



GUIDANCE NOTE

Dose for Impact



To help inform media implementation – from unfacilitated media viewing to highly structured media-integrated community engagement programming – the Sesame Workshop Guidance Note on Dose for Impact offers clear guidance on the minimum amount of time children should spend engaging with Sesame Workshop content to unlock optimal learning effects.

Grounded by existing global evidence on the impact of educational media implemented in diverse contexts and distribution platforms, this guidance note serves as a comprehensive resource that outlines the recommended minimum minutes children should watch Sesame Workshop content to promote positive cognitive, emotional, and social development.

This guidance note aims to be a valuable tool for content creators, program designers, researchers, educators, and parents and caregivers seeking to optimize the learning experience for children, wherever they are. It is important to note that a key moderator of this guidance note is the depth of co-viewing and co-engagement with an adult. Evidence demonstrates that educational media is further enhanced with co-viewed with a trusted adult.¹ The guidance note here is focused on viewing alone, and we would likely find even greater effects with these supports.

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OVERVIEW

Decades of research have demonstrated repeatedly that educational media is an effective to support children’s learning. The existing evidence, however, varies widely in the amount of viewing involved, ranging from watching a single viewing of a single segment to longitudinal studies of watching full episodes on a daily or weekly basis.

Given this, this leaves open the question of *dosage* – that is, how much viewing is necessary to produce significant impact on children’s learning?

With this in mind, this dosage guidance note is informed by over one dozen past studies of children’s learning from *Sesame Street* and its international co-productions, supplemented by research on other television series where useful. Specifically, our review and analysis were designed to address the following questions:

- What is the minimum amount of viewing necessary to produce significant learning?
- To what degree does additional viewing, beyond the minimum, result in incremental learning?
- Is there a maximum amount of viewing, beyond which learning levels off and is no longer incremental?
- To what degree do the above answers vary as a function of:
 - » The content being conveyed and assessed?
 - » Repeat viewing of the same episode vs. viewing different episodes?
 - » Demographics of the audience?

TERMINOLOGY DEFINITIONS

Given these questions, we offer clarity on often-used terminology that were used to inform the dose guidelines:



Long-term vs. short-term viewing:

Because the studies we looked at range widely, from the impact of watching a single episode or even a single segment² to viewing over the course of two or three months³ or even viewing over multiple years.⁴ Because of this, we have looked at dosage separately for long-term (more than one year) and short-term exposure.



Amount of viewing:

Amount of viewing was reported and treated differently in various studies, via either number of segments or episodes, number of minutes of viewing, or “concentration” (i.e. number of episodes per week). To understand the distinction, consider two hypothetical studies in which children watch four episodes of *Sesame Street* — but one study is run over the course of one month and the other is run over one year. The number of episodes in the two studies is the same, but the concentration is very different. As a result, we might expect the outcomes from these different viewing patterns to differ.



Repetition vs. reinforcement:

In considering “amount of viewing” in past research, it is also important to keep in mind that in some studies, the key aspect of viewing was repeat viewing of the same episode, while the amount of viewing in other studies referred to viewing multiple different episodes or compilations of segments, often relating to a particular, shared content area such as kindness or the number. We have drawn upon both in thinking about the amount of viewing necessary to yield significant benefits.

KEY ASSUMPTIONS AND MODERATORS

It is important to note that these guidelines are grounded by these key assumptions and moderators:

