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[IBBY Biennial Reports \(/subnavigation/archives/ibby-biennial-reports\)](/subnavigation/archives/ibby-biennial-reports)

---

[IBBY Congresses \(/subnavigation/archives/ibby-congresses\)](/subnavigation/archives/ibby-congresses)

---

[Hans Christian Andersen Awards \(/subnavigation/archives/hans-christian-andersen-awards/2018\)](/subnavigation/archives/hans-christian-andersen-awards/2018)

---

[IBBY-Asahi Reading Promotion Award \(/subnavigation/archives/ibby-asahi-reading-promotion-award/2018\)](/subnavigation/archives/ibby-asahi-reading-promotion-award/2018)

---

[IBBY Honour List \(/subnavigation/archives/ibby-honour-list/2018\)](/subnavigation/archives/ibby-honour-list/2018)

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[International Children's Book Day \(/awards-activities/activities/international-childrens-book-day/icbd-2019\)](/awards-activities/activities/international-childrens-book-day/icbd-2019)

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[Outstanding Books for Young People with Disabilities \(/subnavigation/archives/outstanding-books-for-young-people-with-disabilities\)](/subnavigation/archives/outstanding-books-for-young-people-with-disabilities)

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[IBBY-Yamada Fund \(/subnavigation/archives/ibby-yamada-fund\)](/subnavigation/archives/ibby-yamada-fund)

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[Bookbird \(/subnavigation/archives/bookbird\)](/subnavigation/archives/bookbird)

---

[National Newsletters \(/subnavigation/archives/national-newsletters\)](/subnavigation/archives/national-newsletters)

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[IBBY Newsletters \(/subnavigation/archives/ibby-newsletters\)](/subnavigation/archives/ibby-newsletters)

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## Mehri Parirokh and Rahmatollah Fattahi

### Modeling the minds of children to think philosophically: Content analysis of stories for children

Speaking time: Friday, 22 September 2006, 14h00-15h30

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Philosophy, according to Lipman, the originator of philosophy for children, is considered as a discipline which can be integrated into the educational life of children and make them knowledgeable. Philosophy encourages logical thinking and provides higher order of thinking and self-directed thinking. This can be a true investment for any society. However, there are a lot of debates about whether philosophy can be taught to children. Children's stories are tools for learning PT, i.e., to learn how to generate concepts, how to judge, how to base judgments on reasons, how to think and to be knowledgeable. By combining emotion with curiosity, creativity and deep understanding, stories can

be powerful tools for teaching PT. Through different approaches, stories help children to analyze the problems from different perspectives and enhance self-criticism. This will result in the modification of their behavior, beliefs and values and the development of their understanding of life.

This research focuses on the content of children's stories as a tool for developing PT in children. In the first part of the paper, the thinking model which promotes PT in children is discussed. The elements in children's stories which enhance the so-called thinking model will be described in the second part. Examples are based on a content analysis carried out on children's stories published in Iran during the period of 1991-2003 for children between 7-12 years old.

## Introduction

There are a lot of debates about whether children should learn PT. Those who believe it is not necessary (e.g., Piaget 1933), specify certain age (after the age of 11 or 12 years) for learning how to think philosophically. Those who realize that it is necessary for children (e.g., Matthews 1980; Fisher 1998, Lipman 1991) believe that children are capable of PT even from preschool age. However, as Astington (1993) and Gopnik, et al. (1999) state, there is a growing body of psychological research suggesting that Piaget's account seriously underestimates children's cognitive abilities. Following this belief, this paper attempts to find out theoretically and empirically how children can be taught to think philosophically through children's stories. It is not intended to discuss in detail the methods and approaches to teaching of PT to children; rather, the focus is on children's stories as tools for teaching such kind of thinking. The theoretical part of discussion answers to questions such as what kind of thinking is PT, which elements can help and represent thinking philosophically. The empirical part of the discussion identifies philosophical elements in the children's stories published during 1991-2004 in Iran. The conclusion and trends for future research are the last part of discussion.

