What is learning? Attitudes toward learning among homeschooled youth

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Homeschooling is a phenomenon in which children do not attend school and learn at home. In recent decades, this phenomenon has become more widespread and has been studied from various perspectives. While the learning attitudes of homeschooling parents have indeed been researched, little information is available on the learning attitudes of homeschooled students, particularly teenagers. The present study aims to examine the various learning attitudes of homeschooled teens. Toward this end, it includes interviews with homeschooled teenagers on various aspects of their learning attitudes. The article discusses instances of congruity between the learning attitudes of respondents and the constructivist approach, the experiential learning approach, the life-long learning approach, and the intrinsic / extrinsic motivation principle of the self-determination theory.

Keywords: homeschooling; learning attitudes, constructivist learning, experiential learning, life-long learning, self-determination theory.

#### Introduction

For the last 250 years, the vast majority of 3-18 year-old children in western countries spend most of their waking hours in schools. They attend school in accordance with the compulsory education laws of various countries, which determine that the government is obligated to provide basic education and parents are obligated to send their children to the public institutions that offer these educational processes (Avner 1989; Cai, Reeve, and Robinson 2002; Hiatt 1994; Tyack 1980).

Although most western children still attend school today, in recent decades an increasing number of parents have chosen to educate their children at home instead. This phenomenon is called “homeschooling” or “home education.” In several western countries, the number of homeschooled children is on the rise. For instance, while 13,000 children were reportedly homeschooled in the U.S. during the 1970s, today, conservative estimates count over 2 million homeschooled children in America. In England roughly 80,000 children are currently homeschooled (Kunzman and Gaither 2013; Blok and Karsten, 2011; Ray 2011). In Israel, where the homeschooling phenomenon began approximately 20 years ago, the number of homeschooled children has grown from several dozen to over 500, and some estimate that the number is even higher (Neuman 2018; Neuman and Guterman 2013).

Parallel to the growth in the number of homeschooled children, homeschooling itself has gained increasing legitimacy. This is expressed, among other things, by laws and regulations in various countries that enable homeschooling without breach of compulsory education laws. For instance, homeschooling is legal in all U.S. states as well as in England and other European countries (Blok and Karsten 2011).

Simultaneously, public interest in this phenomenon has grown as well, particularly in the context of incisive criticism against the education systems of certain western countries (Fielding and Moss 2011; Clennon 2014; Pilat 2014).

This public interest has also been reflected in academia, and in recent decades, many studies have examined the phenomenon of homeschooling. For instance, some studies investigate parents’ motivation for homeschooling. These indicate several causes for this choice, including pedagogical reasons that stem from criticism of the education system, a poor educational environment in schools and escalating violent events on school grounds, and pro-family reasons – meaning the desire to keep children close and not outsource educational processes (Anthony and Burroughs 2010; Collom 2005; Mackey, Reese, and Mackey 2011; Neuman and Aviram 2008; Kunzman and Gaither 2013; Spiegler 2010).

Other studies examine the effect of homeschooling on the family. As the children do not attend school, one (usually the mother) or both of their parents stays at home with them. The family’s prolonged shared time (in contrast with the few hours families spend together when children attend school and parents go to work) affects various aspects of the family unit, including marital relationships, sibling relationships, parent-child relationships, and more (Lois 2006, 2010; Mayberry and Knowles 1989; Gray and Riely 2013; Wagner 2008; Sabol 2018).

Of course, homeschooling also affects family economics, as at least one partner stays home with the children and consequently does not work; as well as the professional field and career choice of one or more of the parents (Butler, Harper, Call, and Bird 2015; Lois 2006, 2010; Ceka and Murati 2016; Nemer 2002; Isenberg 2007).

Since homeschooling is often perceived as an alternative to schools, various studies compare educational achievement between homeschooled children and school-educated children in the same age group (Bagwell 2010; Blok 2004; Galloway 1995; Kunzman and Gaither 2013; Meighan 1997; Ray 2013). These studies indicate that, in many cases, homeschooled children perform better than their school-educated counterparts. A study by Martin-Chang, Gould, and Meuse (2011) shows that this applies to children educated in a structured homeschooling framework, but not to those educated in an unstructured homeschooling framework (see explanation of these terms below). However, comparing educational achievement should be done with caution, as it hinges on the definition of educational goals and the educational process, and some parents, particularly those who choose the unstructured homeschooling approach, might have different learning and educational goals than do schools (Neuman and Guterman 2016).

