The problem with "best practice" language

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Abstract

We argue that the use of "best practice" language poses problems for environmental education practitioners though its implicit message of certainty as to how particular pedagogical activities will result in particular educational results. Rather than encouraging approaches that look to be "best" for all times and in all places, we encourage mutual learning and experimentation in the creation of increasingly "better" programs that are appropriately designed for a "best fit" to local populations, cultures and environments.

Best practice; best fit; nature kindergarten; forest pre-schools; educational innovation

Introduction

"The best is the enemy of the good" (Edge & Richards, 1998, p. 371).

Our concern in this commentary is the idea that the use of a particular kind of language, the prescriptive language of "best practice", is not what is needed at this time in a developing field, and may in fact never be of value in educational discourses. Our concern is *not* about the various forms and approaches possible for environmental education, or nature-based kindergartens or preschools; we trust that good educators will do wonderful things in a variety of contexts and with a diversity of approaches. However, the field of environmental education has, like many domains of education, been infused with "best practice" language for more than two decades, and with very little critique (e.g., Hart, Jickling, & Kool, 1999) and we feel that our concern may be shared by others and needs to be surfaced and addressed.

Growing primarily from a range of NGOs such as the North American Association for Environmental Education (NAAEE) and others, there are now a range of products offering practitioners what proponents feel is "best practice" in the field (see, for example, table 1).

Author/ Organization	Title	Brief description (from document)	URL
NAAEE	Guidelines for Excellence: **Best Practice** in EE	The National Project for Excellence in Environmental Education, initiated by NAAEE in 1993, has developed a series of guidelines that set the standards for high-quality environmental education.	https://naaee.org/our-work/programs/guidelines-excellence
NAAEE	EE Certification: Making **Best Practice** Standard Practice	… environmental educators and others [are] holding themselves accountable for meeting **best practices** by pursuing certification. Why? Because certification holds the best hope for making best practice standard practice and raising the level of professionalism within the field.	https://naaee.org/sites/default/files/eepro/resource/files/ee_certification-making_best_practice_standard_practice.pdf
NAAEE	Research and Evaluation	Turn to this group to find studies that could improve your practice, discuss avenues for using research to legitimize and substantiate the field, and share **best practices** for program evaluation.	https://naaee.org/eepro/groups/research-and-evaluation
Skibins, J. C., Powell, R. B., & Stern, M. J.	Exploring empirical support for interpretation's **best practices**.	Since Freeman Tilden defined interpretation, numerous authors have proposed methodological **best practices**. The purposes of this meta-analysis were to identify best practices and examine the empirical evidence linking them to visitor outcomes. We identified 17 best practices from key texts used for interpretive training.	https://naaee.org/eepro/research/exploring-empirical-support-interpretation%E2%80%99s-best-practices
The Green Leadership Trust	Green Leadership Trust- **Best Practices** Library	The Green Leadership Trust is excited to launch it's [*sic*] **Best Practices Library**! The Library is an extension of our Best Practices on Diversity, Equity, and Inclusion and includes documents that will help organizations learn from each other without reinventing the Diversity, Equity, and Inclusion wheel.	http://www.greenleadershiptrust.org/our-work/best-practices-library/(link is external)
The Nature Conservancy	Get resources to help bring nature into the classroom	In 2010, The Nature Conservancy launched the LEAF Educator Network for environmental high schools **to share the best practices.**	https://www.nature.org/about-us/careers/leaf/resources-for-teachers/index.htm?redirect=https-301
Zoos Victoria	Education for Conservation	This case study explores how zoos might redevelop their education strategies to address 21st century conservation priorities while	https://naaee.org/eepro/groups/global-ee/case-

		incorporating current **best practices** in education.	study/education-conservation

Table 1: A sample of documents presenting ideas on "best practice", found on the North American Association for Environmental Education's website on 26 April 2017.

What prompted our article is a discussion now happening in Canada regarding the direction that the nascent Nature Kindergarten/Forest School programs for young children might take. The current concerns (or "moral panic" as Waite, Bølling, and Bentsen have put it (2016, p. 882) about children spending too much time with video games (e.g., Zaradic & Pergams, 2007) and too little time outside climbing trees or finding wood bugs (e.g., Louv, 2005) has encouraged an increasing interest in adopting nature-based early childhood and kindergarten programs across the country (e.g., Hoyland & Elliot, 2014; MacEachren, 2013). In this context, we have seen two different approaches for the development of early childhood educational programming that addresses these concerns.

