



USING CONTRIBUTORY DIGITAL TECHNOLOGIES TO PROMOTE STUDENT KNOWLEDGE, CONFIDENCE AND VOICE: THE NERUPI FRAMEWORK AND UNIVERSAL DESIGN FOR LEARNING

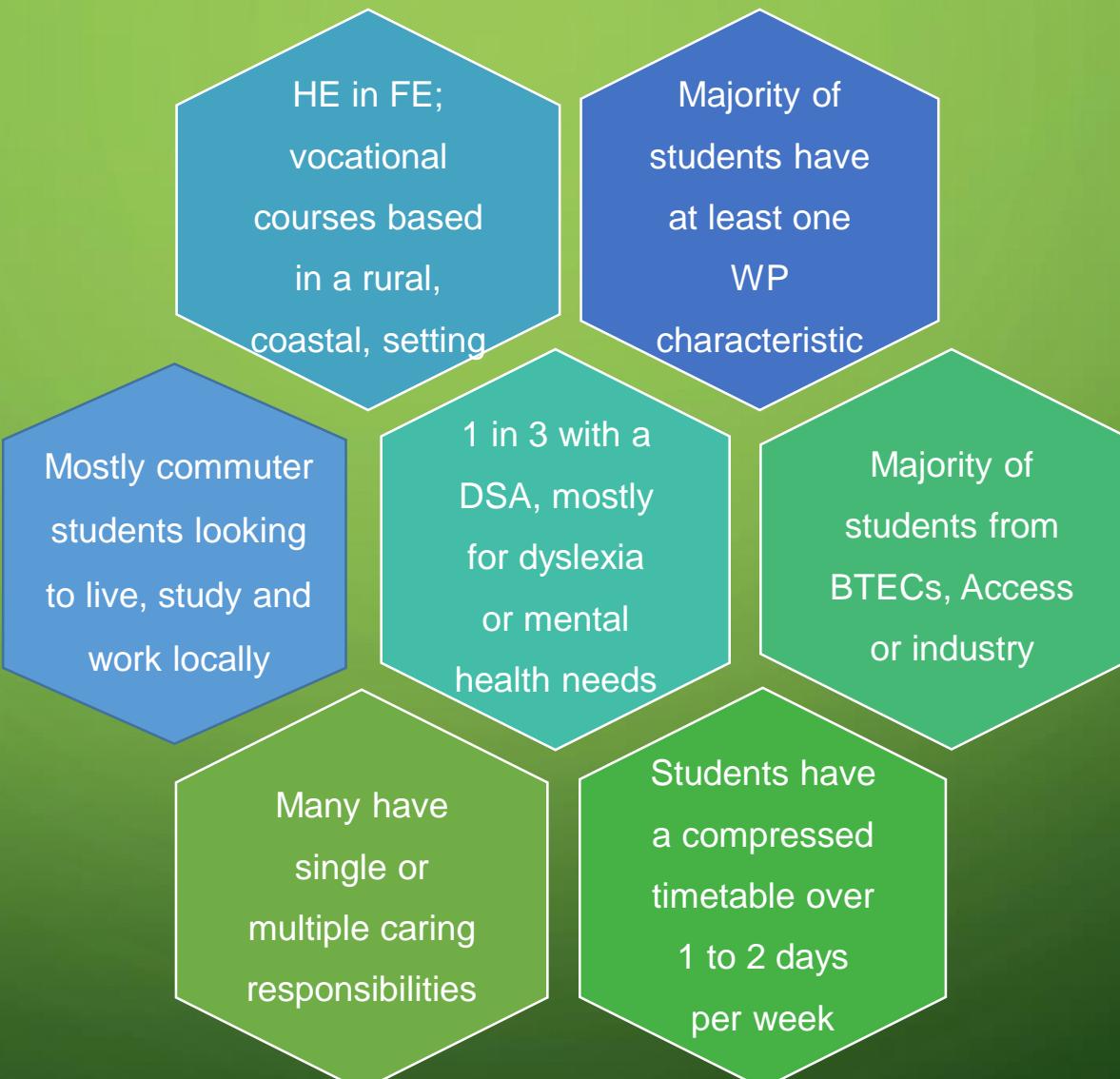


SALLY TAZEWELL, UNIVERSITY CENTRE WESTON AND WIN

(Image: Rahnama, 2017)



INSTITUTIONAL CONTEXT



WHY CONTRIBUTORY DIGITAL TECHNOLOGIES?