The outcomes of homeschooling and the homeschooling process are also closely linked to approaches and attitudes toward learning, as both the educator’s and student’s definitions of learning influence various aspects of the learning process, such as what and how to teach, why one should learn, and more. Since homeschooling is often viewed as “the parents’ story,” as parents are often those who decide that their child should be homeschooled, the subject of parents’ learning attitudes has gained scholarly attention (Beck 2017; Pannone 2017; Ray 2017; Petrovic and Rolstad 2017).

Van Galen (1986, 1988) distinguished between parents who homeschool due to ideological reasons (religious ideology in particular) and those who homeschool for pedagogical reasons. Many studies have shown that, in the United-States, some parents’ firm religious ideology guides educational content clearly and strictly, which produces rigid, structured learning attitudes and processes (Coleman 2010; Kunzman 2009; Hanna 2012; Cai, Reeve, and Robinson 2002). Several studies have also found that some parents implement a “child-centred curriculum,” whereby the child autonomously facilitates the learning process (Rothermel 2005).

In this context, homeschooling is usually divided into two categories: “structured” homeschooling and “unstructured” homeschooling, also known as “unschooling.” With structured homeschooling, parents provide methodical education that resembles school education in several ways—for instance, in having structured goals or a structured learning process. Unstructured education on the other hand, views learning as part of life and therefore does not establish concrete goals or processes. With the latter type of homeschooling, children live their lives and learn based on their ongoing interests or needs (Aurini and Davies 2005; Kunzman and Gaither 2013; Neuman and Guterman 2016).

Certainly, the two groups are not completely separate and distinct, and the degree of structure in homeschooling should be viewed as a spectrum on which each family can be located. This spectrum can illustrate the level of structure applied to the goals of learning as well as the level of structure applied to the process of learning (Neuman and Guterman 2016).

Nonetheless, to our knowledge, only a small number of studies have been conducted on the learning attitudes of homeschooled youth (such as the study by Martin [2016], which describes a single autobiographical case of homeschooling), and in Israel no such research has been conducted whatsoever. The perspective of homeschooled teens is vital to creating a broader understanding of homeschooling, as even though parents make the decision to homeschool, the children are those influenced by the decision scholastically and educationally. The way in which they perceive learning is crucial, as it inevitably influences their daily learning process. However, as mentioned, information on the subject is scarce. Therefore, the purpose of the present study is to examine the learning attitudes of homeschooled teens living in Israel.

#### Materials and methods

A qualitative approach was selected for the purposes of the present study. Since, as mentioned, the learning attitudes of homeschooled teens have yet to be studied, it is important to employ an open-ended approach that enables the perspectives of teens themselves to guide a mapping of their various learning attitudes. Open-ended qualitative tools allow interviewees to describe their worldview in their own language, and to emphasise what they deem most relevant (Denzin and Lincoln 2000; Maykut and Morehouse 1994; Glense and Peshkin 1992).

##### Population

Research subjects were 19 homeschooled teens living in Israel. The average age of participants was 18.02 years (s.d. 2.1). Eleven participants had been homeschooled their entire lives and the rest had been homeschooled for an average of 6.75 years (s.d. 2.06).

## *Tools*

The interview format for the study included an informed consent form and a series of questions on learning. Respondents were asked the following: What is learning? What do we learn? When do we learn? How do we learn? Why do we learn? The assumption was that this series of questions would generate a wealth of information on interviewees’ perception of learning.

## *Process*

The study was approved by the ethics committee of the Western Galilee College. The research goal and the way in which findings would be used were explained to the interviewees’ parents; once these were understood, one of the parents signed an informed consent form allowing access to their child.

The researchers approached the teens and scheduled interviews. At the beginning of each interview, respondents were informed of the research goal and the way in which the research findings would be used. Once these were understood, the respondents signed an informed consent form and the interviews commenced. The interviews lasted approximately 1.5 hours and were recorded using two recording devices.

## *Analysis*

The audio files of the interviews were transcribed. Interview analysis was conducted using the Atlas Ti (7) software. The analysis process consisted of three stages (in-line with Giorgi 1975):

In the first stage, the texts were categorised according to the five research questions (What is learning? What do we learn? When do we learn? How do we learn? Why do we learn?). At the end of the first stage, each relevant text was associated with the corresponding question (or what the Atlas program calls a “family”).

