Theories Supporting the Use of Puppets as Pedagogical Tool with Young Children

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Abstract  Puppets as pedagogical tools with young children have a long tradition in therapy and healthcare, but the tradition and practice in ECEC (Early Childhood Education and Care) have decreased in recent years. The academic learning outcomes of ECEC require a clearer connection to researching the professional practice. If puppets are to be introduced as functional pedagogical tools, it is important to find theoretical support for their use. This study is a systematic review of 37 research articles concerning the pedagogical use of puppets with young children, focusing on the theoretical relationship. The review reveals four theoretical perspectives, constructivism, psychology, sociology and art. The finding of the two most common perspectives, constructivism and psychology is not surprising but does give some new insights into relevant and functional terms and approaches. Perezhivanie is an example of a relevant term from Vygotsky to understand the pedagogical use of puppets. A bit surprising was the finding of Corsaro in the perspective of sociology, and an insight here is that also this theory and concept can be useful when puppets are used to teach children social behaviour. More surprising is that the art perspective includes few articles. However, the foundation of theoretical support in art, narrative pedagogy, seems highly relevant and worthy of development.

Keywords  Pedagogical Tool, Puppets, Theories, Young Children

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1. Introduction

The use of puppets as pedagogical tools with young children has a long tradition in ECEC but has decreased in recent years [1]. In other areas such as therapy and healthcare, puppets still have a quite strong position as pedagogical tools [2,3]. The development of ECEC institutions in many countries and with more established curriculums results in more focus on the learning outcomes of the children which also implies that pedagogical tools in today’s ECEC have to be supported by research [4,5]. Puppets have many benefits as a pedagogical tool but if the tool is to be used in the more academic ECEC of today, it is of importance that it has clear theoretical support as the research base is now crucial [6,7]. A play-based pedagogy, as puppets, may have a potential to integrate playfulness and academic learning in ECEC [8]. The aim of this study is to scrutinise what theories can support the pedagogical use of puppets with young children. As children begin school at different age in different countries a quite broad age range is used, 1-9 year of age, which also includes the first years in elementary school.

1.1. Integration of Play and Academic Outcomes in ECEC

There is a trend towards a more structured and formal academic ECEC with new demands on children’s attention, emotional responses and behaviours [9,10]. This tendency, however, has in some cases favoured teacher instructions and decreased children’s play in ECEC.
1.2. Benefits of the Pedagogical Use of Puppets with Young Children

Puppets have been used in hospital situations to help between adults and children, and make teaching effective and enjoyable, since puppets bring spontaneity, humour, and fun to the serious tasks of learning [24]. Puppets are also captivating, as young children believe and relate to them and see them as non-threatening and sympathetic friends [25]. Another benefit is that puppets motivate children’s engagement and reduce the “affective filter”, so even shy and apprehensive children develop public speaking skills, and reticent children are helped in “coming out of their shell” and becoming a bit more expressive [26]. Puppets can give ECEC a link to cultural heritage through fairy tales which can result in multicultural and international connections [27,28]. In summary, puppets provide many benefits to the learning of young children, but these benefits are not clearly supported by research or theories.

1.3. The Use of Puppets with Young Children in Research Reviews

To give an oversight of the research dealing with puppets in educational and related fields, other reviews are valuable sources of knowledge. Even if therapy, research-related and healthcare uses of puppets differ somewhat from the educational use in ECEC, reviews of these fields are included, as they provide inspiration and can be applicable, to some extent, to the educational field.

The review by Quisenberry and Willis [29] deals with puppets as a learning tool. This review states that play provides a significant contribution to any childhood curriculum and that puppets, as an instrument for learning, can function well in early childhood programmes. Puppets help children to coordinate their own experiences with language, as well as teaching them to be an attentive audience and to overcome their egocentrism. Puppets are important in sociodramatic play as they can positively influence the child’s intellectual, creative, and social development. Puppets also serve as an essential learning tool for children who need to learn how to play.

One recent review about puppets in education focuses on children of school age, and is based on only 15 scholarly sources and a few peer-reviewed articles [7]. Nevertheless, this review identified five potential uses of puppets applied in educational and learning contexts. These areas are generating communication, supporting a positive classroom environment, enhancing creativity, fostering cooperation, and changing attitudes.

Other reviews deal with the therapeutic use of puppets. Bromfield [30] mentions the long term and highly-valued use of puppets in play therapy. Kjellstrand Hartwig [2] deals with puppets in play therapy and focuses on child-centred play therapy (CCPT), and summarises the therapeutic use of puppets. The first documented use of puppets with children in therapy was in 1936, when puppet shows were used to address behavioural issues. Puppets have been used in hospital situations to help
children cope with illness, to verbalise feelings and learn about diseases. Puppets have also been used in group and family therapy. Kjellstrand Hartwig [2] suggests, based on other studies, that the CCPT nondirective, trustworthy and close relationship with the child have similarities with the children’s perspective in the modern educational pedagogy in ECEC. Carter and Mason [31] deal with the practical points of puppetry skills and the selection of appropriate puppets for use in counselling. James and Myers [32] offer descriptions of practical use of puppets in counselling young children and highlight that the fantasy of puppets can be an effective way to help children deal with their emotions and with real world problems.