- Funds of knowledge approach (see, for example, Ríos-Aguilar, Marquez Kiyama, Gravitt and Moll, 2011)
- Epistemic justice (see, for example, Walker, 2006)
- Own disability
- Covid-19



BEING MINDFUL OF INEQUALITIES IN DIGITAL ACCESS

The Sutton Trust (Montacute, 2020) suggests that the greatest disadvantage will be felt by around 1 in 20 students with limited access to *adequate technology, internet access and a quiet space to work*



UNEQUAL EXPERIENCES OF LEARNING UNDER COVID-19

'In a crisis, reducing inequalities doesn't tend to be seen as a priority' (Chadderton, 2020)

Covid-19 saw inequalities emerging by:

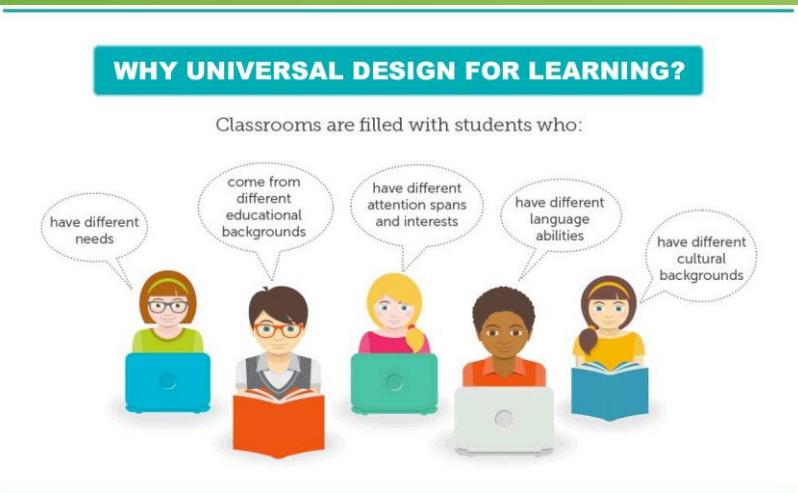
- **age** (Elliot Major and Machin, 2020)
- **BAME** (Doku, 2020; Singh, 2020)
- **care-experienced and estranged students** (Become, 2020a: 2020b)
- **disability** (Chadderton, 2020)
- **gender** (Chadderton, 2020)
- **learning differences** (Ball, 2020)
- **socio-economic status** (Children's Commissioner, 2020)
- **wellbeing and mental health** (Moore and Mountford-Zimdars, 2020)



ACADEMIC YEAR 2020 - 2021

'we must not let our emergency response become our solid state' (Tooth, 2020)

WHAT IS UDL?



