. Therefore, an action research methodology was useful for this project. We desired to investigate the system of operation around the street performing students' understanding of their practice when using improvisation (Gilmore, Krantz & Ramirez, 1986, p. 161).

Additionally, the decision to use an action research methodology was due to the following: (1) the research team and students were involved as partners in the research process, (2) the investigation was cyclic in that it built on a previous study that investigated the same phenomena (Hains-Wesson & Campbell, 2014), (3) the study was qualitative, and (4) the study was reflective. The following research question consequently helped to guide us when undertaking the action research project:

> How do street performing arts students perceive working with ideas in teams
> when undertaking an assessment task that involves improvisation?

In considering the research question we also drew from the literature that sought to understand the experiences of creative and performing arts (CPA) students undertaking a non-placement, work-integrated learning experience. For instance, in a previous study with the same CPA participants, we noted that traditionally students viewed themselves as being immensely creative and innovative, taking on risk taking as an employability attribute that was both challenging and rewarding (Hains-Wesson & Campbell, 2014). On reflection, we decided to continue with the research cycle for improving practice and to explore an additional topical problem around improvisation in teamwork. Therefore, it is important to note that we openly confess our researchers' bias here. We made all efforts necessary for the second named author (who was not a part of the original study) to act as the initial data analysis expert, prior to final analysis being undertaken and the writing up of the results. This in turn, aided in minimising researcher bias.

Method

In examining the students' experiences of the non-placement, WIL activity, the second author re-analysed the qualitative data that was collected during the original study (Hains-Wesson & Campbell, 2014), but in terms of the following: (1) how students worked together to generate new ideas, (2) how students worked with one, or more of these ideas in order to produce an end product, (3) students' reflections about how the product was received and (4) any changes made, regarding students' creative practice.

Context

This research project's context of operation, assessment criteria and the validation of the data collection tools have been discussed in detail elsewhere (Hains-Wesson & Campbell, 2014). For this reason, we will not re-visit the specifics of the original research context here, but rather point out where this research project departs from the original. First, we concentrated on the open-ended, qualitative responses from students who participated in the survey in order to elicit their beliefs and opinions about improvisation in teamwork, and second we focused on the responses from students who participated in the recorded, focus group discussion (N=22) where improvisation was a key element in the discussions. Therefore, this paper reports on the qualitative data collection phase of the original project that focused on students' beliefs, opinions and/or views on how they used improvisation for teamwork.

Data collection

The qualitative data was collected and transcribed, and placed into a *Word* document for *NVivo* analysis. The qualitative data was analysed by conducting coding. Ten codes were agreed upon by the researchers, with a pilot trial for each code completed on a randomly chosen piece of data that included both survey and focus group responses. Eventual consensus was achieved with each coder to ascertain similar coding processes. All data was rendered anonymous. The ten codes aligned to the research question for this study.

The following section presents the specific findings and in terms of the three stages, which enabled us to propose a three-stage improvisation model for students learning-to-be improvisers. We have named these stages: (1) putting ideas forward, (2) working the key idea and (3) the product and its presentation. It is important to note, that these three stages are similar to Sawyer's (2006) three characteristics of group creativity - improvisation, collaboration and emergence. However, the three-stage model presented in this paper differs from Sawyer's (2006) due to our focus on improvisation as a *process* that leads to creativity.

Each of the three stages of the learning-to-be improvisation framework highlighted capacities that we termed capabilities, several of which, such as reflection and improvisation, were developed by students in more than one stage. This finding allows university educators to rethink how they might support students in developing the improvisation capabilities to a higher level of achievement through exposure via the different stages. For example, when the capacities of the three stages, plus the ability to reflect are achieved, a measure of controlled improvisation is demonstrated. Then, students' improvisation capability has the potential to be measured. The three-staged improvisation model was developed through listening to, and analysing the voices of the students who undertook the non-placement, WIL assessment task.