## What is PT and how can we philosophize

Let's define what do we mean by PT and then analyze its elements. According to Oxford Companion to Philosophy (OCP), philosophy is critical thinking. To be convinced that this definition is acceptable, we should define critical thinking. Lipman (1991, 118) calls critical thinking "intellectual judgment", "Excellent judgment", and "cognitive accountability". By judgment he means good judgment or wise judgment, the judgment which takes everything relevant into account. Since, judgment is based on criteria, critical thinking depends on criteria or rules and principles which make judgments possible. There is, therefore, close relationship between judgment, criteria and critical thinking.

The *Penguin Dictionary of Philosophy* considers philosophy as "the most fundamental and general concepts and principles involved in thought, action and reality". It can therefore be inferred that critical thinking is the approach used in PT for assessing principles and understanding concepts. On the other hand, in this dictionary, philosophy is considered as "rational enquiry, or enquiry guided by the canons of rationality". Fisher (2006) defines PT or philosophical intelligence as the capacity to ask and seek answers to existential questions.

Critical thinking, on the other hand is enquiry about truth, what to do, what not to do, what to believe and what not to believe. Questioning and enquiry are at core of thinking critically. Lipman (1991) states that when a child ask "why" he/she is trying to philosophize. It can be concluded that PT is based on critical enquiry. Or, critical thinking is a tool for PT. By teaching critical thinking children can learn how to think philosophically. Critical thinking is a kind of thinking that deals with reasoning and assessing according to one's reason. In justifying teaching of critical thinking, Siegel (1988 quoted in

Bailin 1994, 1206) states that critical thinking is crucial for fostering independence in judgment required for self sufficiency in adulthood. It can be inferred that critical thinking is the basis for evaluation, judgment, inference, and making decisions.

In critical thinking, when we ask why, we are asking for reason for a behavior or idea. This kind of thinking, therefore, deals with reason, judgment and facts. In other words, in critical thinking as well as in PT, reasoning is the core element.

### **Why children should think philosophically**

In everyday life we are confronted with a lot of basic questions about life, love, death and so on. The ability to find answers to our questions can be a stimulus for more questions and answers. Questions emerge from PT ability. Answers are innovative thoughts, knowledge, findings and experiences. These answers enrich our knowledge base. Rich knowledge base is an encouragement for asking deep questions. It is commonly accepted that knowledgeable people ask more questions. Rich knowledge base also supports personal and professional success of individuals.

According to Philip Smith (quoted in Khosrou Nejad 2005), PT is characterized by coherence, deep understanding and intellectual flexibility. By coherence he points to the process of thinking by which philosopher look at a problem from different perspective. In other words, they are multidimensional thinkers. Deep understanding process deals with epistemological understanding of a phenomenon. This process employs analytical thinking by which a particular entity is turned into parts. Analytical thinking help discover the relationship between different parts as well as the relationship between this entity and related entities. This approach provides deep understanding or deep learning. Intellectual flexibility is a concept which involves correction, change, completion and agreement. In other words, philosophers do not rely on abstract ideas in their judgment, but through inductive reasoning and facts they can draw conclusions and reject or accept hypotheses. Intellectual flexibility is crucial characteristics for children who, according to Piaget are self-centered. Psychologists call this characteristic centrism. Centrism is defined as: "A young child's tendency to focus only on his or her own perspective of a specific object and a failure to understand that others may see things differently." (Psychology...2004). It does not let children to develop intellectually. Intellectual flexibility helps them to look at a problem from different perspective and assess it by criteria. The consequence might be moving away from centrism to decentrism. That is, correcting mental schema, being subjective and intellectually flexible.

PT equips children with these characteristics. Such kinds of thinking develop habits of intelligent behavior (Fisher 2006). McGuines (quoted in Fisher 2006), who uses thinking skills instead of PT, relates this approach in thinking to academic achievement in children. The results of several research projects (for example by Dyfed 1994; Tickey and Topping 2004 and Fisher 2005a quoted in Fisher 2006) also show the same impact of PT on children's achievement.