Universal design for learning created to improve accessibility

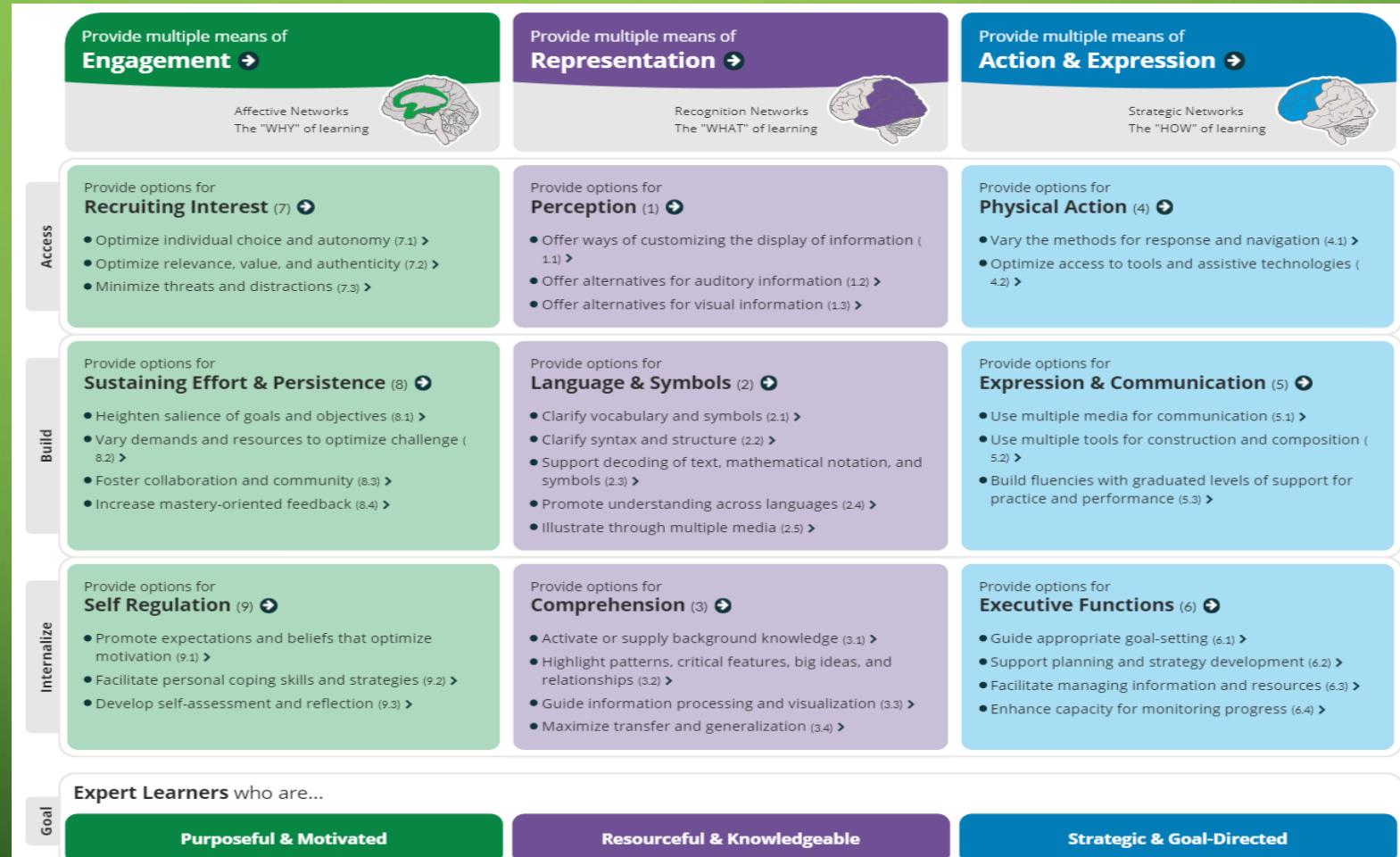
Maps well to the NERUPI framework, e.g.

1) engagement = habitus = become

2) representation = skills capital = practise

3) action and expression = intellectual capital = understand

WHAT IS UNIVERSAL DESIGN FOR LEARNING (UDL)?



(Image: CAST, 2018)

CONTRIBUTORY DIGITAL TECHNOLOGIES FOR ENGAGEMENT (HABITUS)



QUIZZES AND
MULTIMEDIA APPROACHES

(Image: Disney, 2019)

- Familiar with learning and teaching approaches
- Personalise strategies for maximising benefits

- Access – optimise choice + relevance + minimise threats
- Build – foster collaboration and community
- Internalise – promote expectations and beliefs that optimise motivation