Results: Three-stage model for improvisation

Stage 1: Putting ideas forward (5 capacities)

Putting ideas forward was an essential part of the improvisation process and, for some students, the first time they were given such improvisation license. As one student said, "one of the other major things that I have discovered about myself is that it means a lot to me to create my own work". The aim of putting ideas forward was to achieve group commitment to a key idea for development. For this reason, it is the first stage in the process of a group working creatively when improvising. Our analysis found that there were five elements to this process: (1) research skills (2) ideas generation and sharing, (3) creativity, (4) ideas selection and (5) resilience. While these elements are said to be stage one, it is important to note that they appear again in later stages. Therefore, this is not necessarily a linear model. We highlight this point in order to suggest the need to design curricula to introduce and develop the capabilities to improvise appropriately.

In the following section each capability is elaborated on further. We similarly present the following for stage two and three.

Capacity 1: Research skills
Research about the physical locations, the town hall, the art gallery amongst others, where the performance would take place and research about street performance was an important starting point for the students. All groups had to conduct research prior to any other work. Students got to choose how to do their research and, apart from the mandatory site visit, research included talking with community members, note taking from content found in documents and books, the Internet and personal experiences. This research had a direct impact upon the resulting performances.

> [Student A - research took a long time] The scripting process in itself was quite a long way as we were so stumped with the little research we had that it was hard to create anything.

Capacity 2: Ideas generation and sharing
When reflecting upon their experiences of generating and sharing forward, students mentioned the need for this aspect to be a shared, communicative and an open process.

> [Student T - not being afraid] Everyone in my group put in ideas and was not afraid to give their opinion. This is a helpful value to have as some people might be too scared to share their opinion with their peers.

Not each and every individual must put forward ideas. As one student described, they found it difficult to contribute ideas but 'hit their stride', when it came to negotiating.

> [Student P - stride in negotiating] When working in a group dynamic, I've found that I tend to be less capable of coming up with ideas and suggestions … I typically leave this element to other members of the team. Once we have these ideas, however, I find my stride in negotiating them and weighing them up against each other, building on the ideas of others and in some cases suggesting alternatives.

As suggested by this student, an important element of generating and sharing ideas as a team process for improvisation was the ability to discuss – to listen to options, to weigh them up, build on others' ideas and make suggestions.

According to the students, having discussions required the capacities of being open and respectful to others' ideas, confidence in putting your own ideas in the mix, brainstorming and the ability to recognise conflict, and to resolve it while noting one's own areas for improvement (or reflection).

> [Student C - group discussion] I find it much easier when ideas are discussed between everyone in the group rather than one person suggesting everything and everyone going along with it. When this happens, the task at hand becomes a

burden and that results in poor communication skills as well as a lack of connection with the rest of your ensemble.

One student referred to this need to communicate as giving feedback in order to provide clarity, and suggested that calmness when improvising was the key.

> [Student D - communication required] Personally, communication is a major factor when expressing ideas and giving feedback; it provides clarity within the group and gives an understanding to the task. If there is a problem within the group dynamic that needs to be expressed, a calm and constructive discussion can sometimes be the only thing needed to resolve the issue.

Capacity 3: Creativity

The capacity to be creative proved to be a key capability for students and one we argue runs through each of the three stages of our improvisation model, in terms of the *process* for effective improvisation. Some of the student teams relied upon improvisation to put forward and discuss ideas. For instance, the improvisational aspect allowed students to feel free to let go of an idea with respect – they tried it, it didn't work - or to adopt an idea(s) as another key to improved future performances. Students in our study found the 'physicality' of improvising extremely important.

> [Student E - improvisation was fun] Exploring ideas through improvisation with the group. The brainstorming process wasn't as much fun as the improvisation and creation process.

Students described improvising during the idea forming process in the following way:

> [Student H - physicalises ideas but speaks little] To physicalise an idea then discuss it, seeing an idea in action gives you a far greater insight into whether it worked or not.

