# The Ability of Persian-Speaking Children in Using Story Grammar through Concept Map

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***Received: 5 July 2016 Accepted: 18 July 2017***

## Extended Abstract

### 1- Introduction

Storytelling is one of the effective ways to increase the learning level of a child, because it helps him to create meaning based on his observations and experiences. Using concept maps and story grammar is helpful for children in creating stories, as they can employ the structure of concept maps as a pattern for organizing and representing stories. Concept maps are represented in a hierarchical fashion in which the most inclusive concepts and contents are represented at the top of the map, and the more specific contents and concepts are placed at the end of the hierarchy (Novak & Canas, 2006). It seems that the two features of concept maps, that is, the hierarchical structure represented in the map and the possibility to search and identify new cross connections, have an important role in forming a creative and critical thinking in children, since the ability to draw a concept map requires the activity of higher cognitive levels, namely the evaluation and combination of knowledge (ibid). A concept map is used as a graphical creation system for organizing knowledge and information (Chen, Looi, & Chen, 2009), thus, instead of dealing with the details which will reduce creativity, it can guide the story development at the meta-level (Liu, Chen, Shih, Huang, & Liu, 2011). Liu and colleagues (2011,) believe that story grammar consists of four main sections: a) setting, b) action, c) event, and d) sequence. Setting is the description of the place and time of the story and the relationship between characters. Action includes activities such as competition, adventure, and daily activities of characters. Events consist of all the incidents that occur during the story, such as difficulties and obstacles. Sequence includes the outcomes of the events, such as success, achievements, and rewards.

The main objective of this research was to evaluate and compare the performance of Persian-speaking children in two age groups of 7-8 and 8-9 years old in using story grammar through concept maps. The researchers

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aimed to use these maps and story grammars to help children in creating stories, and to compare their performance in using story grammars through concept maps in terms of the number of words and events and also the usage manner of the features of story grammar (setting, action, events and their sequences) in storytelling.

**2- Methodology**

The present descriptive and comparative study was conducted for two weeks on 14 Persian-speaking monolingual girls in two age groups of 7-8 (first grade) and 8-9 (second grade) years in Asemi elementary school, district 9 of Tehran. In the first week, the children became familiar with story grammar and concept maps, and in the second week, each child was required to create and tell a story about "the adventures of losing my little brother in the forest" for about 25 minutes. The children were asked to draw their concept maps on an A4 sheet. Their storytellings were recorded by MP4 while drawing.

**3- Discussion**

Data analysis revealed that the mean number of episodes produced by children in the age group of 7-8 and 8-9 years were 6.14 and 7.71, respectively. Also, the 7-8 years old subjects produced a mean number of 98.42 words, while the 8-9 years old ones produced a mean of 146.85. Thus, the Persian-speaking children in the two age groups showed different degrees of ability to use story grammar in terms of the number of words and events, but this difference was not statistically significant (the P value for the number of episode variable in the 7-8 years old group was $0.05<0.47$, for the 8-9 years old group was $0.05<0.48$, and for the number of words variable in both age groups was $0.05<40.0$). Moreover, the research data indicated that the usage mean of the story grammar's features (setting, action, event, and sequence) in children aged 7-8 years old were 10.58, 3.18, 1.2 and 1, and in children aged 8-9 years old were 13, 5.7, 1.7 and 1, respectively. Based on the statistical analysis of these data, although the children in the higher age group (8-9 years old) used the story grammar's features more and more accurately than the children in the lower age group (7-8 years old), the difference was only significant with respect to the action element ($t=-2.44$, $sig=0.03$). No significant difference was observed for the elements of time and place, and event ($t=-1.64$, $sig=0.12$ and $t=-0.63$, $sig=0.54$). In addition, both age groups displayed the same ability in using the sequence element.

**4- Conclusion**

In sum, the data of the present study demonstrated that although the performance of the 7-8 and 8-9 years old children in using the two elements

of time and place, and event of the story grammar through concept mapping was not significant, a significant difference was observed in their performance regarding the action element. Therefore, the data, in accordance with other studies, such as Fraser and Edwards (1985) showed that subjects with different levels of ability were able to use concept mapping. As children's linguistic knowledge and their information about the world around extend parallel to their age increase, their stories become more complex and creative. Drawing concept maps motivates children to generate more events by presenting concepts and drawing lines between them, and to become more creative by producing more words and grammatical rules.

**Keywords:** story grammar, child storytelling, child language, concept map.

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