One example, which the authors have some direct connection with, is the Sooke (British Columbia) School District's Nature Kindergarten, which takes inspiration from both the Danish Forest School movement that began over forty years ago (Williams-Siegfredsen, 2012) and the more recent *Waldkindergarten* movement in Germany (Kane & Kane, 2011). Appreciating this northern European approach to living in and with the natural world and finding the joy and richness within it, the Sooke program has adopted many of their principles and added their own local emphasis on sustainability and the place-based knowledge shared by the local First Nations [1]communities. The Sooke program, like the Scandinavian ones as noted by Waite et al., (2016), was an expression of a "grassroots development within schools since it is most often practised by teachers rather than outdoor activity providers" (p. 881). As community members and teachers

[1] The accepted Canadian term for who also might be called "Indians", Aboriginal or Indigenous peoples.

from other Canadian jurisdictions have expressed an interest in learning more about the Sooke model, they have been encouraged to see and learn from what the Sooke community has done, but also encouraged to do their own work to find out what is needed and wanted in the context of their own community and local environment: no templates for replication of the Sooke program are provided.

Other novel programs, in particular one developed by Forest School Canada, has leaned more towards a British model of execution (Cree & McCree, 2012), a model with its own unique perspectives on how programs should be developed and delivered and that differs from the Scandinavian approach in that, as Waite et al., (2016) have noted, "the roll out of Forest Schools [in the UK] was largely through independent provider businesses that worked with schools offering standalone programmes, and then through an accredited training scheme that attempted to kitemark[2] the model and protect the brand" (p. 881). This approach reflects a formalized and controlled approach to program development and delivery, and is reflected in a statement by the UK-based *Forest School Association*:

> The Forest School Association is the professional body and UK wide voice for Forest School, *promoting best practice*, cohesion and 'quality Forest School for all'. There are many excellent forms of outdoors learning, but Forest School is a distinct and clearly defined approach. It is FSA policy that all Forest School practice should *conform to the principles and criteria* of Forest School [italics added]. (Forest School Association, 2016)

In a similar spirit, *Forest School Canada* states:

> After our five pilot courses, we plan to collaborate with faculties of education and faculties of early childhood education to become the future deliverers of the 'Forest and

[2] "an official kite-shaped mark on goods approved by the British Standards Institution."

> Nature School Practitioners' Course'. At which point in time [*sic*], FSC will focus on moderating courses across Canada, collaboratively developing *'Best Practices'* for this field, and working on a variety of policy and research initiatives that will further enhance and provide an evidence base for this field [italics added]. (Forest School Canada, 2016)

Applying "best practice" language and attempting to standardize emerging programs (e.g., "promoting… cohesion") like the nature kindergarten/preschool movement concerns us. We are aware that the intentions behind "best practice" or "standards of practice" language are usually positive, with a focus on creating programs that fit a particular mission and that fulfill a vision, based on the values and assumptions, held by a group or an individual. While specific practices might seem "best" to that group or to commercial interests, other practitioners may not see them in the same way, and we note here along with Waite et al (2016) that it is often the non-profit but still commercially-driven organizations that "own" what they are promoting that seem to be the ones using the "best practice" language, and not the bottom-up teacher/community-based innovators. This phenomenon was also noted by Bretschneider, Marc-Aurele, & Wu (2005) who, coming from a systems analysis frame where they note that there aren't enough "scientific" researchers to do the work of creating useful knowledge for public administrators, see that situation:

> …leads to the growth of nonacademic sources of *causal and prescriptive knowled*ge, including consultants, professional associations of users… and not-for-profit groups interested in social change... Most of these sources typically develop a common sense form of "best practices" approach to vet their information… where a group of experts use "human judgment" to identify the "best practice"… [italics added] (p. 308)

What is best?

With a Google search returning more than 40 million hits for the term "best practice", it is fair to say that this concept is very popular indeed. According to the Oxford English Dictionary, a definition of "best practice" is "commercial or professional procedures that are accepted or prescribed as being correct or most effective", while Wikipedia defines the term as:

> … a method or technique that has been generally accepted as superior to any alternatives because it produces results that are superior to those achieved by other means or because it has become a standard way of doing things, e.g., a standard way of complying with legal or ethical requirements.