> [Student F - working as a group] There were moments where two of us would have opposing ideas of how to convey something, but instead of one winning out over the other, we would decide as a group to workshop both ideas and decide on the basis of that.

Capacity 4: Ideas selection

The capacity to select a key idea or disregard others' ideas was required by at least some of the team members when improvising. This aspect of deciding on a workable key idea can prove to be quite damaging if not done with sensitivity and/or collectively.

> [Student Q - disappointed] At the time I was very disappointed that our idea had not been picked up. Throughout the creative process we were constantly hindered by miscommunication, poor direction and ideas being thrown out the door.

Trying new ideas, continual discussions and openly improvising were some of the keys to letting go of ideas with grace. It also helped if students were prepared to let their ideas be disregarded for the greater good.

> [Student F - letting go of ideas] I learnt that it is important not to get attached to ideas – because even if they work, or are genuinely wonderful, it may simply be something that will not work within the parameters of the task.

Capacity 5: Resilience
The process of putting forward ideas, going through the process of discussion that highlights areas of improvisation, and disregarding certain ideas proved to be stressful for some students.

> [Student G - negotiating control] We had one particular member almost controlling the project and not listening to others – I say all this because I strongly believe that our group got on the right track not even a week or so after we realised what we were doing and passed the negative and stressful situation that we were evidently stuck in.

For this reason, resilience is a capacity that can support students through the stressful process of stage one.

Stage 2: Working the shared idea – shared commitment leads to success (3 capacities)

Once an idea has been decided upon, the next stage of the improvisation process was to 'work the shared idea'. This part of the process required, first and foremost, (1) commitment to the shared idea, without which, students may continue to flounder; (2) ability to improvise in a focused manner and, (3) collaboration with improvisation as a key element for working effectively together.

Capacity 1: Commitment
It cannot be stressed enough that commitment to the shared key idea was essential in this stage. In the best instance, even if the main shared idea was not their own, the students felt that the idea belonged to them. Commitment allowed a sense of trust in the actual performance, especially when improvisation was taking place.

> [Student H - commit to ideas] So, it was great to be able to ascertain that I still have the ability to commit myself to an idea [improvisation], even if it is not perhaps my choice in the first place.

> [Student I - commit and trust] I had my ideas put into the script, as did everyone else. That unconditional commitment really gave me a sense of trust in other artists, a sense that we all have something to say, but if we say it together, it will be much more stronger.

[Student K - commitment and group work] Committing to the task really helped me work within the group.

When commitment was lacking, tensions arose that then effected the performance.

[Student U - lack of input] However, I felt as though by the end of the creative process there was very little of our ideas [improvisations] there at all and we simply where trying to appease our assessors who shot down every idea we brought forward which meant that when it came time to actually perform the piece, I felt extremely uncomfortable and to be honest embarrassed, which made it very difficult to summon the energy I wanted to interact with the crowd.

Capacity 2: Improvise
Students used improvisation in a far more focused manner than in the first stage. For instance, by this stage they had decided upon the key idea and needed to 'flesh' it out.

[Student A - linking themes] We then did three minds maps […] to try and link these themes together somehow.

They also had to integrate a long piece of string into their performances. Improvisation was key in working together in order to figure out how to integrate this prop into the performance.

[Student C - ending] As we discovered new uses for the string we were able to come up with an abstract and powerful ending.

Openness and honesty were important to improvisation as well.

[Student R - important to be open] We all found it important to be open and honest about our feelings towards the [development] process. […] This was with particular reference to our thoughts on what would be our ways of doing things versus the necessities of working within the confines of the brief.

Capacity 3: Collaboration
Generally, the first stage of the model could be approached as an individual – the need to contribute and/or choose an idea(s). Stage two though is dependent upon collaboration where communication is the key for effective improvisation processes. For example, students found that communication was an important key for undertaking improvisation, whether it was when they were creating ideas or arranging time to meet, it still played a beneficial role in the teams' dynamics. Collaboration for the groups required students to learn how to work with individuals and team members, and especially those who tended to dominate and those who tended to hold back. In this stage, it became apparent that students required support in undergoing peer-review as part of the collaborative process for this stage; so that they could take the feedback on board and in turn incorporate the feedback. This taught students about their own strengths and weaknesses.