In this ever-changing and complex world, individuals need to understand problems, find solution and make decisions independently. In general, they should know how to survive. Academic achievement is not enough for survival. Philosophical thinking helps better problem deterrence and problem avoidance (Lipman 1991). It can be concluded that PT brings about independence, happiness, ambitious and prosperity. Children, therefore, deserve to be taught how to think philosophically and benefit from its positive outcomes.

### **Different kinds of thinking which represent PT**

In order to differentiate between different kinds of thinking which enhance the above mentioned characteristics (that is coherence, deep understanding and intellectual flexibility in thinking), different approaches in thinking should be selected. These approaches show how individuals process information in their mind. Based on the limitation of this study, in this paper we classify these approaches within three concepts translated into reasoning, judgment and concept formation by Lipman (2003). He considers these concepts crucial for teaching students how to think philosophically.

Although these concepts are not independent and have some relationships with each other, they are discussed separately in this section. Since this study also takes the attributes of these concepts into consideration and considers them as elements in children's stories which can stimulate thinking and help develop PT in children, they are also mentioned within each concept. Attributes related to each concept are the approaches used by writers in stories.

### **Concept formation**

Concept is mental representation of a class. Everything which constitutes the universe belongs to a class. Understanding of a concept helps understand epistemologically an entity and its relationship to a class and other entities. This knowledge is the basis for determination. The relationship between concept and determination is mentioned in the definition provided in the Cambridge Dictionary of Psychology (1999, 170) "Concept may be understood as a principle of classification. Something that can guide us in determining whether an entity belongs in a given class or does not." Concept formation is crucial to our understanding of everything around us. Concepts provide knowledge and criteria which help us explain and understand other concepts, predict, make decisions and solve problems. In early stages of life, a child has not a clear understanding of concepts. He/she has a holistic understanding of concepts (Ross 2000). In other words, the understanding process does not take into consideration particular parts of an entity, rather it focuses on overall similarities between that concept and earlier knowledge. Gradually, by increasing experiences, his/her knowledge about entities and their features increase. For increasing this knowledge base, concept learning must be taught to the children. This, which is called concept formation in this paper, provides criteria for understanding, comparing, evaluating and decision making. It provides a well ground for thinking critically, because in critical thinking process, validation of criteria, acknowledging or evaluating is the main concern. Concept formation, results in cognitive development, i.e., deep understanding of phenomena and deep learning and formulation of criteria. Criteria can be facts, principles, values (as basis of comparison) and countless other sorts of things. The Concept formation ability helps students be independent in thinking philosophically.

The following attributes are acknowledged for concept formation:

- *Links between concepts*: This refers to the cause and effect of events, thinking and behaviors.
- *Objective realism*: This refers to providing a picture of real life. Children are able to understand whatever seems familiar to them. In other words, they internalize the events in stories and discover relationships between concepts and their experiences in real life.
- *Formulating criteria*. Understanding the reason for some consequences help children formulate criteria and/or understand and accept criteria or rules and principles.

### **Reasoning**

Reasoning is encouraged by questions (Fisher 2006). Most of the times when we ask questions, we are looking for a reason for doing or believing something. According to Sternberg (2000, 70), “reasoning involves drawing conclusions from evidence.” Evidence based on observations, experience or experiments provides information for driving consequences and making decisions. Reasoning can be deductive or inductive and deals with the processing of information. Deductive reasoning relies on general premises upon which we make conclusions about specific events. For example, fox in most stories is a clever but selfish character. Therefore, a general inference would be that all foxes are selfish animals. On the other hand, in inductive reasoning, specific features can be the basis of holistic reasoning. In the previous example, it can be concluded that the fox is not a pleasant character to children.

Attributes of this kind of deductive reasoning in children's stories are acknowledged as:

- Rules and regulations which provide obligations for some beliefs and behavior, and
- Judgments which are based on criteria.

In inductive reasoning, conclusions are based on facts and observations. In this approach, it is not possible to reach a certain logical conclusion, only more or less probable conclusion (Sternberg 2000).