Yet can any of us really come to an agreement about what "best" refers to when we talk about virtually anything, be it a product or a process? What is the "best" piece of music of the 20th century? Who is the "best" painter in the world? What is the "best" craft beer? What is the "best" way to teach young children? What is the "best" way to make a widget? While people trying to sell paintings, music, beer, early childhood education programs and widget makers might make claims about their product or process as being the "best", no doubt others would offer arguments in dispute of any claim to anything being the "best" and the rest of us would have to make up our own minds based on our values, knowledge, and the persuasiveness of the claims being made. "Consensus is not necessary for cooperation nor for the successful conduct of work" (Star & Griesemer, 1989, p. 388). The lack of complete coherence in the description of particular concepts and models of practice should not necessarily be seen as a weakness in need of fixing.

The idea of keeping concepts "loose" allows a range of hopefully-productive conversations to emerge between disciplines that might, in fact, really have their own ideas of

what is “best”, while the premature hardening of ideas, in particular at the start of a new development, privileges certain people and concepts and locks potentially-valuable innovations out. Ensuring that there is space for ‘open ended’ practice and concepts seems to be critical for the advancement and elaboration of any field and at any time, but in particular at its outset.

Given that claims of what is “best” are often truly unsupportable other than perhaps in particular narrow and well-defined contexts and seem to be used to influence decisions around the adoption or sale of products or processes, we have to ask why we are seeing more and more places where “best”, in the context of “best practice (BP)” language, is being used in educational settings. The use of “best” language explicitly is normative, implying that someone has made an evaluative study of the quality of some product or action and that there is a clear and objective indication of a winner, the “best”. Bardach (2010) does attempt to burst that bubble when he writes:

> First, don’t be misled by the word *best* in so-called best practices research. Rarely will you have any confidence that some helpful-looking practice is actually the best among all those that address the same problem or opportunity. The extensive and careful research needed to document a claim of “best” will almost never have been done. Usually, you will be looking for what, more modestly, might be called “good practices.”
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> But even this claim may be too grand. Often you can’t be sure that what appears to be a good practice is even solving or ameliorating the problem to which it is nominally addressed. On closer inspection, a supposedly good practice may not be solving the problem at all.

If “best practice” language is going to be anything more than an advertising or sales slogan, then, as Bretschneider et al (2005) assert, there are three tests that need to be

accomplished: “1. a comparative process, 2. an action, and 3. a linkage between the action and some outcome or goal” (p. 309). We should ask of those that claim they represent a particular “best practice” whether they have compared comparable programs or approaches before claiming any one, or theirs, is “best”; and can they make a strong case that engaging in their “best practice” will have a result that exceeds in quality or quantity the outcomes of other approaches. As Bretschneider et al note, “best” language is really confined to the “best” of those practices that are compared: “any successful comparative approach can only find the ‘best case’ within the sample” (p. 310). These authors also raise questions about how comparisons are made in the quest for the “best”. Two approaches are generally used, either together or independently: “one is to apply human judgment, and the other is to apply statistical models. Both approaches have strengths and weaknesses” (p. 311). Since it is very unlikley that any kinds of statistical analyses have been done comparing the outcomes of various models of nature kindergartens or forest preschools for example, it is most likely that the proponents of a particular “best practice” are relying on limited range of human judgements for the designation. And again, these authors clearly warn us that “little information, if any, is given about the comparison groups or the criteria for sorting. In essence, this approach is based on the authority of the judge…” (p. 311).

Education and best practice

Education is and has been a contested domain where educators over millennia have argued about “best practice”; the education pendulum swings back and forth, old “best practices” are dumped and new “best practices” are created (and they too may be dumped at some point). The concept of an educational "best" is elusive; one person's "best" is not another person's, and "best" for one setting may not be "best" for another. Making a claim of “best” is significant, in our opinion, as it can be seen as a show of real possessed power or as a means of gaining power

desired by particular groups or individuals in an attempt to define a complex reality in a way that allows for a simpler or even unitary answer. Those in powerful positions (or those wishing to gain power)—and this includes governments, professional organizations, businesses and NGOs that can exert influence over members—all can make claims about what is best and through those claims may attempt, either knowingly or not, to control or constrain acceptable practice. By casting oneself or one's group as having the knowledge and authority to say what is best and what is not, one can gain influence through using positional power to persuade an audience about the truth of the claims being made, or by requiring the "best practice" be adopted. And by gaining influence through assertions around what is proper and best practice, groups or individuals are also in a position to exert power through the coercive concept that if you're not doing what we say is best, you shouldn't be doing it at all.