In the second stage, or the ‘preliminary analysis’ stage, each relevant text unit was given a name that described the main idea to which it pertains. This name, which represents a theme, is called a “code” in the Atlas program.

In the third stage, or the ‘mapping analysis’ stage, the different themes identified in the second stage were grouped into meta-themes (or what the Atlas program calls “super-code”). The network view function of the Atlas program, which enables graphic representation of themes and meta-themes while illustrating their connection to the original text sources, was used to carry out this stage.

The final two stages were conducted for each of the five main interview questions. Once the third stage was completed, each relevant text unit was associated with a theme and each theme was associated with a meta-theme. This was repeated for each of the five questions.

At the end of this process, the analysis results were submitted to a research fellow for a critical examination of the research analysis. Disagreements on the part of the research fellow were discussed until an agreement was reached among researchers. This analysis validation process accords with the ‘trustworthiness’ principle coined by Lincoln and Guba (1986).

#### Results

As mentioned, the teen interviewees were asked a series of questions through semi-structured interviews, with the aim of revealing their learning attitudes and perceptions. This series of questions included the following: What is learning? What do we learn? When do we learn? How do we learn? Why do we learn? The presentation of findings below corresponds with these questions.

## *What is learning?*

Answers to this question fell into three categories, or meta-themes: the acquisition of knowledge and information, in-depth learning, and physiological aspects of learning.

### *The acquisition of knowledge and information*

Some respondents stated that learning is the development of knowledge and familiarity with new fields, at times for the purposes of using said knowledge in the future:

I think learning is developing knowledge. Like, learning, yes, it’s developing knowledge (1)

Learning is acquiring new knowledge, in whatever way, any type of knowledge (4)

In the most practical sense, it’s approaching a field that you are not familiar with, and living it, getting to know it, investigating it from different angles. Learning the known facts of this field (2)

I think learning is anything that you learn from, and absorb and remember, and can use in the future (9)

### *In-depth learning*

The interviews also indicated that learning means achieving a deeper understanding of things:

Learning is, is a process in which you understand things more deeply, anything, you learn it (15)

When I think about learning, I think about an in-depth look into something that interests me, getting to understand it more (19)

### *Physiological change*

A small number of answers discussed learning from a physiological perspective:

It is just a natural ability of the brain to understand how things function (3)

A change in the brain, a good change (12)

## *When do we learn?*

The answer to this question was unanimous among all respondents. Without exception, they each stated that learning occurs all the time.

Everyone is learning all the time. From every experience, from every event, from everything they see (2)

We learn in almost every situation. It can be things you really don’t think of as learning, like moving your finger in some scenario, I see that as physical learning, you’re not really very aware of it. And also when you just look at something and learn something about it. It’s in almost every situation, I don’t think there is anytime you can say, “I learned nothing at all” (6)

When do people learn? All the time, you can learn from every little thing (16)

## *What do we learn?*

Answers to this question fell into four categories (or meta-themes): anything, whatever is interesting, information, and social skills.

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### *Anything*

Many respondents noted that anything can be learned:

I think everything is learned (9)

I believe anything can be learned. If you aren’t good at something, you do it and learn how to be good at it. I am a firm believer in that (14)

What is learned? Really anything in the world, if it’s, if it’s some scientific process or another, if it’s… more philosophical learning, not just philosophical but thinking about, art in… in… all its forms, if it’s (silence, 4 seconds) I don’t know, really anything can be learned (15)

### *Whatever is interesting*

Some of the respondents stated that people learn whatever interests them:

If you listen to every child and let them learn however they wish, however they like and whatever they like, then they’ll also, it will also make them want to learn more, aspire to know more, and then they’ll also have knowledge about what they want to learn (4)

What do people learn? Anything that interests them. I am trying to learn about what interests me… (5)

### *Information*

A small number of answers stated that “information” is learned:

People also study information such as history (14)

There is learning material, which is, which is usually the institutional stuff, all the fields, the institutional fields of study… (18)

### *Social skills*

A small number of answers stated that “social skills” are learned:

And there is also learning about people or like getting to know the person better or the environment better (18)

People learn to deal with social situations. Or they learn about a situation… (4)

## *How do we learn?*

Respondents were asked to discuss how they think people learn. Answers to this question fell into four categories (or meta-themes): experience and reflection, repetition, imitation, and external sources of knowledge.