The attributes of this kind of thinking are acknowledged as

- Outcomes of behavior
- The relationships between concepts, such as the relationship between ideas and behavior and
- Analyzing the concepts in a story

## **Judgment**

Judgment is making decisions and opinions upon facts and evidence. According to Merriam Webster judgment is “the process of forming an opinion or evaluation by discerning and comparing”. It is, therefore, the act of judging or assessing a person, a situation or an event and to draw conclusions. Lipman (1990) discusses about the importance of judgment skill in children. By judgment he refers to good judgment. He believes that good judgment relies on “proficient reasoning skills, concept formation and translation skills” (p. 124). Similar to concept-formation and reasoning, the judgment process is also based on criteria. As discussed about two previous concepts, critical thinking is also an essential component of judgment. Attributes of this kind of thinking in children's stories are identified as:

- Using criteria
- Difference and similarities between ideas, behavior, personalities, etc.

The above mentioned concepts and related attributes are demonstrated in the following table which is called *Thinking table*

<b>Reasoning</b>   <b>Judgement</b>   <b>Conceptualization</b>
Rules and regulations Using criteria Formulating criteria
Judgement Differences and similarities between ideas Links between concepts
Outcome of thinking and behavior  Realism
The relationship between concepts
Classification
Analyzing the concepts

Table (1): Thinking table: A model for acknowledging PT elements in children's stories

As mentioned earlier, there is a close relationship between judgment, reasoning and concept formation. They are all based on criteria and evidence and employ critical thinking skills. They help shape cognition and mental schema in children. Mental schemas are based on criteria. The more thinking approach dealing with concept formation, the more criteria are created and is added to the mental model of children. The more the number of criteria or cognition development, the better environment is provided for reasoning and making judgments. They can be called families of thinking philosophically. Lipman (1991, 18) believes that the knowledge which is based on means of evidence and reason is scientific knowledge. It can be inferred that the product of concept formation, reasoning and judgment is scientific knowledge. Scientific knowledge is coherent and flexible.

### **The role of children's stories in modeling children's mind and thinking philosophically**

Children with limited knowledge about the universe and real life could not think philosophically. This kind of thinking should be taught if we expect an intelligent and happy generation. Most children are eager to read stories. Lipman (2003) acknowledges several features for children's stories that make them interesting to read. He believes that stories "may provide a fictional, imaginative setting, an energetic dialogue, lively characters, a sprightly style, animation, humor, or all of these." Stories with such features are powerful tools for educating the concepts. Normally, children enjoy stories which involve them by their interesting events, processes, characters and approaches. The more stories being capable of involving children, there will be better stimulus for them to think. The initial efforts of Lipman, who believes that the educational system should take into consideration the teaching of logic to children through critical thinking, was the creation of his first children's novel, Harry Stottlemeier's Discovery (1974). He considers stories as suitable tools for teaching PT to children.

Several elements increase the effect of philosophical stories.

- Stories, which are closely related to children's experience, can be powerful stimulus for thinking.
- Group discussion sessions arranged after reading stories are good exercise for thinking. These discussions help children have control over stories (Sharp 2004) and they can, therefore, have better influence on thinking skills of the reader. The reason is that, discussion sessions provide good opportunity for children to ask questions, to answer questions and to think.
- Questioning is at the core of philosophical thinkers. Questions, which are guided by teachers, librarian or parents, offer cognitive challenge. Moreover, in some stories, without relying on community enquiry, the plot, theme or events of the story itself provide cognitive challenge. For example, "Mida and Misa", "the one who went and the one who stayed" are stories which based on challenge between active and passive personality. Skepticism, which represents active personality, encourages thinking.

There is no point in reading a story if the reader has not been confronted with the challenge of thinking about events, and their consequences, cause and effects. In order to make stories interesting, Lipman (1991) insists that stories must be about children "discovering logic".

As mentioned earlier, community of enquiry which is question and answer sessions and based on narrative approaches can also provide an environment to stimulate children's thinking. In these narrative meetings, children learn to form concepts, formulate criteria and increase their ability for judgment. By moving away from centrism to decentrism, they could change their mental model and modify their knowledge and acquire knowledge. One of the other results of narrative approach in reading stories and subsequent discussions is to gain understanding along with coherence and consistency (Lipman 2003). The importance of discussion and narrative approach in individual development has been discussed by many researchers (e.g., Hickmann 1998; Cooper 2000, Lipman 2003; ..).