[Student Q - cult of the individual] This was not a balance, a relationship of giving and taking, manoeuvring and directing ideas but a long process of elimination and rejection. […] This project seems to define the 'cult of the individual, the arrogant culture of the self'.

And, being more flexible.

[Student I - group cooperation] For me the most influencing factor to the whole experience has been the cooperation of my group [team]. Through this task I have learnt the balance of give and take required to work within such a group [team].

Stage 3: The product and its presentation (3 capacities)

The third stage of our model was the product of the creative output and its presentation, if necessary. Our analysis found that this stage of the process required the capability of students to improvise as well as to build self-confidence to take risks. The capacities developed in stage three were: (1) improvisation, (2) confidence and (3) risk taking.

Capacity 1: Improvisation
Again, improvisational skills proved essential in this stage. The quote we have chosen to illustrate this point is the unwelcomed need to improvise. However, unwelcomed or not, students need to be both prepared and ready to improvise during this stage.

[Student D - ideas scrapped] The only points where I didn't feel completely comfortable in the project was when my ideas would get completely scrapped last minute (the day of performing) and I was thrown into the unknown of improvisation.

Capacity 2: Confidence
Students required confidence in their creative product/outcome. While students might gain confidence through the process, any actual presentation will contribute to future confidence.

[Student N - out of my shell] It took me out of my shell to realise that I will actually be performing in a public space for the first time in my life.

Capacity 3: Risk taking
Risk taking was important in the presentation of the product/outcome and to encourage students to continually improvise. In the case of the performances, this included students' ability to push oneself and one's team beyond a safe space in order to create a 'better' performance.

[Student O - playing it safe] I think the performance could have been more non-natural, we played it pretty safe and could have explored our ideas further.

Risk taking involved overcoming, or at least performing with fear. Students felt a great deal of fear about presenting in public.

> [Student S - initial fear] There is always the initial fear when performing my own work for the first time. However, once I put [fear] aside and just decided to enjoy it when I moved amongst the crowd I enjoyed it immensely.

Overall, by listening to and analysing students' words about their experiences of undertaking a creative assessment task in teams, and when utilising improvisation that leads to creativity, we have developed a three-stage improvisation model. We emphasise that the model is a starting point only. It requires further development and evaluation in order to validate its usefulness, its creditability and its success across the disciplines.

Discussion

The three stages of our model for working with others on ideas were: (1) putting ideas forward, (2) working the key idea and (3) production and presentation of the idea. Each stage had particular capacities that students were required to develop. Improvisation was a key element in the process of creativity and creative output. It either centred, touched-on, or was embedded into the other skills that students were developing.

The following image (Figure 1) presents the three-stage improvisation model in a visual way. The image can be used as a starting point for further research, evaluation and/or additional development of improvisation *process* model for teamwork that leads to creativity for enhancing job-readiness.
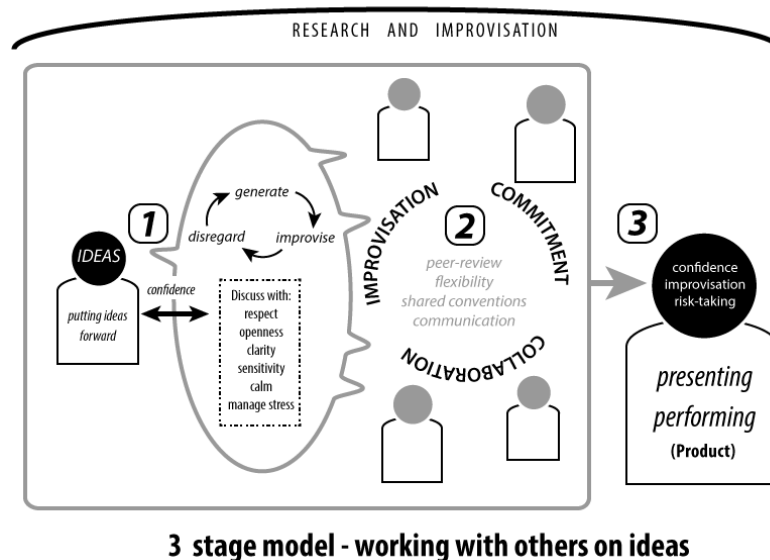