### *Experience and reflection*

Some of the respondents stated that people learn through experience, particularly through trial and error – they try various things and learn from what does or does not succeed.

Usually, what people learn is the outcome of a certain action they carry out. Because that’s what we do most of the time. We perform all kind of actions, and we see that different things happen (3)

A lot of it is learning through trial and error. When you try things and you see that it does or doesn’t succeed and it reinforces that action (2)

How people learn: either from mistakes or they just succeed and learn the right way. Like now for instance I can travel through the entire country by bus. (In the past) I sometimes got on the wrong bus going in the wrong direction. I wanted the route to there, I stood on the opposite side of the road, and it took me to there [the opposite direction]. But I learned this is the side I need to board on (4)

### *Repetition*

Some respondents also stated that learning is achieved by repeating an action or a piece of information.

How do I learn it? It’s just practice, trying (9)

There are certain actions that help you learn. Like repeating something a few times (3)

How do you learn? It depends, you can learn from habit, by just doing the same thing over and over again (16)

### *Imitation*

Some of the respondents stated that learning occurs when people observe and imitate one another:

They see other people doing things, and they learn to imitate them (2)

I [would learn] by just looking at people and learning (6)

### *External sources of knowledge*

Many respondents stated that learning is done by using external sources, including books, websites, or people.

A process of learning is like, you look into the field, you find sources of some kind, it can be books or the internet, or it could be people who know the field, parents, family, something. Or there are fields that you can explore with experimentation or thought. But most of the time some kind of source is helpful. You get the knowledge from there, and try to understand how everything connects. You see what you can do with it next (2)

Usually, my favourite way to learn is like through the internet, yeah, looking something up or… and finding all kinds of people that like teach through the internet, or texts, or like videos and all that (17)

How do you learn? You learn by reading books or from the internet or by asking people questions. You can ask anyone and learn, even if they don’t know anything about it, either way you learn something or you learn they don’t know anything (18)

The interviews also indicated that the learning process is different for each person and depends on their personal style:

There are all kinds of things and a way to learn each thing and it also depends who is learning. I look at people in my surroundings, how I learn certain things and how they learn the same thing, and each one has their own way (13)

It’s different for everyone. You can’t generalise and say “this is how one learns” (6)

How do people learn? I think it differs from one person to the next (15)

## *Why do we learn?*

The interviewees were asked to address the motivation behind learning – they were asked why people learn. Many of the respondents stated that it would be impossible not to learn. Additional replies fell into four categories: development and improvement; fulfilling a need; curiosity and interest; and enjoyment.

### *It is impossible not to learn*

Many respondents stated that learning is part of human behaviour and that it is actually impossible not to learn. In this sense, they hold the assumption that living is in fact learning.

In the end people learn just because that’s how we’re built. People naturally learn from events. It’s for evolutionary reasons too, but regardless, it’s how we are (2)

I think that learning doesn’t equate to sitting at your desk with a notebook. When I hear the word learning that’s not the situation that comes to mind, just something that happens in life. Like, as long as you are alive, you learn things. Even if you are not satisfied, just sitting with people and reading. That’s how I see it (8)

It’s human nature, you can’t not learn (9)

You can’t not learn, because I don’t see how. I’m trying to imagine a scenario where you don’t learn, and it’s just impossible (13)

### *Development and improvement*

The interviews also indicated that one of the goals of learning is to develop and improve:

We learn in order to improve our lives, to elongate our lives, to add value to our lives (16)

Why do people learn? I think to keep developing, inventing things. If we stay at the same level our whole lives and we don’t learn, it’s a little boring (5)

Why do people learn? Do develop, in every way (10)

### *To fulfil a need*

Interviews also indicated that people learn in order to fulfil various needs:

People really learn when they have the desire to learn. Or when they understand they need to learn, need the learning, they need [so] they learn (7)

But I think that learning is also like surviving in a way. In nature, you have to learn to stay alive (17)

### *Curiosity and interest*

### An additional cause of learning cited by respondents was interest and curiosity. The desire to understand the world, according to these subjects, is part of human nature:

Because people are naturally curious, and it’s something that’s in our nature. We want to know as much as possible, and understand how things work, how the world works, to understand people, to just understand the world. It may even come from something very very pre-historic, that human beings naturally want to understand the world. And it’s a part of it, like, everything stems from that (8)

Because there is no one in the world who isn’t interested in anything, so people want to learn what interests them, because every human being is curious about something (4)