NERUPI

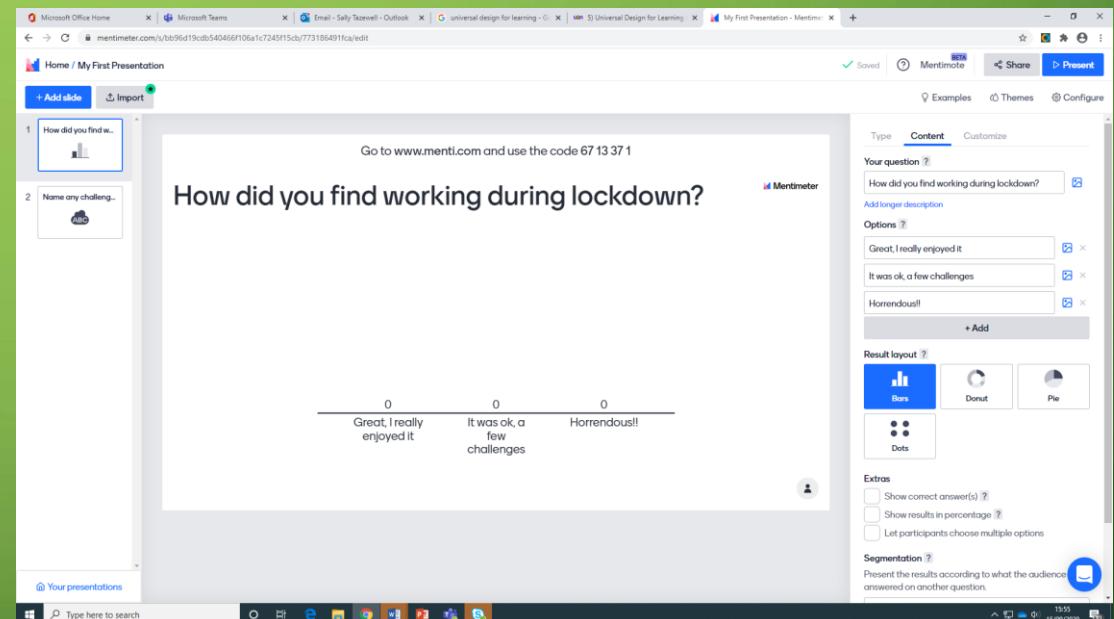
UDL

QUIZZES

Many of us are familiar with a kahoot quiz or quizzizz

menti is good as it shows the results in real time

Go to Menti.com and add the code 67 13 37 1



MULTIMEDIA

- Example 1 – useful for thinking about gender, stereotypes and being a ‘good’ student
- Example 2 – useful for thinking about identity, belonging and adherence to rules



[Little Mix music video - Black magic](#)

(Image: Little Mix, 2015)



[Fast and Furious video clip - first race in Tokyo Drift](#)

(Image: Movie Car Chases HD, 2017)

CONTRIBUTORY DIGITAL TECHNOLOGIES FOR REPRESENTATION (SKILLS CAPITAL)



MINDMAPS

(Image: Brandner, undated)

- Skills to engage effectively
- Skills to communicate effectively
- Skills to work independently
- Capacity to work collaboratively

NERUPI

- Access – offer alternatives to auditory / visual
- Build – illustrate through multiple media
- Internalise – highlight patterns, critical features, big ideas and relationships

UDL

SAMPLE OF A COGGLE ON STUDY SKILLS: WHAT DO YOU LIKE AND WHAT WOULD YOU CHANGE?



CONTRIBUTORY DIGITAL TECHNOLOGIES FOR ACTION AND EXPRESSION (INTELLECTUAL CAPITAL)



NOTE-MAKING AND DEBATES

- Accessible and challenging curriculum
- Situate existing knowledge and interests within the context of university course and subject area

- Access – vary methods of response
- Build – use multiple media for communication
- Internalise – facilitate managing information and resources

