

# Writing Motivation Intervention for Children with Dyslexia

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# Language and Literacy



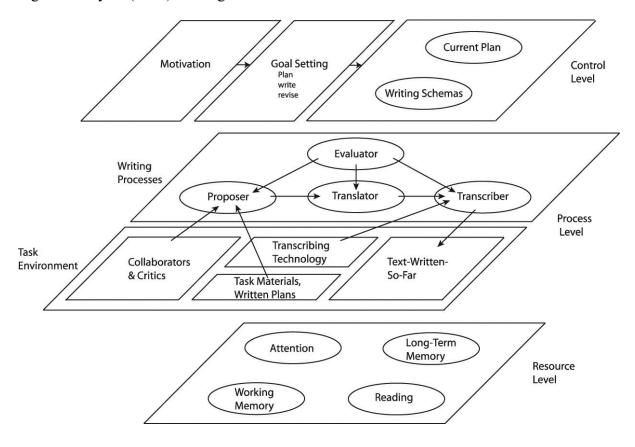




# Introduction

Dyslexia is a language-based learning disability which affects 10% of people in the UK (Jacobs et al., 2022). The disorder significantly impacts writing ability (Berninger et al., 2008) – a complex behaviour involving numerous processes (see Figure 1). Motivation was included as an additional element to Hayes' (2012) original 1996 model stressing its importance in writing. Since motivation towards literacy is more difficult for dyslexic children (Gibby-Leversuch et al., 2021), Yeung (2022) states the importance of improving writing motivation to positively affect writing performance. In 2006, Caso and García noted a deficiency of writing motivation programmes. Recent interventions into writing and dyslexia tend to solely target text quality elements like handwriting eligibility (Balantekin, 2021) rather than motivation.

Figure 1. Hayes' (2012) Writing Model.



Writing is a key skill that assists individuals' progression through education and success in later life (Graham & Alves, 2021). All children require encouragement towards the activity in their early years to prevent writing failure (Kissel, 2008). Existing publications illustrate how dyslexic children are more likely to produce poor-quality texts through factors like spelling (Sumner, 2013) and punctuation errors (Torkildsen et al., 2016). 'Failure' in academic achievement can damage young dyslexics' identities who may experience severe anxiety and perceive themselves as 'stupid' (Lithari, 2023). Research suggests that higher motivation towards writing can result in better writing-products (Rocha et al., 2019). Therefore, writing motivation should be encouraged in children with dyslexia.

Motivation can be extrinsic – external rewards promoting behaviours – or intrinsic, referring to internal satisfaction as a result of behaviour (Hennessey et al., 2015). In primary schools, stickers are out-dated rewards that specifically increase extrinsic motivation (Taylor et al., 2014). This has led to modern implementation of technological resources to motivate learning within the classroom (Braje & Topčić, 2023). Camacho et al.'s (2021) systematic review highlights the advantages of e-learning towards students' writing motivation. Landers' Gamified Learning Theory (GLT, 2014) demonstrates the benefits of applying game-like attributes to the non-game context of learning. As gamification improves one's intrinsic motivation (Treiblmaier & Putz, 2020), such applications have been created to keep students academically engaged (Buckley & Doyle, 2014).

The current intervention proposal takes inspiration from Gooch et al. (2016) who focused on dyslexic students transitioning from primary to secondary school. Implementation of 'ClassDojo' in specialised-educational sessions concluded how gamification could positively evolve lesson planning. ClassDojo allowed teachers to target pupils' personal educational

challenges through the customisation of badges. The digital-extrinsic motivator improved the children's intrinsic motivation through agency, reflecting and meaning-making. Like the publication, the current proposal would entail a selective intervention procedure that aims to protect students with dyslexia in educational settings through improved development of and attitudes towards literacy.

# Method

# **Participants**

Eight children with a dyslexia diagnosis aged 8-11 years would be recruited through contacting specialist schools/teachers in Merseyside.

Up to four specialist teachers – minimum of five years of experience – are required for the study. The children's parents would also be needed.

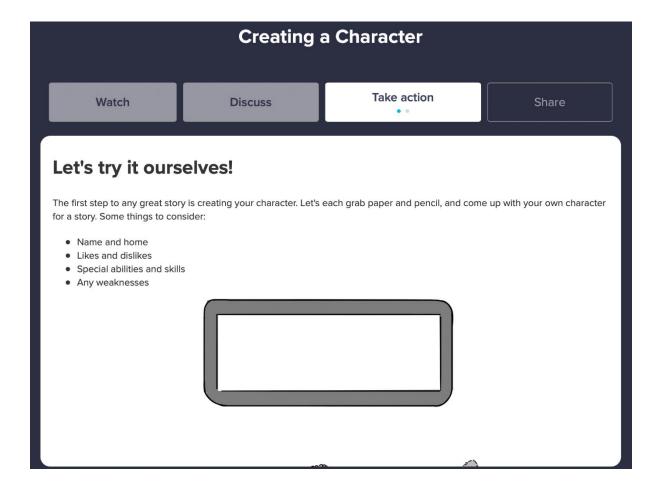
# **Procedure**

Prior to the intervention, the children, parents and teachers would be questioned separately using transcribed semi-structured interviews. Students would be asked about their attitudes towards writing, personal motivation and self-perception. Interviews towards the parents would focus on their children's academic attainment, perceived attitude towards writing and personal opinions about their child's education. The educators' interviews would explore individual teaching techniques, challenges in writing activities and thoughts on gamification.