Dunst [33] focuses on special education and is a meta-analysis of 26 studies investigating the effect on children’s attitudes and knowledge about individuals with disabilities by recorded programmes with puppets shows. Even if only a small to medium effect on changing a participant’s attitudes and knowledge is revealed, there is, nevertheless, evidence that puppets can have some educational use as they can affect the children’s behaviour.

Another review deals with the use of puppets in nursing education and children’s healthcare. Tilbrook et al. [3] relate to about puppets in nurse training and children’s healthcare and scrutinises 12 articles, concluding that puppet modelling and puppet simulation have been adopted into nurse training and practice as a three-way communication process. Some gaps in the research are identified in terms of the application and the benefits of using puppets as an educational tool.

Epstein et al. [34] study the use of puppets in qualitative research. Some limitations are found, but it was also discovered that the use of puppets in interviews with children helps children identify, clarify and verbalise their feelings.

This overview reveals that some reviews have been undertaken concerning the educational use of puppets in interacting with young children, but no review has been carried out in recent years, and none with a focus on the theories supporting the use of puppets. It also reveals that other areas, such as therapy, research and health, can provide relevant inspiration for the pedagogical use of puppets in ECEC.

2. Method

This is a systematic review that follows the guidelines for literature reviews set by the American Psychological Association [35,36]. The review was conducted between January and May 2020 and used three international research databases: 1) Academic Search Premier (ASP), 2) Education Resources Information Center, (ERIC) and 3) Web of Science (WoS), in addition to a search in Google Scholar (GS). The keywords used were puppet/puppets in combination with keyword as early childhood and education. Inclusion criteria were: 1) puppets used in relation to children (mentioned more than once), 2) children involved aged 1-9 years, 3) English language and 4) peer-reviewed journals. Empirical experimental studies with no relation to institutions for young children were excluded. The Ulrichweb Global Serials Directory was used to determine whether the journal was considered to be peer-reviewed.

In all, 105 articles from 80 international peer-reviewed journals were included, and in 37 of these articles, the use of puppets was supported by theories to some extent. Methods used in these articles were interventions (63), experimental (16), interviews (6), case-studies (5), meta-analysis (3), and other (14). The most recent article was from 2020 and oldest was from 1980, with 2010 being the mean year of publication.

Articles using theories were selected by the references of the articles. Here literature about theories in education served as reference for the screening [37]. Now four wide theoretical perspectives appeared, with subgroups of theories that were labelled with the name of the theorist. This division in four perspectives was a pragmatic way to present the result. The main ambition was to identify different theories supporting the use of puppets which is apparent with the subgroups. In the last screening of the articles, it was scrutinised how the theory was used as it had appeared that the theories were used to varying extent. An analysis template was constructed that made a difference between a) articles that used the theory in a major sense, with several references in both background and findings/discussion, and b) articles that used the theory in a minor sense, with single or few references in only one part, often in the background.

A methodological problem in this study was to consider to what extent theories were used in the articles. The division into two categories of the theoretical use reduced this problem. An aggravating phenomenon was also that some articles used multiple theories. Further limitation was that some theories can be considered to belong to different perspectives, for example Piaget can be categorized as Psychology or Constructivism. The theory of “Narrative pedagogy” found in Art is not a clearly theoretical perspective as the other identified perspectives.

3. Result

In 37 (34 %) of the 105 articles, it is possible to find theories that relate to the use of puppets with young children. Four theoretical perspectives are identified, constructivism, psychology, sociology and art (Table 1). Specific theories are identified in all perspectives.

Notice that 17 articles use more than one theory. Three
articles use three theories (Bateman [38]; Farrell Darling [44]; Wohlwend [58]). In 14 articles, two theories are used (Brown [39]; Davis & Dolan [41]; Forsberg Ahlcrona & Östman [45]; Hakkarainen et al. [47]; Hatzigianni et al. [48]; Jacono & Jacono [63]; Lake & Evangelou [50]; Mantzicopoulos et al. [60]; Quiros [62]; Rule et al. [53]; Sutherland & Friedman [56]; Timmons & Pelletier [64]; Tzuriel & Remer [57]; Wohlwend [58]).

3.1. Constructivism

The constructivism perspective, identified in 25 articles, is divided into two theories, the sociocultural theory of Vygotsky, 21 articles, and the pragmatic theory of Dewey, four articles. By the support of Aubrey and Riley [37] these theories are considered as constructivistic as they have a main focus on the children’s construction of their knowledge, and in a social context.