NERUPI

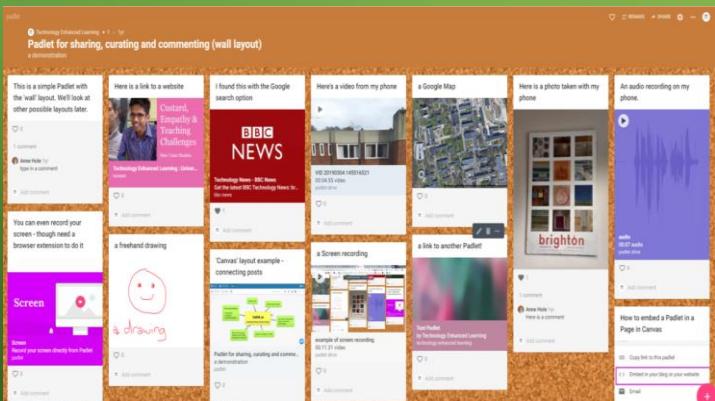
UDL

NOTE-MAKING AND DEBATES

USING PADLET

CURATORY – SEE WHAT ALREADY EXISTS

CONTRIBUTORY – INTRODUCTIONS, REFLECTIONS, CAROUSELS, ‘SCRAPBOOKING’ LINKS OR IMAGES

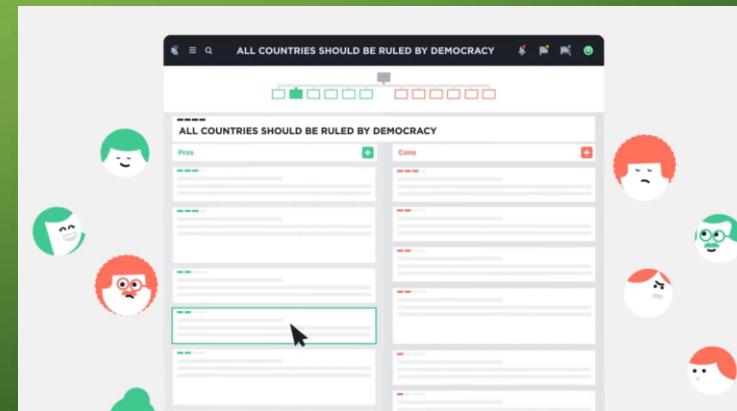


(Image: Robinson, 2020)

USING KIALO

CURATORY – SEE WHAT ALREADY EXISTS

CONTRIBUTORY – RESPOND TO A DEBATE OR SET UP THEIR OWN, ‘LIKE’ OTHER PEOPLE’S COMMENTS



(Image: Kialo, 2020)

CONTRIBUTORY VERSUS CURATORY APPROACHES

Creating, reflecting and refining resources



(Image: Yutongo, 2013)

Responding to resources (which is still contributing)

WHY REINVENT THE WHEEL WHEN YOU DON'T HAVE TO?



(Image: Aras Blog, 2014)



WHEN TO CONTRIBUTE

PRE-SESSION

- Initial thoughts as a bridge to learning for students
- Initial thoughts as a baseline for staff around prior knowledge
- Collect items or ideas to discuss in class

IN-SESSION

- Share ideas
- Share resources
- Build a community of learners

POST-SESSION

- Follow-up questions or tasks
- Share thoughts and reflections
- Compare thinking now compared with pre-session

USEFUL SOURCES:

- Kahoot <https://kahoot.com/schools-u/>
- Menti <https://www.mentimeter.com/>
- Quizzizz <https://quizizz.com/>
- Coggle <https://coggle.it/>
- Padlet <https://padlet.com/auth/login>
- Kialo <https://www.kialo-edu.com/>

REFERENCES

Aras Blog (2014) *Are you needlessly reinventing the wheel?* Available from: <Https://community.Aras.Com/b/english/posts/are-you-needlessly-reinventing-the-wheel> [Accessed 07 September 2020].

Ball, H. (2020) *Delivering remote support for neurodiverse learners*. Available from: <https://wonkhe.Com/blogs/delivering-remote-support-for-neurodiverse-learners/> [Accessed 05 June 2020].

Become (2020a) *Supporting care-experienced and estranged students in higher education – responding to covid-19* (2020). Available from: <https://www.Becomecharity.Org.Uk/for-professionals/resources/supporting-care-experienced-and-estranged-students-in-higher-education-responding-to-covid-19-2020/> [Accessed 05 June 2020].

Become (2020b) *Coronavirus and its impact on care-experienced young people* (2020). Available from: <https://www.Becomecharity.Org.Uk/for-professionals/resources/coronavirus-and-its-impact-on-care-experienced-young-people-2020/> [Accessed 05 June 2020].

Brandner, R. (undated) *Why mind mapping?* Available from: <https://www.mindmeister.com/blog/why-mind-mapping/#> [Accessed 14 September 2020].