Key assumptions

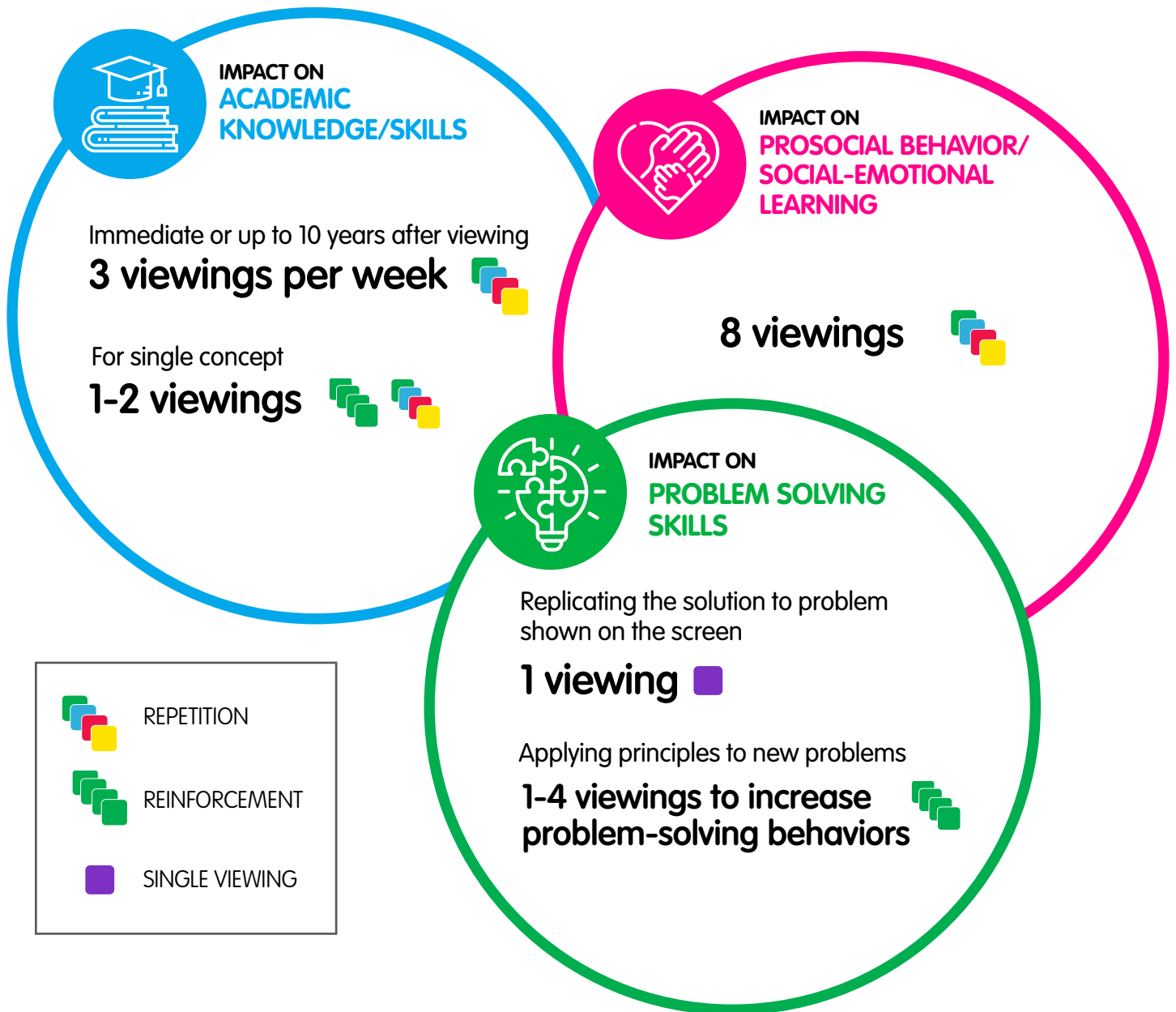
- The content is viewed regularly and consistently within the intervention.
- There is strong interest and engagement.
- The format and content is strong enough to influence knowledge, attitudes, and behavior.
- Children have consistent access to the content.

Moderators

- Frequency of co-viewing with parent, caregivers, and/or facilitators
- Demographic variables including, but not limited to, gender; disability; immigration status; nationality; socio-economic status; access to infrastructure; level of family adversity
- Child’s access to and enrollment in early learning program
- Familiarity with *Sesame Street*, *Sesame international* co-productions, and/or video content via other direct interventions

DOSAGE GUIDELINES

Applying these definitions to answer our research questions, we have developed a guideline on the minimum number of viewings required to see effects, organized by curriculum domain:





Conclusion

As you are thinking about integrating media content into your program, we hope this guide is a useful tool in the process, including how the above assumptions and moderators may inform both program design, the roles of adults, and the ways in which media content is integrated. When possible, to achieve the greatest impact and to support reinforcement of educational messages and skills, we encourage co-viewing and co-engagement with a trusted adult, as well as ensuring consistent access to quality, educational media resources.

Through this engagement, children will develop strong bonds with their favorite characters, be supported in their learning by the adults in their lives and develop a wide range of critical learning skills to help them be lifelong learners who are smarter, stronger, and kinder.

Endnotes

- 1 Fisch, S., et al (2008) Coviewing Preschool Television in the US. *Journal of Children and Media*, 2(2):163-173. <https://doi.org/10.1080/17482790802078680>; Foulds, K. (2023). CoViewing Mass Media to Support Children and Parents' Emotional ABCs: An Evaluation of Ahlan Simsim. *Early Childhood Education Journal*, 51, 1479–1488. <https://doi.org/10.1007/s10643-022-01408-0>; Rasmussen, E., Shafer, A., Colwell, M., White, S., Punyanunt-Carter, N., Densley, R., & Wright, H. (2016). Relation between active mediation, exposure to Daniel Tiger's Neighborhood, and US preschoolers' social and emotional development. *Journal of Children and Media*, 10(4), 443–461. <https://doi.org/10.1080/17482798.2016.1203806>.
- 2 Hodapp, T.V. (1977). Children's ability to learn problem-solving strategies from television. *The Alberta Journal of Educational Research*, 23, 3, 171-177.
- 3 Borzekowski, D., Singpurwalla, D., Mehrotrab, D., & Howard, D. (2019). The impact of *Galli Galli Sim Sim* on Indian preschoolers. *Journal of Applied Developmental Psychology*, 64, 1–9. <http://doi.org/10.1016/j.appdev.2019.101054>; Foulds.
- 4 Wright, J.C., Huston, A.C., Scantlin, R., & Kotler, J. (2001b). The Early Window project: *Sesame Street* prepares children for school. In Fisch, S.M., & Truglio, R.T. (Eds.), *"G" is for "growing": Thirty years of research on children and Sesame Street* (pp. 97-114). Mahwah, NJ: Lawrence Erlbaum Associates.

For list of data sources consulted in this study, please contact Sesame Workshop.

For additional information and list of data sources and citations, contact Kim Foulds, Ph.D., Vice President, Content Research & Evaluation kim.foulds@sesame.org

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