We fundamentally think that there is something wrong with the conception of "best practice" language when applied to educational work (Edge & Richards, 1998). We see this language as counterproductive to facilitating the development and growth of educational programs that reflect their local places, narratives and values. "Best practice" language is, in our opinion, language that can potentially close down rather than open up inquiry; moves us towards a uniformity of approaches rather than encouraging innovation, diversity and experimentation; tells the profession that we have an understanding of domains of theory and practice that often are still in their infancy; makes totalizing claims rather than celebrating the unique and local; and implies, most importantly, that we really understand what is going on in the domain we are engaged and know enough to say that "this" is best. As Sheehan (2014) put it, "best practice" has become a "…catch-all phrase and even a sales slogan" (p. 91). And worse, as Purcell (1999)

argues, “Taken to extremes the search for best practice tends to take on the flavour of a moral crusade…” (p. 26).

Perhaps in engineering, manufacturing (which is where this term comes from), surgery and other professions where it is clear that some approaches are better than others, we can talk about “better” practices, better in the sense that there are clearly worse practices and that there likely will be even “better” practices as research and experience reveals routes to improvement. But to us, in education, the very concept of “best” is itself unclear, especially in the context of nature-based programing for young children where we are unlikely as yet to find enough data to tell us what “best” might be in a particular time and context. In one of the very few studies that actually critically examined what “best practice” might practically mean in a particular discipline, an analysis of 113 papers related to “best practices” in library sciences led the authors to conclude that “There is no widely shared or common definition of ‘best practices’ amongst the authors of these papers, and most papers (n=94, 83%) fail to define the term at all” (Druery, McCormack, & Murphy, 2013, p. 1). The same lack of a “widely shared or common definition of ‘best practices’…” can likely be said for our field in general, as well as for those working in the domain of early childhood environmental education.

We work in a field full of contention, argument and differences and we believe that what we need to grow in both theory and practice is contention and argument and differences. Right now, our society is demonstrating how little we collectively know about how to implement things that are actually going to work to help us solve the global issues of unsustainability. We are living in a time where we need to be more and more open to innovation and experimentation based on both theory and practice, and in our programmatic experimentation be aware that our innovations may fail and that we can learn much from our failures, which need to be reported so

we can do better. Talking about "best practices" isn't talking about trying things out, experimenting, making mistakes and learning from them.

A language of simplicity

In essence, "owners" of best practice language seem to be expressing a desire to become the gatekeepers to the intellectual and practical advancement of a domain of practice, expressing a desire to maintain their own interests as much as the interest of the domain of practice they are trying to define. There are many claims made by entrepreneurs of practice and theory as a field initiates and develops, but the claim of "best" practice is an assertion by one group of such entrepreneurs about having a regnancy over other interpretations of how things should be thought of and done, asserting a "privilege" to one way of doing things over others.

The language of best practice is in some ways a language of simplicity and confidence: do these things and you'll be sure to be doing the "best" to achieve your desired outcomes or results[3]. We feel that the field of environmental education needs to be continually encouraging a diversity of approaches, and not promoting a premature closure to new practices such as that of nature kindergartens and forest schools that are only beginning to take hold in North America; we need an acceptance of multiple ways of doing things that are highly sensitive to context and starting conditions, and not simply looking to recipes for replication. Indeed, as Greene (2012) has pithily written, "If imitation were the path to excellence, art museums would be filled with paint-by-number works".