Each teacher would then be introduced to 'ClassDojo' (<a href="https://www.classdojo.com/engb/">https://www.classdojo.com/engb/</a>) – a website designed to support education and keep families, teachers and pupils connected. ClassDojo has been successful in supporting young people's social emotional development (Williamson, 2017) and increasing self-regulatory behaviours (MacLean-Blevins, 2013). Specifically, educators would become familiar with the "Night Zoo" activity

which splits storytelling into four parts: 'create a character/place/obstacles/ending'. Each stage includes a video to engage the children, discussion questions like "Think of your favourite book. What makes it a good story?" and finally, tackling the creation of character/place/obstacles/ending (see Figure 2).

Figure 2. 'Creating a Character' stage of the Night Zoo storytelling activity. https://ideas.classdojo.com/f/storytelling-1/0



Alongside the activity, teachers can personalise achievements to students – for example, if one child struggled particularly with punctuation and grammar, a corresponding badge could be targeted to the individual. Whilst all participators would technically be completing the same activity, such digital rewards would simultaneously allow individualisation. Specialist teachers

would also be partnered with students they are familiar with, hence the proposed recruitment approach. This decision aims to maximise personalisation in the teaching environment to target struggling areas in each pupil's writing. Two-to-one teaching sessions would take place in one hour sessions twice a week in a specialised-educational setting. The first hour block would entail the 'create a character' activity which would progress through to the final stage of storytelling.

After administering the proposed intervention, another set of semi-structured interviews would take place. Pupils' interviews would include questions targeting their motivation towards the activity, experience using ClassDojo and attitudes towards writing. Interviewing the parents would involve interrogating their opinions on ClassDojo, their child's motivation towards the storytelling and self-monitoring behaviour in their children. The final interviews would explore teachers' views on the gamification platform, effect on writing motivation and self-regulation from their students. Two researchers would thematically analyse the transcriptions to find common feedback surrounding ClassDojo's impact on writing motivation.

# Conclusion

The aforementioned procedure proposes a method to tackle writing motivation in dyslexic primary school children. It builds on work from Gooch et al. (2016) who applied the ClassDojo gamification platform and discovered increased levels of intrinsic motivation during lessons in students with dyslexia. Moulding the existing methods to writing motivation would aim to tackle literacy difficulties in dyslexia from a young age. As indicated by Hayes' (2012) model, motivation is a vital element to the writing process despite being excluded from previous interventions. Developing foundational writing skills is crucial for young people to progress through their education. Dyslexia diagnoses make educational progression more difficult

stressing the relevance of the proposed programme. Results should inform specialist education lesson planning. Whilst it is anticipated that the digital rewards will positively affect writing motivation, future researchers could consider how to maintain this as students get older. Scholars may also propose empirical measures to assess writing motivation.

# References

- Balantekin, Y. (2021). Improving the Reading and Writing Performance of a Student with Dyslexia: An Action Research Study. *International Electronic Journal of Elementary Education*, 14(2), 163-177. <a href="https://doi.org/10.26822/iejee.2022.236">https://doi.org/10.26822/iejee.2022.236</a>
- Berninger, V. W., Nielsen, K. H., Abbott, R. D., Wijsman, E., & Raskind, W. (2008). Writing problems in developmental dyslexia: Under-recognized and under-treated. *Journal of school psychology*, 46(1), 1-21. https://doi.org/10.1016/j.jsp.2006.11.008
- Braje, I. N., & Topčić, J. (2023). Implications of Teacher Motivation in the Digital Age: Does

  Teacher Motivation Contribute to the Adoption of E-Learning Tools. In *SHS Web of Conferences* (Vol. 169). EDP Sciences.

  https://doi.org/10.1051/shsconf/202316901020
- Buckley, P., & Doyle, E. (2016). Gamification and student motivation. *Interactive learning* environments, 24(6), 1162-1175. https://doi.org/10.1080/10494820.2014.964263
- Camacho, A., Alves, R. A., & Boscolo, P. (2021). Writing motivation in school: A systematic review of empirical research in the early twenty-first century. *Educational Psychology Review*, 33(1), 213-247. <a href="https://doi.org/10.1007/s10648-020-09530-4">https://doi.org/10.1007/s10648-020-09530-4</a>
- De Caso, A. M., & García, J. N. (2006). What is missing from current writing intervention programmes? The need for writing motivation programmes. *Estudios de Psicología*, 27(2), 221-242. <a href="https://doi.org/10.1174/021093906777571682">https://doi.org/10.1174/021093906777571682</a>
- Gibby-Leversuch, R., Hartwell, B. K., & Wright, S. (2021). Dyslexia, literacy difficulties and the self-perceptions of children and young people: A systematic review. *Current Psychology*, 40(11), 5595-5612. https://doi.org/10.1007/s12144-019-00444-1
- Gooch, D., Vasalou, A., Benton, L., & Khaled, R. (2016). Using gamification to motivate students with dyslexia. In *Proceedings of the 2016 CHI Conference on human factors in computing systems* (pp. 969-980). https://doi.org/10.1145/2858036.2858231