It can be concluded from this discussion that reading suitable children's stories followed by discussions which use narrative approach are useful tools for children to develop PT abilities.

Based on this theoretical discussion, an exploratory study on children's stories was undertaken. Next section is the result of this study.

### **Research questions**

- 1) To what extent children's stories which published in Iran employ elements which can enhance PT?
- 2) Which kind of PT is the dominant focus of children's stories
- 3) What subjects are the focuses of children's stories which employ elements which can enhance PT?
- 4) Through which approaches children's stories employ elements which can enhance PT?
- 5) What stories are more effective in teaching PT?

### **Research design and analysis**

This exploratory research, which is based on cognitive psychologist view, has used content analysis method. The aim of the research is to investigate the elements in children's stories which are capable of enhancing PT. The focus of the study is on stories published in Iran. It is expected that the results

of this study help children's writers, researchers, librarians, parents and teachers to become familiar with such elements and use them in research, teaching, or discussing about the content of stories.

### **Population of the study**

Based on the aim of the study, a research population was selected with the following features:

- Children's stories written by Iranian writers
- Children's stories published in Iran, during 1991-2004
- Children's stories assessed by the Children's Book Council of Iran as suitable stories for school age students (i.e., 7-11 years old)

Based on above mentioned features, 133 stories were selected as the population for this research.

### **Validation of data gathering instrument**

“Thinking table” (TT) is an instrument for collecting data and is a model for discovering PT elements in children's stories. The theoretical framework of this model and the study is based on philosophical concepts mentioned by Lipman (2003). Based on the related literature and focus group approach, the attributes of these concepts were identified and upon which 3 checklists were developed. In focus group approach, several meetings were arranged for the research team consisting: two scholars in library and information science, who have taught children literature for several years and have conducted several research in this discipline, one writer and illustrator of children's stories, who is knowledgeable about the literature on PT and literature on children and for children, and an experienced librarian who is interested in children literature, knows very well these documents, has control over population of this study and has participated in conducting another research in this discipline (Parirokh, Mehri, Madji and Zahra. Children stories; a tool to help children to confront difficulties: A bibliotherapeutic investigation on children's stories. In publication process).

The model was developed and completed through four phases. In the first phase, the result of the initial meeting was the creation of the first version of TT and the related checklists. In the second phase, 50 stories were read by all members of the team. They must acknowledge the concepts and compare them against the concepts of the initial TT and complete the checklists. The results and suggestions of this pilot study were discussed in another meeting and helped construct the second version of TT. In the third phase, based on the 2nd version of TT, all members of the research team read and analyzed all stories and again completed the related checklists. In the last phase, one of the scholars analyzed and compared the suggestions and critical views of other co-researchers about the philosophical elements in stories. The results discussed in a meeting ended up with the last version of TT.

Each checklist is related to one concept and consists of the name of the story and the related attributes of each philosophical elements, and points which were assigned to the stories. In other words, if a story had any attributes of a concept, number one was assigned to that story in the related checklist. These numbers reveal the availability of a concept and the related attributes in the stories read. Numeric values are not assigned to the numbers. These checklists were produced in Excel and were the sources for analysis.

### **Analysis of the collected data**



In this part, some information about the population of the study or the selected books is provided first. Then, the collected data from the content analysis of children's stories will be discussed. The organization of the discussion is based on research questions.

In this study, as mentioned earlier, only those stories were analyzed that have been selected by the Children's Book Council of Iran as suitable stories for children of 7 to 11 years old. In general 133 stories were analyzed.

1) To what extent children's stories published in Iran employ elements which can enhance PT?

According to the information provided in table (2), each story may be categorized under one, two or three concepts. In other words, a similar concept overlaps in more than one story.