In Vygotsky, ten articles use the theory in a major sense and eleven use it in a minor sense (Table 1). Seven articles use the sociocultural term ZPD (Zone of proximal development) (Davis & Dolan [41]; Hakkarainen et al. [47]; Hatzigianni et al. [48]; Lake & Evangelou, [50]; McLean et al. [52]; Tzuriel & Remer [57]; Wohlwend [58]). Four articles use the term of scaffolding (Conner & Fraser [40]; McLean et al. [52]; Simon et al. [54]; Tzuriel & Remer, [57]) One article uses the Vygotskian perezhivanie (emotional lived experience) (Davis & Dolan [41]). Another article uses the term pivot (Wohlwend [58]), and one article mediating tool (Forsberg Ahlcrona [43]).

| Perspective/Theory/Articles                                                                 | Number |
|---------------------------------------------------------------------------------------------|--------|
| Constructivism                                                                             | 25     |
| Vygotsky                                                                                    | 21     |
| Bateman [38], Brown [39], Conner & Fraser [40], Davis & Dolan [41], Eckhoff [42], Forsberg Ahlcrona [43], Farr Darling [44], Forsberg Ahlcrona & Östman [45], Hakkarainen et al. [47], Hatzigianni et al. [48], Keogh et al. [49], Lake & Evangelou [50], Lee & Hassett [51], McLean et al. [52], Rule et al. [53], Simon et al. [54], Stagg Peterson et al. [55], Sutherland & Friedman [56], Tzuriel & Remer, [57], Wohlwend [58], Dewey | 4      |
| Brown [39], Davis & Dolan [41], Hatzigianni et al. [48], Wohlwend [58]                      |        |
| Psychology                                                                                  | 24     |
| Piaget                                                                                      | 9      |
| Bateman [38], Farell Darling [44], Green [59], Mantzicopoulos et al. [60], Rule et al. [53], Sutherland & Friedman [56], Peliand et al. [61], Tzuriel & Remer [57], Quiros [62] |        |
| Bruner                                                                                      | 6      |
| Bateman [38], Farell Darling [44], Forsberg Ahlcrona [43], Forsberg Ahlcrona & Östman [45], Hakkarainen et al. [47], Lake & Evangelou [50] |        |
| Bandura                                                                                    | 5      |
| Jacono & Jacono [63], Mantzicopoulos et al. [60], Timmons & Pelletier [64], Quiros [62], Webster-Stratton & Reid [65] |        |
| Gardner                                                                                    | 4      |
| Jacono & Jacono [63], Kardum et al. [66], Korosec [67], Remer & Tzuriel [68]                 |        |
| Sociology                                                                                  | 4      |
| Corsaro                                                                                    | 4      |
| Bateman [38], Green [59], Timmons & Pelletier [64], Wohlwend [58]                          |        |
| Art                                                                                        | 2      |
| Narrative pedagogy                                                                         | 2      |
| Mackenzie [69], Romanski [70]                                                               |        |
Hakkarainen et al. [47] presents an innovative approach to adult participation in children’s play development. This is part of a larger research project in a Play Laboratory in Finland, where puppets are used as didactic tool with children aged 1-7 years. The results, mainly supported by observations, reveal that adults have to become genuine partners in children’s play and must use appropriate narrative methods in order to create the ZPD for children. Simon et al. [54] uses a mixed methodological approach in primary school in UK, children aged 7-11 years, and gives evidence that the use of puppets significantly increases the amount of teacher scaffolding children’s reasoning and argument, exploratory talk, and decreases the amount of talk that focuses on recall. Davis and Dolan [41] study a professional learning programme for early childhood practitioners, the Open Story Box Project, in Australia, with learning material that included finger puppets. A key finding was that teachers enjoyed playing and working with the puppets themselves in a kind of perezhivanie (a lived experience), which might be important potential for a lived experience for others. In Wohlwend [58], observing 3-5 -year-old children in US childcare centers, commercial media toys and child-made artefacts function as pivots (objects for fantasy) in the children’s play world and classroom culture. Forsberg Ahlcrona [43] uses an ethnographic approach to explore the mediating role of puppets as a didactic tool in Swedish preschool with children 3-5 years old and finds puppets as a versatile tool for communication and learning.

Dewey is found in four articles. All these articles only refer to Dewey in a minor sense (Table 1). Three articles draw on Dewey’s inquiry-based, experiential and reflective learning (Davis & Doland [41]; Hatzigianni et al. [48]; Wohlwend [58]), and one article draws on the democratic approach in Dewey (Brown [39]). Hatzigianni et al. [48] interviews 34 children aged 5-8 years, from both Kindergarten and Grade 1 and 2, in Australia, involved in a project with 2D design that included the printing of shadow puppets. The children enjoyed directing their own learning and viewed their experience as creative. Brown [39] is an intervention, in US kindergarten and elementary school, that studies how shadow puppetry can be used to build character in the democratic approach of Dewey that education has the role of creating participatory citizens.

3.2. Psychology

The psychological perspective, found in 23 articles, is divided into four theories, the theory of cognitive level of Piaget (nine articles), the social cognitive theory of Bruner (six articles), the social learning theory of Bandura (five articles), and the theory of multiple intelligence of Gardner (four articles). By the support of Aubrey and Riley [37] these theories are considered as psychological and with a main focus on the individual, child.

All nine articles with Piaget use this theory in a minor sense (Table 1). Tzuriel and Remer [57] support the use of puppets referring to Piaget’s ideas about young children’s animism. This study, from Israel, investigates the effects of teaching with puppets on 145 kindergarten children from both special education (68 children) and regular kindergarten (77children).