- Graham, S., & Alves, R. A. (2021). Research and teaching writing. *Reading and Writing*, *34*, 1613-1621. <a href="https://doi.org/10.1007/s11145-021-10188-9">https://doi.org/10.1007/s11145-021-10188-9</a>
- Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In
  C. M. Levy & S. Ransdell (Eds.), *The science of writing: Theories, methods*. *Individual differences, and applications* (pp. 1-27). Lawrence Erlbaum Associates,
  Inc.
- Hayes, J. R. (2012). Modeling and remodeling writing. *Written communication*, 29(3), 369-388. https://doi.org/10.1177/0741088312451260
- Hennessey, B., Moran, S., Altringer, B., & Amabile, T. M. (2015). Extrinsic and intrinsic motivation. *Wiley encyclopedia of management*, 1-4. https://doi.org/10.1002/9781118785317.weom110098
- Jacobs, L., Parke, A., Ziegler, F., Headleand, C., & De Angeli, A. (2022). Learning at school through to university: the educational experiences of students with dyslexia at one UK higher education institution. *Disability & Society*, *37*(4), 662-683. https://doi.org/10.1080/09687599.2020.1829553
- Kissel, B. (2008). Promoting writing and preventing writing failure in young children. *Preventing school failure*, 52(4), 53. https://doi.org/10.3200/PSFL.52.4.53-56
- Landers, R. N. (2014). Developing a theory of gamified learning: Linking serious games and gamification of learning. *Simulation & gaming*, 45(6), 752-768. https://doi.org/10.1177/1046878114563660
- Lithari, E. (2023). Academic identity development: school experiences and the dyslexic learner. *International Journal of Inclusive Education*, *27*(8), 851-867. https://doi.org/10.1080/13603116.2021.1879947
- MacLean-Blevins, A. O. (2013). Class DoJo: Supporting the art of student self-regulation.

  \*Rising Tide, 6, 1-20.

- http://mat2013macleanblevins.pbworks.com/w/file/fetch/67504126/MacLean-Blevins%20MRP%20FINAL%2028may13.pdf
- Rocha, R. S., Filipe, M., Magalhães, S., Graham, S., & Limpo, T. (2019). Reasons to write in grade 6 and their association with writing quality. *Frontiers in Psychology*, *10*, 2157. https://doi.org/10.3389/fpsyg.2019.02157
- Sumner, E. (2013). *Children with dyslexia: Spelling as a constraint on writing development*(Doctoral dissertation, Oxford Brookes University).

  <a href="https://radar.brookes.ac.uk/radar/file/155f1c2d-2f5f-45ea-ac33-418c3294d758/1/sumner2013children.pdf">https://radar.brookes.ac.uk/radar/file/155f1c2d-2f5f-45ea-ac33-418c3294d758/1/sumner2013children.pdf</a>
- Taylor, C., McNaney-Funk, C., Jardine, D., Lehman, G., & Fok-Chan, E. (2014). Teacher Rewards: Going beyond the Stickers--Moving beyond Extrinsic Motivation. *Online Submission*. https://files.eric.ed.gov/fulltext/ED546455.pdf
- Torkildsen, J. V. K., Morken, F., Helland, W. A., & Helland, T. (2016). The dynamics of narrative writing in primary grade children: Writing process factors predict story quality. *Reading and writing*, 29, 529-554. <a href="https://doi.org/10.1007/s11145-015-9618-4">https://doi.org/10.1007/s11145-015-9618-4</a>
- Treiblmaier, H., & Putz, L. M. (2020). Gamification as a moderator for the impact of intrinsic motivation: Findings from a multigroup field experiment. *Learning and Motivation*, 71, 101655. https://doi.org/10.1016/j.lmot.2020.101655
- Williamson, B. (2017). Decoding ClassDojo: Psycho-policy, social-emotional learning and persuasive educational technologies. *Learning, Media and Technology*, 42(4), 440-453. <a href="https://doi.org/10.1080/17439884.2017.1278020">https://doi.org/10.1080/17439884.2017.1278020</a>
- Yeung, P. S. (2022). Writing motivation in Chinese children with developmental dyslexia.

  \*\*Journal of Research in Reading, 45(2), 223-252. <a href="https://doi.org/10.1111/1467-9817.12403">https://doi.org/10.1111/1467-9817.12403</a>