Figure 1: Working with ideas: A three-stage improvisation model for teamwork

It was creativity and improvisation that were the two recurring elements which appeared throughout the model. Creative learning has increasingly become an important aspect of higher education curriculum and it is directly linked to critical thinking. It is thus not surprising that this capacity appeared as an important link to improvisation when students worked in teams for the street performance activity. We also found that reflective notes were an important element of the students' improvisation experiences. Reflection was a key element in the major assessment tasks for the unit of study (see initial research article, Hains-Wesson & Campbell, 2014). We argue that reflection be considered as a way to support, assess and monitor teamwork tasks where improvisation is emphasised.

The focus of this paper was improvisation for teamwork that leads to creativity and/or creative output. As Sawyer (2006) argued, improvisation is an essential aspect of creativity. It is perhaps expected that in a performing arts project that improvisation skills and creativity outcomes would be essential, possibly intuitive and therefore, an unnecessary teaching and learning requirement for performing arts students. However, we argue that this is not necessarily the case. In this study, we suggest there is a need to cultivate improvisation skills in all teamwork tasks, including the performing arts arena. Whether one argues that improvisation/creativity can be taught or not (Best, 1982), providing students with a model to assist them with improving their improvisational development skills, during teamwork projects, is highly beneficial for students' employability skill development for job-readiness.

In stage one, which focused on putting ideas forward, the main capacities were research skills, ideas generation skills, creativity, disregarding of ideas, and resilience when in the face of stress. Ideas generation was dependent upon research, openness, the ability to share, respect, the ability to give and take feedback, conflict resolution skills and calmness. Curriculum that supports the development of different ways to undertake research, discussion strategies, clarity, confidence building and knowing when to take the initiative can be highly valuable when supporting students to learn to communicate for improvisation. When creativity was mentioned it was in terms of encouraging educators to consider ways to ensure students learn to improvise with their ideas. This involves working from a point of not-knowing. An uncomfortable place for many students. We suggest the need to offer "shared conventions" for improvisation (Sawyer, 2006, p. 157). Students can work together to decide these conventions and more ideally when the assessment task itself is a shared convention.

Workshopping, trying out and physically enacting ideas were important to many of the students. This can support students to be able to select the most appropriate ideas and respectfully let go of others' ideas. As students would have had the opportunity to try out different ideas, they may have developed a pertinent reason for letting some go. For alleviating stress, it is important that students are supported to communicate during generation of ideas, a lack of ideas, lack of direction and insensitive disregarding of ideas. Without support, these stresses can lead to students feeling over-whelmed by the process. This was commonly expressed in our research as a feeling of being dis-oriented, dominated and stuck. This can lead to conflict, to individuals 'holding back' and a feeling that it will never end in a positive experience – rather than displaying coherence, clarity

and a shared commitment. University educators can share different ways of dealing with stresses with students, can make 'dealing with stress' part of the assessment, and share resources with students to help support this type of complex learning process. It also may be necessary to set up a formal approach for learning about how to manage stress in order to avoid complaints to teaching staff.

In stage two, which focused on working the shared idea, the following capacities were required: commitment to the shared idea, capacity to creatively improvise on the idea and collaboration. Commitment was a key attribute for students to be able to work on an idea. We suggest that higher education educators enable students to focus on their ability to commit to an idea. This involves the use of judgment – reflection and critical thinking can be important capacities to support the development of such judgment. Learning activities designed to support trust can also prove excellent to this end. Creative improvisation was integral to this stage. Again, we suggest that educators pay particular attention to the shared conventions (Sawyer, 2006) that are necessary to enable strong improvisation. We also suggest that educators pay close attention to the conventions of their assessment task in order to guide and scaffold improvisation. This includes students' ability to be agile and adaptive regardless of discipline.