Educators, we believe, must walk away from the constraining and limiting language of "best practices". "Best practice" language reminds us of Dewey's concern with the quest for certainty, where he argues that "the ultimate ground of the quest for cognitive certainty is the

[3] A more cynical approach would be that of Mark Twain, who wrote in 1887 "All you need in this life is ignorance and confidence, and then Success is sure."

need for security in the results of action" (1929/1988, p. 32). We should not be promoting claims of security and certainty; as a new field develops, indeed, as any field develops, practitioners have to be endlessly experimenting, or as Dewey would put it, be engaged in "practical activity":

> The distinctive characteristic of practical activity, one which is so inherent that it cannot be eliminated, is the uncertainty which attends it… Practical activity deals with individualized and unique situations, which are never exactly duplicable and about which, accordingly, no complete assurance is possible… The quest for certainty is a quest for a peace which is assured, an object which is unqualified by risk and the shadow of fear which action casts... (Dewey, 1929/1988, pp. 6-7)

Our task as educational leaders is to not close experimentation down with more talk of "standards" and problems having been solved, but instead to encourage others to try even more and varied approaches to the practice of environmental education innovation while building on the experience of others. For example, rather than talking about "best practices" in the realm of nature and forest kindergartens in North America, when we look at the tiny number of cases of operational programs we should want to listen to each program's story of their journey, hearing what they wished they could have done, and trying to understand where they see their mistakes having being made. Practitioners and innovators can learn from those accounts and continue to innovate, building on the past and open to the future. There is a need to foster debate and experimentation and be humble in any claims of our impacts. Dewey, in this spirit, writes "No mode of action can, as we have insisted, give anything approaching absolute certainty; it provides insurance, but no assurance. Doing is always subject to peril, to the danger of frustration" (Dewey, 1929/1988, p. 27). We need to watch for programmatic failures (as happened, for example, to the "Coastal Kindergarten" project in the Victoria (British Columbia

Canada) School District (Bell, 2017)) and try to understand what might have been going on to lead to the failure: we know that the slavish copying of strategies considered "best practices" in one industry or company may have little to no traction in another (Greene, 2012).

We are concerned about creating a potentially oppressive, static, closed-down situation with increasing use of standards and "best practices" that define what can and should be done in programs such as nature kindergartens that will be situated all over North America in different educational and community settings and with different educators and students involved. There are far too many uncertainties and opportunities as we now grow these kinds of innovative practices involving moving educational activities out from the four walls of a classroom and into local environments and communities. Our knowledge base is small; we should be humble in the face of that unknowing and be curious as to what is possible.

Encouraging diversity

Now is the time for openness and playfulness, for inclusion and diversity of approaches in environmental education. "Best practice" language, for us, puts *practices* and not students and teachers at the centre of the educational endeavor. Educators are enjoined, or even required (as in school systems with high-stakes testing requiring a standardized approach to teaching as well (Au, 2011; Stoller, 2015)), to use prescribed "best practices" in the absence of contextual appropriateness or even evidence of their efficacy. We need to admit we don't know what "best" looks like or even if there could ever be a "best practice" for all to adhere to. More than 15 years ago, Hart, Jickling and Kool (1999), responding at the time to attempts by the NAAEE to establish "standards" for environmental education, wrote:

> Education, however, is a messy business; it is not precise at a conceptual level and requires constant reflection and examination on the part of practitioners. Therefore, a

framework that claims to offer suggestions about educational activities cannot be narrowly prescriptive. In a new field like environmental education, where so much still is contentious, we would be skating on thin ice indeed were we to try and lay out for all time the criteria for good environmental education. (p. 106)

We believe that this advice still has validity. It isn't that we shouldn't always be looking to improve our practice; it's just that we should be very careful about implying that what one person or organization claims is "best" should become an expectation as to what everyone else should also do. Perhaps more appropriate than the application of "best practice" language is to explore the concept of "best fit", or even "better fit", which takes into account the local and particular conditions and local priorities all working in partnership with the range of practices that could be applied in a particular context (Birner et al., 2009).

It is good to keep a dynamic dialogue going that welcomes different perspectives and ideas and encourages educators to engage in an on-going practice of doing, thinking and learning; we offer these thoughts in that spirit.

References

Au, W. (2011). Teaching under the new Taylorism: High stakes testing and the standardization of the 21st century curriculum. *Journal of Curriculum Studies, 43*(1), 25-45. doi:10.1080/00220272.2010.521261

Bardach, E. (2010). *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving* (4th ed.). Los Angeles, CA: Sage Publications.