In Bruner, one article uses the theory in a major sense and five articles use the theory in a minor sense, (Table 1). Bateman [38] uses the concept of Trouble from Bruner in the children’s complex story structures as a part among resolutions and activities that are necessary for early literacy practice and story writing. This study, from New Zealand, is from a project investigating spontaneous play and storytelling with puppets by children in kindergarten (4 years old), and first year of primary school (5 years old).

In Bandura, one article uses the theory in a major sense and four articles use this theory in a minor sense (Table 1). Several use Bandura’s self-efficacy theory that centres on an individual’s beliefs about their abilities and that individual’s beliefs in their own capabilities being central to their actions (Mantzicopoulos et al. [60]; Timmons & Pelletier [64]; Webster-Stratton & Reid [65]). In Timmons and Pelletier [64] finger puppets are used to interview 233 4 and 5 years old Canadian kindergarten children’s perspectives of school and uses Banduras self-efficacy theory to understand this. In Quiros [62] puppet plays are used to promote environmental conservation among first-graders in Costa Rican schools. Quiros [62] refers to Bandura, stating that storytelling can influence interests and behaviour at an individual and societal level. Narrative and storytelling therefore could be a very effective tool for teaching.

All four articles with Gardner use this theory in a minor sense (Table 1). Two articles refer to Gardner’s theory of multiple intelligences (Korosec [67]; Remer & Tzuriel [68]). Puppets are used as learning tool in Israeli kindergarten in the intervention study of Remer and Tzuriel [68] and puppets are used to teach 145 children aged 5 and 7 years. Remer and Tzuriel [68] write that the power of puppets as an educational tool lies in its being a type of three-dimensional symbolic art form and being able to move and speak, a learning style using a number of senses align with Gardner’s multiple intelligence theory. Jacono and Jacono [63] studies the use of puppets to promote culture, language and history among North American aboriginal youth. Jacono & Jacono [63], refers to Gardner - that for First Nations people, problem solving must be coupled with cultural nurturing of the domain in connection with puppets made from natural forest materials to promote culture, language, and history by Native North American youth.

3.3. Sociology
The sociological perspective, found in four articles, includes one theory, the sociology of childhood, Corsaro. This theory is considered as sociological as it has focus on children’s peer culture and children’s socialisation in group. Two articles use the theory in a major sense and two articles use the theory in minor sense (Table 1). Two of these articles refer to Corsaro’s ideas of the inclusion and exclusion of friends in children’s peer cultures and the value of insider humour (Bateman [38]; Wohlwend [58]). Wohlwend [58], observing 3-5 years children in US childcare centers, and finds insider humour as one important cohesive element of children’s peer culture and play with puppets, figures and toys. Bateman [38] interpret that children’s pretend play with puppets involves inclusion and exclusion of peers through the negotiation of roles and rules. Green [59], studies 31 children of 3 years of age in Germany and their special places by using puppets, highlights children’s rights with the support of Corsaro, and both Green [59] and Timmons and Pelletier [64] highlight the importance of respecting children and following them, to get close and to be a friend to the child. Green [59] also remarks on how the Wittiness of the puppets used by adults can help the child to be at ease and perceive the researcher as a friend.

3.4. Art

The Art perspective, found in two articles, includes one theory or pedagogy, Narrative pedagogy with a focus on the narrative and transformative function of puppets. This perspective is defined inductively as this was the kind of theory used in these articles with focus on Art and puppets. In Narrative pedagogy, one article uses the theory in major sense (Table 1). Romanski [70], studies US preschool teacher students in art education using puppets, shows the transformative power of puppets through narrative pedagogy, contemporary art and transdisciplinary approaches in art education. Romanski [70] uses shadow puppets, stop-motion toy theatre puppet shows, hand puppets and finger puppets with teaching students and highlights the importance of student puppet stories in student-empowered learning. In Mackenzie [69] teaching students in US art education creates body puppets to wear and perform mythic narratives, making the classroom a sacred place in which the possibility of transformation exists.

4. Discussion and Conclusions

This study finds that 37 (35 %) of the 105 articles discovered had references to theories to support or understand the use of puppets with young children. The theories used form four perspectives, constructivism, psychology, sociology and art. Several articles, 17, use two or three of these perspectives. When taking account of theories that are used in a major sense, five are left: Vygotsky, Bruner, Bandura, Corsaro, and Narrativ pedagogy. As these theories seem to be more comprehensive when used in connection with the pedagogical use of puppets, they are considered as the most relevant theories for this use and are selected for some discussion.

The occurrence of Vygotsky, in 21 articles, is in line with the occurrence of this perspective in the curriculum of ECEC in recent times (Fleer & Veresov [71]). Its focus on the importance of spoken language and communication makes it relevant for supporting and understanding the pedagogical use of puppets. In addition, the use of the concepts of ZPD and scaffolding is not surprising, especially when puppets are often used as a tool for learning language, subjects or thinking. It is more interesting that the creativity, fantasy and drama aspects of Vygotsky are not used very often in relation to the use of puppets. This could be used and elaborated more as a support for the pedagogical use of puppets, especially the concept of pivot, used by Wohlwend [58]. It is a concept seldom used, also in general, in the sociocultural perspective. The concept of Perezhivanie, used in Davis and Dolan [41], also seems to be a relevant concept to use as it captures the idea of the unity of thinking and emotions (Fleer & Hammer [72]). This concept has also received increased attention in recent years in connection with research on children’s development (Veresov & Fleer [73]). It is especially interesting that it has been used together with dramatic events in fairy tales and play in ECEC (March & Fleer [74]).