CAST (2018) *Universal Design for Learning*. Available from: http://udlguidelines.cast.org/?utm_medium=web&utm_campaign=none&utm_source=cast-about-udi [Accessed 11 September 2020].

Chadderton, C. (2020) *What will covid-19 mean for widening participation in higher education?* Available from: <https://www.Eventbrite.Co.Uk/e/what-will-covid-19-mean-for-widening-participation-in-higher-education-tickets-106129865284> [Accessed webinar 04 June 2020, recording yet to be uploaded to IPR website at time of presenting].

Children's Commissioner (2020) *We're all in this together?* Available from: <https://www.Childrenscommissioner.Gov.Uk/wp-content/uploads/2020/04/cco-were-all-in-this-together.Pdf> [Accessed 13 June 2020].

Disney (2019) *The Rise of Skywalker*. Available from: <https://www.youtube.com/watch?v=BCPiBWrlaSI> [Accessed 14 September 2020].

Doku, A. (2020) *We cannot let covid-19 derail progress on closing the BAME attainment gap*. Available from: <https://wonkhe.Com/blogs/we-cannot-let-covid-19-derail-progress-on-closing-the-bame-attainment-gap/> [Accessed 05 June 2020].

Elliot Major, I. and Machin, S. (2020) *Covid-19 and social mobility: A CEP covid-19 analysis (paper 4)*. Available from: <http://cep.Lse.Ac.Uk/pubs/download/cep covid-19-004.Pdf> [Accessed 03 June 2020].

Little Mix (2015) *Black magic*. Available from: https://www.youtube.com/watch?v=MkElfR_NPbI [Accessed 14 September 2020].

Montacute, B. (2020) *What will covid-19 mean for widening participation in higher education?* Available from: <https://www.Eventbrite.Co.Uk/e/what-will-covid-19-mean-for-widening-participation-in-higher-education-tickets-106129865284> [Accessed webinar 04 June 2020, recording yet to be uploaded to IPR website at time of presenting].

Moore, J. and Mountford-Zimdars, A. (2020) *Assessing the implications of school closure: survey of uni connect partnerships and widening participation professionals*. University of Exeter: Centre for Social Mobility.

Movie Car Chases HD (2017) *FAST and FURIOUS: TOKYO DRIFT - first race (Monte Carlo vs Viper)*. Available from: <https://www.youtube.com/watch?v=7vjrjXud-WE> [Accessed 14 September 2020].

Rahnama, H. (2017) *What the rise of interconnected learning means for higher ed*. Available from: <https://www.Gettingsmart.Com/2017/01/interconnected-learning-means-for-higher-ed/> [Accessed 07 September 2020].

Ríos-Aguilar, C., Marquez Kiyama, J., Gravitt, M. and Moll, L. (2011) Funds of knowledge for the poor and forms of capital for the rich? A capital approach to examining funds of knowledge. *Theory and research in education*. 9(2), pp. 163 – 184.

Robinson, G. (2020) *4 fantastic uses for padlet in online teaching*. Available from: <https://blogs.sussex.ac.uk/tel/2020/07/28/4-fantastic-uses-for-padlet-in-online-teaching/> [Accessed 14 September 2020].

Singh, G. (2020) *Covid-19 does discriminate – so we should tackle its impact on BAME students*. Available from: <https://wonkhe.Com/blogs/covid-19-does-discriminate-so-we-should-tackle-its-impact-on-bame-students/> [Accessed 05 June 2020].

TechRepublic (2019) *How to use Microsoft's sticky notes in windows 10, on the web, and on your mobile device*. Available from: <https://www.techrepublic.com/article/how-to-use-microsofts-sticky-notes-in-windows-10-on-the-web-and-on-your-mobile-device/> [Accessed 14 September 2020].

Tooth, R. (2020) *Practical and ethical responses to Covid-19 for outreach evaluation*. Available from: <https://www.villierspark.org.uk/partner-events> [Accessed 19 May 2020].

Yutongo (2013) *Collecting ideas for a new TV format - a yutongo project show case*. Available from: <https://www.yutongo.com/collecting-ideas-for-a-new-tv-format-a-yutongo-project-show-case> [Accessed 07 September 2020].