Bell, J. (2017, January 13). No more nature kindergarten classes in Victoria district. *Times Colonist*. Retrieved from http://www.timescolonist.com/news/local/no-more-nature-kindergarten-classes-in-victoria-district-1.7235697 - sthash.QgPyoXeC.dpuf

Birner, R., Davis, K., Pender, J., Nkonya, E., Anandajayasekeram, P., Ekboir, J., . . . Cohen, M. (2009). From best practice to best fit: A framework for designing and analyzing pluralistic agricultural advisory services worldwide. *The Journal of Agricultural Education and Extension, 15*(4), 341-355. doi:10.1080/13892240903309595

Bretschneider, S., Marc-Aurele, F. J., Jr, & Wu, J. (2005). "Best Practices" research: A methodological guide for the perplexed. *Journal of Public Administration Research and Theory, 15*(2), 307-323.

Cree, J., & McCree, M. (2012, Winter). A brief history of the roots of Forest School in the UK. *Horizons, 60,* 32-34.

Dewey, J. (1929/1988). The Quest for Certainty. In J. A. Boydston (Ed.), *The Later Works of John Dewey, 1925-1953* (Vol. 4, pp. 307). Carbondale, IL: Southern Illinois University Press.

Druery, J., McCormack, N., & Murphy, S. (2013). Are best practices really best? A review of the best practices literature in Library and Information Studies. *Evidence Based Library and Information Practice, 8*(4). Retrieved from http://ejournals.library.ualberta.ca/index.php/EBLIP/article/view/20021/15939

Edge, J., & Richards, K. (1998). Why best practice is not good enough. *TESOL Quarterly, 32*(3), 569-576.

Forest School Association. (2016). Standard letter supporting Forest School and FSA policy. Retrieved from http://www.forestschoolassociation.org/wp-content/uploads/2015/04/Standard-letter-promoting-FS-and-the-FSA.pdf

Forest School Canada. (2016). About us. Retrieved from http://www.forestschoolcanada.ca/home/about-us

Greene, J. P. (2012). Best practices are the worst: a review of *Surpassing Shanghai: An Agenda for American Education Built on the World's Leading Systems,* edited by Marc Tucker. *Education Next, 12*(3). Retrieved from http://educationnext.org/best-practices-are-the-worst/

Hart, P., Jickling, B., & Kool, R. (1999). Starting points: Questions of quality in environmental education. *Canadian Journal of Environmental Education, 4*, 104-124.

Hoyland, T., & Elliot, E. (2014). Nature kindergarten in Sooke: A unique collaboration. *Canadian Children, 39*(2), 39-44.

Kane, A., & Kane, J. (2011, Fall). Waldkindergarten in Germany. *Green Teacher, 94,* 16-19.

Louv, R. (2005). *Last child in the woods: Saving our children from nature deficit disorder*. Chapel Hill, NC: Algonquin Books.

MacEachren, Z. (2013). The Canadian Forest School movement. *LEARNing Landscapes, 7*(1), 219-233. Retrieved from http://learninglandscapes.ca/images/documents/ll-no13/ll-no13-v-fin-lr-links.pdf - page=219

Purcell, J. (1999). Best practice and best fit: chimera or cul-de-sac? *Human Resource Management Journal, 9*(3), 26-41.

Sheehan, R. (2014). Problems with best practice. *ELT Journal, 69*(1), 90-92. doi:10.1093/elt/ccu039

Star, S. L., & Griesemer, J. R. (1989). Institutional Eecology, 'translations' and Boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science, 19*(3), 387-420.

Stoller, A. (2015). Taylorism and the logic of learning outcomes. *Journal of Curriculum Studies, 47*(3), 317-333. doi:10.1080/00220272.2015.1018328

Waite, S., Bølling, M., & Bentsen, P. (2016). Comparing apples and pears?: a conceptual framework for understanding forms of outdoor learning through comparison of English Forest Schools and Danish udeskole. *Environmental Education Research, 22*(6), 868-892. doi:10.1080/13504622.2015.1075193

Williams-Siegfredsen, J. (2012). *Understanding the Danish Forest School Approach: Early Years Education in Practice*. London: Routledge.

Zaradic, P. A., & Pergams, O. R. W. (2007). Videophilia: Implications for childhood development and conservation. *Journal of Developmental Processes, 2*(1), 130-144.