From a psychological perspective, the concept of Trouble of Bruner, used in Bateman [38], as an important part in stories, seems relevant in connection with the use of puppets in ECEC. Bandura’s theory also seems relevant, as Quiros [62] uses him as support for the importance of storytelling for children’s interest and behaviour. These are theoretical arguments for the storytelling with puppets in an elaborated way. Further the concept of animism of Piaget, used in Tzuriel and Remer [57], can be a relevant concept to understand why children is so easily see puppets as being alive and gets fascinated by them.

Slightly surprising was the use of Corsaro in connection with the use of puppets. However, his studies and theories of children’s peer culture, are of course of great interest to understanding children’s behaviour in groups. For example, the inclusion and exclusion of friends, used in Bateman [38] and Wohlwend [58], can be used both to understand children’s play with puppets, and also how teachers’ puppet play can inspire or initiate discussion about friendship in play. An aspect in
connection with this is also that the pedagogy can use the wittiness of the puppet to be a friend of the children, and respecting the children rights with the support of Corsaro’s theory (Green [59]).

The final interesting theory is Narrative pedagogy, even if this is not a clear theory and the articles have different sources of support, they have a focus on narratives and the transformational function of puppets. This might be theoretical approaches of high relevance for the use of puppets, as they are often used in generating communication with children, storytelling, and frequently integrating different learning outcomes in a transdisciplinary way (Kröger & Nupponen [7]). The transformational function seems also having some similarities with the fantasy and creativity of Vygotsky, and both perspectives can support the important function of puppets as pedagogical tool.

As a conclusion, this review reveals that there are several relevant theories that can be used to support the pedagogical use of puppets with young children. It is also interesting that several articles, 17 of the 37, use two or more of the theoretical perspectives found, which also endorses the usefulness of these perspectives. A renewal of the use of puppets as pedagogical tool in ECEC can be supported by different theories and can function as a play-based pedagogy (Bergen [16]; Pyle & Danniels [17]; Taylor & Boyer [18]). These theories can support the pedagogical potential of the puppets to endorse communication, fantasy, storytelling and friendship of young children. Professionals of ECEC can thus use puppets for different learning outcomes for the children with the support of relevant theories, and this teaching can be an interesting area for further research.

REFERENCES

[1] Forsberg Ahlerona M., “The puppet’s communicative potential as a mediating tool in preschool education”, International Journal of Early Childhood, vol. 44, pp. 171-184, 2012, https://doi.org/10.1007/s13158-012-0060-3.

[2] Kjellstrand Hartwig, E., “Puppets in the playroom”. International Journal of Play Therapy, vol. 23, no. 4, pp. 204-216, 2014, https://doi.org/10.1037/a0038054.

[3] Tilbrook, A., Dwyer, T., J.A. Parson, “A review of literature: The use of puppet simulation in nursing education and children’s healthcare”, Nurse Education in Practice, vol. 22, pp. 73-79, 2017, https://doi.org/10.1016/j.nepr.2016.12.001.

[4] Nyland, B., Ng, J., “International perspectives on early childhood curriculum changes in Singapore and Australia”, European Early Childhood Education Research Journal, vol. 24, no. 3, pp. 465-476, 2016, https://doi.org/10.1080/1350293X.2015.1102416.

[5] Sumption, J., Cheeseman, S., Harrison, L., Kennedy, A., A. Stonehouse, “Insider perspectives on developing Belonging, Being and Becoming: The Early Years Learning Framework for Australia”. Australasian Journal of Early Childhood, vol. 34, no. 4, pp. 4-14, 2009, https://doi.org/10.1177/183693910903400402.

[6] Fleer M., Chen, F., B. van Oers, “New directions in Early Childhood Education Practice: International Developments and Practice Gaps”, in International Handbook of Early Childhood Education, vol. II, Springer, 2018, pp. 955-966.

[7] Kröger, T., Nupponen, A-M., “Puppet as pedagogical tool: A literature review”, International Electronic Journal of Elementary Education, vol. 11, no.4, pp. 393-401, 2019, DOI: 10.26822/iejee.2019450797.

[8] Weisberg, D.S., Hirsh-Pasek, K., R.M. Golinkoff, “Guided play: Where curricular goals meet a playful pedagogy”, Mind, Brain and Education, vol. 7, no. 2, pp. 104-112, 2013, https://doi.org/10.1111/mbe.12015.

[9] Russel, J.L., “From child’s garden to academic press: The role of shifting institutional logics in redefining kindergarten education”, American Educational Research Association, vol. 48, no. 2, pp. 236-267, 2011, https://doi.org/10.3102/0022027210372135.

[10] Zambrana, I.M, Ogden, T., H.D. Zachrisson, “Can pre-academic activities in Norway’s Early Childhood and Care program boost later academic achievements in pre-schoolers at risk?”, Scandinavian Journal of Educational Research, vol. 64, no. 3, pp. 440-456, 2020, https://doi.org/10.1080/00313831.2019.1577751.