## Children's stories which employ elements which are capable of enhancing PT in children (N=136)

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**Judgement** | **Concept formation** | **Reasoning** | **Concepts**

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22 | 126 | 100 | No. of stories

Table (2): children's stories which employ elements which are capable of enhancing PT in children (N=136)

Although for teaching PT, Sharp (2004) prefers to rely on books which are written for this purpose, our assumption was that stories that their purpose is not to enhance PT can to some extent involve elements which are useful for PT. The information in table (2) shows that stories are suitable tools for teaching PT even if teaching philosophy is not their major purpose. As mentioned by Sharp (ibid), we must prepare teachers who know the art and craft of PT. They can, then, discover the related elements in stories and arrange community of enquiry and play the role of facilitator for discussion and argument among children. Based on table (2), the analysis of collected data reveals that most children's stories which were published in Iran have the capabilities to teach children how to think philosophically.

2) Which kind of PT is the dominant focus of children's stories

Based on information provided in tables (2) and (3), concept formation, reasoning and judgment are elements used in development of children's stories. In Table (3), the extents to which the elements and the related attributes are used in children's stories are demonstrated.

# Frequency of children's stories which employ PT elements and related attributes (N=136)

<b>Reasoning</b>	<b>Judgement</b>	<b>Concept Formation</b>			
No. of stories	Attributes	No. of stories	Attributes	No. of stories	Attributes
8	Rules and regulations	2	Using criteria	27	Formulating criteria
42	Outcome and thinking behavior	18	Differences and similarities between ideas	50	Links between concepts
10	The relationship between thinking and behavior	23	Realism		
8	Classification	26	Cognition		
32	Analyzing the concepts				

Table (3)

According to the information provided in Table (3), "links between concepts" and "formulating criteria" are taken more into consideration. Criteria are the basis for thinking philosophically. It is therefore, a critical element for education PT to children. The "relationship between concepts", not only helps understanding of concepts, but can also help modeling the mind and formulating concepts. For example, in the story, "who is the most powerful man", based on the relationship between thinking and power, the story shows that intellectual power is more important than physical power. For formulating criteria, understanding concepts is the first step. According to Piaget, Descartes, when teaching a complicated item is based on previous experience, children can understand it better. In other words, when children can discover the relationship between their experiences and the unknown world, teaching has a better effect. This is perhaps the main reason that 23 of stories base their theme on events of everyday life or realism. Twenty-six of them focus on the cognitive development of children. In these stories, children become familiar with different jobs or changes in the nature (e.g., the story about a brave firefighter, understanding the desert and life in desert, or water cycle in the nature) or, become aware of the meaning and value of war, love or honesty. This approach is also effective for concept formation.

Within reasoning, it seems that the outcome of events or behaviors is taken more into consideration. Facilitators of thinking philosophically can base a lot of questions on cause and effects of events and behavior or questioning the thinking models of the character/s of stories. In analyzing the consequences of events and also, through the second attribute, i.e., "analyzing the concepts", which received the highest scores; critical thinking is the core activity. Based on the previous discussion, critical thinking is crucial for thinking philosophically. The "relationship between thinking and behavior" and "classification" of entities which also provide well ground for thinking are not very much taken into consideration in children's stories.

Judgment is another element useful for thinking philosophically. However, it seems that this concept has not extensively been employed in their stories. Judgment is possible through using criteria which children are well aware of. The analysis shows that only 2 stories used this approach. Demonstration of differences and similarities, too, is another approach which can help decide. Eighteen stories

incorporated this approach. For example, in the story of the friendship between mouse and frog shows that although they have some similar interests, they are different creatures with different needs.

Although concept formation and reasoning are critical elements in PT, children should now be familiar with judgment skills. Judgment is the last member of the family of thinking which benefit from the results of the two other members.