Collaboration for this stage (2) was an important aspect of curriculum design. Sawyer (2006, p. 158) used the term 'group flow' to describe "when a group is performing at its peak […] in the same way that an individual performing at his or her peak often experiences a subjective feeling of flow" (p. 148). Paying sufficient attention to the development of collaboration, and making it an aspect of the assessment, can help to avoid 'the cult of the individual' that was experienced by one of our students, and therefore, an experience of group flow. Sawyer (2006, p. 148) wrote "the creativity of a group cannot be associated with any one person. All members contribute and their interactional dynamics result in the performance" (p. 148). Supporting students to attain 'group flow' is thus integral to creative assessment tasks that utilise improvisation. This involves ensuring that communication, peer-review and flexibility are developed throughout the task. Curriculum time must be dedicated to these three aspects.

In stage three, which focused on product and presentation, our analysis found that this stage of the process required the capacities of creative improvisation, confidence and the ability to take risks. Creativity in this stage was important in the sense that many of the teams found they improvised during the actual performance and/or relied on their improvisational skills developed during the process. Sawyer (2006) has a focus on improvisation during team performances, with attention paid to the achievement of 'group flow'. We suggest readers might find his work useful in developing curriculum for creative teamwork that includes a performance aspect.

In generalising beyond a creative performance, we suggest that in order to alleviate tensions, the curriculum enables students to prepare for the possibility that they might have to improvise during any presentation/s. Confidence was important for students in the presentation of their performances. We suggest that to prepare for this stage,

educators allow students to rehearse the presentation in terms of their product, preferably to their peers for constructive feedback, encouraging improvisation throughout.

Risk taking was perhaps the central capacity in this stage (3). Students needed to learn how to take risks both in the sense of their own work and in the presentation of that work to the public. Some students felt nervous about their performance, they felt they 'played it safe'. Students needed to be allowed to take risks during the development of the product in order to over-come 'safe-playing' tendencies, and improvisation can support this notion. Educators interested in improvisation to enhance risk taking could develop strategies for students that teaches 'working in/with fear' as a positive notion, for example.

Conclusion

The improvisation model we propose in this paper for supporting creative assessment design was titled, *Working with others on ideas* and had a three-stage focus: (1) putting ideas forward, (2) working the key idea and 3) the product and its presentation. What we are presenting in this paper is not that the model itself is highly original or only beneficial to street performing arts students, but rather, what we found from listening to street performing arts students' responses to using improvisation for teamwork was that their feedback mirrored what educators often expected about teamwork. However, the development of these skills is rarely a highlight of curricular design. This discovery aided in the development of the model as we analysed why students believed improvisation was essential, or what is needed in order for improvisation to manifest itself and be implemented as a key component in assessment design. In this way, we argue for the role of improvisation to be incorporated as an essential component in the teaching and assessing of teamwork that leads to creativity and/or creative output. We posit that the three-stage improvisation model will help to develop certain improvisation capacities, some of which run through the three stages, some of which are relevant to only one stage when it comes to designing curricula, with a focus on teamwork. In this way, students learn-to-be improvisers, a capacity integral to modern economies.

Finally, it is worth noting again that the three-stage improvisation model that we present here is similar to Sawyer's (2006) three characteristics of group creativity, improvisation, collaboration and emergence. However, where our model builds upon, and therefore, augments Sawyer's (2006) work, is on the focus of the *process* that teams undertake as they develop a creative product that uses improvisation.

Future research directions for this model would therefore include its implementation across disciplines. We would also welcome additional critiques of the model, including the problem of effectively designing assessment tasks to measure students' learning in the area of enhancing improvisational skill development for teamwork.

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