[11] Miller, E., Almon, J., “Crisis in the kindergarten: Why children need to play in school”, The Education Digest, vol. 75, pp. 42-45, 2009, http://web.a.ebscohost.com.proxy.lib.umn.edu/ehost/pdfviewer/pdfviewer?vid=4&sid=6b3533fc-12b6-4ed9-87c5-e42a0d270cb2%40dcv-sessmgr02.

[12] Nie, Y., Lau, S., “Differential relations of constructivist and didactic instruction to students' cognition, motivation, and achievement”, Learning and Instruction, vol. 20, pp. 411-423, 2010, https://doi.org/10.1016/j.learninstruc.2009.04.002.

[13] Rimm-Kaufman, S.E., Pianta, R.C., M.J. Cox, “Teacher’s judgement in the transition to kindergarten”, Early Childhood Research Quarterly, vol. 15, no.2, pp. 147-166, 2000, https://doi.org/10.1016/S0898-5662(00)00049-1.

[14] Pramling Samuelsson, I., Johansson, E., “Play and learning: Inseparable dimensions in preschool practice", Early Child Development and Care, vol. 176, no. 1, pp. 47-75, 2006, https://doi.org/10.1080/030043042000302654.

[15] Van Oers, B., Duijkers, D., “Teaching in play-based curriculum: Theory, practice and evidence of developmental education for young children”, Journal of Curriculum Studies, vol. 45, no. 4, 511-534, 2013, https://doi.org/10.1080/00207272.2011.637182.

[16] Bergén, B., “The role of pretend play in children’s cognitive development", Early Childhood Research & Practice, vol. 4, no. 1, 2002, https://ecrp.illinois.edu/v4n1/bergen.html.

[17] Pyle, A., Danniels, E., “A continuum of play-based learning: The role of the teacher in play-based pedagogy and the fear of hijacking play", Early Education and Development, vol. 28, no. 3, pp. 274-289, 2017, https://doi.org/10.1080/10409289.2016.1220771.
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[18] Taylor, M.E., Boyer, W., “Play-based learning: Evidence-based research to improve children’s learning experiences in the kindergarten classroom”, Early Childhood Education Journal, vol. 48, no. 2, pp. 127-133, 2020, https://doi.org/10.1007/s10643-019-00989-7.

[19] Pyle, A., DeLuca, C., “Assessment in play-based kindergarten classrooms: An empirical study of teacher perspectives and practices”. The Journal of Educational Research, vol. 110, no. 5, pp. 457-466, 2017, DOI:10.1080/00220671.2015.1118005.

[20] Mc Ardle, F., Gri shaber, S., J. Sum sion, J., “Play meets early childhood education”, The Australian Educational Researcher, vol. 46, pp. 155-175, 2019, https://doi.org/10.1007/s13384-018-0293-8.

[21] Wallerstedt, C., Pram ling, N., “Learning to play in a goal-directed practice”, Early Years, vol. 32, no. 1, pp. 5-15, 2012, https://doi.org/10.1080/09575146.2011.593028.

[22] Baird, B., “The art of the puppet”, Macmillan, 1965.

[23] Jurowski, H., Francis, P., “A history of European puppetry”, Volume two: The twentieth century. The Edwin Mellin Press, 1998.

[24] Tierney, J.L., “Puppetry in early childhood education”, (Doctoral thesis), University of Massachusetts Amherst, 1995.

[25] Hunt, T., Renfro, N., “Puppetry in Early Childhood Education”, Nancy Renfro Studios, 1982.

[26] Brezigar, B., “How does the introduction of an English speaking puppet influence the use of English in group speaking activities?”, The University of York, 2010.

[27] Bredikyte, M., “Dialogical drama with puppets (DDP) as a method of fostering children’s verbal creativity”, Vilnius University, 2000.

[28] Esquivel, G., Oades-Sese, G., M. Jarvis, M., “Culturally sensitive narrative interventions for immigrant children and adolescents”, University Press of America, 2010.

[29] Quisenberry, N., Willis, M., “Puppets as learning tools”, Language Arts, vol. 52, no. 6, pp. 883-885, 1975, https://www.jstor.org/stable/41961137.

[30] Bromfield, R., “The use of puppets in play therapy”, Child and Adolescent Social Work Journal, vol. 12, no. 6, pp. 435-444, 1995, https://doi.org/10.1007/BF01875812.

[31] Carter, R.B., Mason, P.S., “The selection and use of puppets in counselling”, Professional School Counseling, vol. 1, no. 5, pp. 50-53, 1998, https://www.jstor.org/stable/42731871.

[32] James, R.K., Myer, R., “Puppets: the elementary school counselor’s right or left arm?”, Elementary School Guidance & Counseling, vol. 21, no. 4, pp. 292-299, 1987, https://www.jstor.org/stable/42871245.

[33] Dunst, C.J., “Meta-analysis of the effects of puppets shows on attitudes toward and knowledge of individuals with disabilities”, Exceptional Children, vol. 80, no. 2, pp. 136-148, 2014, https://doi.org/10.1177/001440291408000201.