### 3) What subjects are the focuses of children's stories employing elements which can enhance PT?

This question is formulated to acknowledge through which approaches philosophical elements and their attributes can be employed. The result shows that most of them, (50 stories) use the real life scenes for developing their stories. Since, children can confronted better with real life and its problems and issues through an interesting and enjoyable tool, they can internalize the concepts and understand them better. Identification in such stories helps shift between centrism and decentrism. The result will be cognitive development and concept formation. Twenty-six of them used imaginative events. The innovative approaches in imaginative events, theme or characters help children enjoy reading stories and understand the related concepts. In "the gift of eleven colors", eleven color pencils can create colors in the absence of the 11 one which is not believable for the child who has not such an experience. Using the mind for creating something innovative was used in 9 stories, analogy in 3 and imitation is 4 stories. Curiosity, analogy and imagination are very useful approaches that children at the age of 7 to 12 like very much. If the stories use the approaches that are suitable and can match with children's interests, they can be more effective. In this regard, it seems that the approaches used in children's stories studied in this research are not based on various interests of children.

### 4) What stories are more powerful in teaching PT?

In order to answer this question, the scores given to philosophical elements that each story has incorporated in the development of the events must be added up. The higher the number of the elements, the more powerful is the related stories. The reason of designing this question is that to investigate the number of stories which are more capable in stimulating thinking. According to Table (4), the increase in the number of elements is equal to the decrease in the number of stories.

## Frequency of stories which have one, two or three philosophical elements

Concepts	Frequencies		
1	2	3	
Reasoning	40	18	8
Concept formation	46	32	5
Judgement	19	1	

Table (4): Frequency of stories which have one, two or three philosophical elements

Since the stories studied in this research were not written initially as philosophical stories, they are not expected to employ several philosophical elements in creating the stories. This fact is perhaps the main difference between philosophical stories and other stories. In order to teach PT, as mentioned earlier, teachers or facilitators should arrange community of enquiry. They should know how to encourage asking questions and providing answering. The writers should be encouraged to produce philosophical stories.

Based on the quantitative analysis of collected data, in terms of using philosophical elements, four stories received the highest scores. Number five, which is the representative of the existence of five philosophical elements in one story, is assigned to each of them. Among the stories analyzed, it seems that 18 stories are more powerful in terms of encouraging curiosity and philosophical questioning. That means that epistemological questions which need higher level of thinking can emerge from those stories. These stories might not have several philosophical elements, but are based on complicated concepts. Understanding those concepts needs teaching analytical and critical thinking. It must be mentioned that there is overlap between these stories and those quantitatively identified as powerful stories.

## Conclusion

If we expect the new generation to be logical and intelligent citizens, an environment should be provided for them that they could discover criteria for distinguishing between valid and invalid reasoning, between supported theories of knowledge and between accepted and unacceptable forms of moral judgment. By the skills of questioning and answering, children can realize that they must be critical towards what they are told, and what they hear, observe and read. They also learn to be objective and to let others be critical about their own beliefs and behaviors. Moreover, they can learn to think comprehensively, to be flexible and to understand deeply. These characteristics help children to model their mind to think philosophically. And, according to the aim of PT, these characteristics help children develop their free will and determination.

These can be taught through children's stories which are enjoyable and amusing tools. Children's stories which are based on realism, imagination, creativity and stimulus thinking are suitable tools for preparing logical and intelligent citizens. Since the aim of the writers were not to write the stories which encourage PT in children, we did not expect to find stories of which, as stated by Sharp (2004), each page contains a variety of philosophical concepts. However, if facilitators encourage questioning and answering the questions in community of enquiries sessions, other stories could also be effective tools for teaching PT. Children's writers should also take for granted their readers' need to think philosophically and try to focus on philosophical elements in children's stories.

This research provides a well ground for other similar content analysis research to identify other philosophical elements in children's stories. It also provides valuable data and knowledge for conducting an experimental case study and examines the effect of various philosophical elements employed in children's stories on children's thinking skills. In order to help the creation of more powerful stories which encourage PT, following suggestions are provided:

- 1) Workshops for children's writers of stories in regard to making them aware of PT elements and how they can be employed in stories
- 2) workshops for teachers or facilitators to make them aware of PT elements and how to arrange community of enquiries and encourage questioning and answering

3) Further content analysis research in order to acknowledge more philosophical elements in children's stories.

4) Completion and modification of thinking model based the results of other similar research

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