[34] Epstein, I., Stevens, B., Mc Keever, P., Baruchel, S., H. Jones, “Using puppetry to elicit children’s talk for research”, Nursing Inquiry, vol. 15 no. 1, pp. 49-56, 2008, DOI: 10.1111/j.1440-1800.2008.00395.x.

[35] American Psychological Association (APA), “Publication Manual of the American Psychological Association”: 6th ed. APA, 2010.

[36] Petticrew, M., Roberts, H., “Systematic Reviews in Social Science: A Practical Guide”, Blackwell, 2006.

[37] Aubrey, K., Riley, A., “Understanding & using Educational Theories”, 2nd ed. SAGE, 2019.

[38] Bateman, A., “Ventriloquism as early literacy practice: Making meaning in pretend play”, Early Years, vol. 38, no. 1, pp. 68-85, 2018, https://doi.org/10.1080/09575146.2016.1254162.

[39] Brown, S., “Building character through shadow puppetry”, Art Education, vol. 57, no. 6, pp. 47-53, 2004, https://doi.org/10.1080/00403125.2004.11653576.

[40] Conner, N.W., Fraser, M. W., “Preschool social-emotional skills training: A controlled pilot test of the making choices and strong families programs”. Research on Social Work Practice, vol. 21, no. 6, pp. 699-711, 2011, https://doi.org/10.1177/1049731511408115.

[41] Davis, S., Dolan, K., “Contagious learning: Drama, experience and perezhivanie”, International Research in Early Childhood Education, vol. 7, no. 1, pp. 50-67, 2016, https://eric.ed.gov/?id=EJ1138761.

[42] Eckhoff, A., “The importance of art viewing experiences in early childhood visual arts: The exploration of a master art teacher’s strategies for meaningful early arts experiences”, Early Childhood Education Journal, vol. 35, pp. 463-472, 2008, https://doi.org/10.1007/s10643-007-0216-1.

[43] Forsberg Ahlcrorna, M., “The puppet’s communicative potential as a mediating tool in preschool education”, International Journal of Early Childhood, vol. 44, pp. 171-184, 2012, https://doi.org/10.1007/s13158-012-0060-3.

[44] Farr Darling, L., “Moles, porcupines, and children’s moral reasoning: Unexpected responses”, Early Years: An International Journal of Research and Development, vol. 22, no. 2, pp. 91-103, 2002, https://doi.org/10.1080/095751402151440.

[45] Forsberg Ahlcrorna, M., Östman, A., “Mathematics and puppet play as method in the preschool teacher education”, Creative Education, vol. 9, pp. 1536-1550, 2018, DOI:10.4236/ce.2018.910113.

[46] Hackling, M., Smith, P., K. Murcia, “Enhancing classroom discourse in primary science”, Teaching Science, vol. 57, no. 2, pp. 18-25, 2011, https://eric.ed.gov/?id=EJ962459.

[47] Hakkarainen, P., Bredikyte, M. Jakula, K., H. Munter, “Adult play guidance and children’s play development in a narrative play-world”, European Early Childhood Education Research Journal, vol. 21, no. 2, pp. 213-225, 2013, DOI: 10.1080/1350293X.2013.789189.

[48] Hatzigianni, M, Stevenson, M., Bower, M., Falloon, G., A. Forbes, “Children’s views on making and designing”, European Early Childhood Education Research Journal, vol. 28, no. 2, pp. 286-300, 2020, https://doi.org/10.1080/1350293X.2020.1735747.

[49] Keogh, B., Naylor, S., Maloney, J., S. Simon, “Puppets
engagement in science: A case study”, Nordina: Nordic studies in science education, vol. 4, no. 2, pp. 142-150, 2008, DOI: https://doi.org/10.5617/nordina.289.

[50] Lake, G., Evangelou, M., “Let’s talk! An interactive intervention to support children’s language development”, European Early Childhood Education Research Journal, vol. 27, no. 2, pp. 221-240, 2019, https://doi.org/10.1080/1350233X.2019.1579549.

[51] Lee, S.W., Hassett, D.D., “The multiple modes of ideological becoming: An analysis of kindergartner’ appropriation of school language and literacy discourses”, European Early Childhood Education Research Journal, vol. 25, no.3, pp. 462-475, 2017, https://doi.org/10.1080/1350293X.2017.1308169.

[52] McLean, K., Jones, M., C. Schaper, C., “Children’s literature as an invitation to science inquiry in early childhood education”, Australasian Journal of Early Childhood, vol. 40, no. 4, pp. 49-56, 2015, https://doi.org/10.1177/183693911504000407.

[53] Rule, A.C., Graham, L.E., Kowalski, S., M. Harris, “Learning landform vocabulary through different methods: object boxes, sand and dough creations, or puppet plays”, Journal of Geoscience Education, vol. 54, no. 4, pp. 515-525, 2006, https://doi.org/10.5408/1089-9995-54.4.515.

[54] Simon, S., Naylor, S., Keogh, B., Maloney, J., B. Downing, “Puppets promoting engagement and talk in Science”, International Journal of Science Education, vol. 30, no. 9, pp. 1229-1248, 2008, https://doi.org/10.1080/09500690701474037.

[55] Stagg Peterson, S.S., Rajendram, S., E. Nazila, “Multimodal meaning-making during play in two Northern Canadian Indigenous kindergarten classrooms”, Early Years, vol. 39, no. 4, pp. 392-407, 2019, https://doi.org/10.1080/09575146.2017.1384994.

[56] Sutherland, S.L., Friedman, “Preschoolers acquire general knowledge by sharing in preteens”, Child development, vol. 83, no. 2, pp. 1064-1071, 2012, DOI: 10.1111/j.1467-8624.2012.01748.x.

[57] Tzuriel, D., Remer, R. “Mediation with a puppet: The effects on teachers’ mediated learning strategies with children in special education and regular kindergartens”, Learning and Instruction, vol. 58, pp. 295-304, 2018,https://doi.org/10.1016/j.learninstruc.2018.08.001.

[58] Wohlwend, K.E., “Who gets to play? Access, popular media and participatory literacies”, Early Years, vol. 37, no. 1, pp. 62-76, 2017, https://doi.org/10.1080/09575146.2016.1219699.

[59] Green, C., “Listening to children: Exploring intuitive strategies and interactive methods in a study of children’s special places”, International Journal of Early Childhood, vol. 44, pp. 269-285, 2012, https://doi.org/10.1080/s13158012-0075-9.

[60] Mantzicopoulos, P., Patrick, H., A. Samarupavangan, “Young children’s motivational beliefs about learning science”, Early Childhood Quarterly, vol. 23, pp. 378-394, 2008, https://doi.org/10.1016/j.ecresq.2008.04.001.

[61] Pelicand, J., Gagnayre, R., Sandrin-Berthon, B., I. Aujoulat, I., “A therapeutic educational programme for diabetic children: Recreational, creative methods, and use of puppets”, Patient Education and Counseling, vol. 60, pp. 152-163, 2006, https://doi.org/10.1016/j.pec.2004.12.007.

[62] Quiros, O.E., “Puppets and experiments as a conservation tool for first grade students”, International Journal of Environmental & Science Education, vol. 14, no. 5, pp. 219-228, 2019, http://www.ijese.net/makale/2117.html.

[63] Jacono, J., Jacono, B., “The use of puppetry for health promotion and suicide prevention among Mi’Kmaq youth”, Journal of Holistic Nursing, vol. 26, no. 1, pp. 50-55, 2008, https://doi.org/10.1177/0898010707306201.

[64] Timmons, K., & Pelletier, J., “Using latent-class analysis to examine the influence of kindergarten children’s perspectives of school on literacy and self-regulation”, Early Child Development and Care, vol. 186, no. 11, pp. 1737-1751, 2016, https://doi.org/10.1080/03004430.2015.1311157.

[65] Webster-Stratton, C., Reid, M.J., “Strengthening social and emotional competence in young children: The foundation for early school readiness and success: Incredible years classroom social skills and problem-solving curriculum”, Infants and Young Children, vol. 1, no. 2, pp. 96-113, 2004, DOI:10.1097/0001163-200404000-00002.

[66] Kardum, G., Kuscevic, D., M. Brajic, M., “The impacts of different sorts of art education on pupils preference for 20th-century art movements”, Education Sciences, vol. 10, no. 15, pp. 1-13, 2020, DOI: 10.3390/educsci10010015.

[67] Korosec, H., “Evaluating study of using puppets as a teaching medium in Slovenian Schools”. Skolski Vjesnik, vol. 62, no. 4, pp. 495-520, 2013, https://hrcak.srce.hr/112414.

[68] Remer, R., Tzuriel, D., “I teach better with puppets: Use of puppets as a mediating tool in kindergarten education: An evaluation”, American Journal of Educational Research, vol. 3, no. 3, pp. 356-365, 2015, DOI: 10.12691/education-3-3-1.

[69] Mackenzie, K.B., “Imagination and transformation: Performing a universal narrative theme”, Art Education, vol. 65, no. 3, pp. 12-16, 2012, https://doi.org/10.1080/0043125.2012.11519171.

[70] Romanski, N.M., “Reigniting the transformative power of puppets through narrative pedagogy, contemporary art, and transdisciplinary approaches in art education”, Art Education, vol. 72, no. 4, pp. 36-42, 2019, DOI: 10.1080/00043125.2019.1602496.

[71] Fleer, M., Veresov, N., “Cultural-historical and activity theories informing early childhood education”, in International Handbook of Early Childhood Education, vol. 1, Springer, 2018, pp. 47-76.

[72] Fleer, M., Hammer, M., “Perezhivanie in group settings: A cultural-historical reading of emotional regulations”, Mind, Culture, and Activity, vol. 23, no. 4, pp. 392-407, 2019, https://doi.org/10.1080/09575146.2016.131157.
[74] March, S., & Fleer, M., “Soperezhivanie: Dramatic events in fairy tales and play”, International Research in Early Childhood Education, vol. 7, no. 1, pp. 68-84, 2016, https://eric.ed.gov/?id=EJ1138869.