### *Enjoyment*

An additional reason for learning is enjoyment – people learn because this action gives them pleasure:

I think that first of all, it’s fun in my opinion. I love to learn, I love knowing new things, I love to understand why things happen (17)

[Table 1 near here]

#### Discussion

As stated above, in the present study, homeschooled teens were asked five questions about learning. The themes generated in response to the question, “what is learning?” were the acquisition of knowledge and information, in-depth learning, and physiological change. The answer to the question, “when do we learn?” was “all the time.” The themes generated in response to the question, “what do we learn?” were anything, whatever is interesting, information, and social skills, and in response to “how do we learn?” the four themes were experience, repetition, imitation, and external sources of knowledge. Finally, in response to the question, “why do we learn?” the following reasons were provided: that it is impossible not to learn; for development and improvement; to fulfil a need; curiosity and interest; and enjoyment. Several conclusions were deduced from the above responses.

In response to the first question, “what is learning?” respondents referred to physiological aspects or the acquisition of knowledge and in-depth understanding. This is an interesting approach, as learning is predominantly considered a permanent behavioural change or a process of acquiring or improving upon knowledge or skills (Holt, Bremner, Sutherland, Vliek, Passer, and Smith 2005). Therefore, in this sense, respondents’ approach to learning was traditional and common.

Respondents’ answers to the next four questions raise several interesting points:

First, some of the answers to the interview questions correspond with a constructivist approach to learning. Generally, constructivism describes an approach that is applicable to various fields (philosophy, sociology, psychology, methodology), among them pedagogy. This approach assumes that knowledge, whether private or public, is actively constructed by the learner, who, while interacting with the world, associates previous knowledge with new experiences—thereby constructing new knowledge and infusing meaning into phenomena that they identify or experience.

Piaget claimed that knowledge is acquired when a person undergoes experiences and constructs knowledge as a result. Piaget divided the learning process into four stages that correspond with the age of the learner (Sensorimotor, Preoperational, Concrete operations, Formal operations) (Piaget 1969).

Constructivism was further developed by Vygotsky, who focused on social constructivism as an approach to learning. Vygotsky believed that knowledge was indeed generated through constructive processes, but that these were closely and inseparably tied to social processes (Vygotsky 1978; Wertsch 1985).

Adherents of Piaget in the field of cognitive psychology emphasise the relationship between the individual and the external world, and the logical foundation of thought, which relates to intellectual development. Meanwhile, supporters of Vygotsky emphasise the relationship between the individual and the environment, and the social-cultural categories and opportunities provided by said environment (Carlson and Wiedl 2013). Among other things, Bruner (1990, 1996) added that learning occurs when the learner attempts to solve problems that are relevant and meaningful to them.

Despite the distinctions between the various approaches, several guiding principles can be identified in terms of constructivist learning:

* The learner plays an active role in the learning process – meaning, the learner controls various aspects of the learning process, including content, time of learning, duration of learning, and methods of learning (Perkins 1999; Arts, Gijselaers, and Segers 2002).
* The learner must follow interest and relevance – in order to guide their own learning process, learners must delve into subjects that are interesting, significant, and relevant to them (Brooks and Brooks 1993).
* Previous knowledge is the foundation of constructivist learning – the learner’s knowledge, assumptions, attitudes, and approaches are significant, as they form the base for constructing new knowledge (Larochelle and Bednarez 1998; Von Glaserfeld 1998; Ertmer and Newby 2013).

Respondents stated that one learns anything as well as what is interesting. They also stated that learning is done to fulfil a certain need, to satisfy curiosity, for the sake of enjoyment, and out of a desire to develop and improve. These answers correspond with the constructivist principle of interest and relevance-driven learning. For instance, when one learns in order to develop, improve, or experience pleasure, they engage in an interest-driven, relevant learning activity.

Respondents also noted that they learn through experience, repetition, and imitation. These three forms of learning are in fact active learning methods and are therefore linked to this principle of constructivist learning.

Finally, respondents stated that they learn social skills, which corresponds with the social-constructivist learning approach.

Secondly, some of the respondents’ answers corresponded with the experiential learning approach, which is closely related to the constructivist learning approach. In experiential learning, action/reflection are the foundation of the learning model; learning occurs when one performs an action in reality and later conceptualises its meaning through reflection. Active learning is an important component of experiential learning as well, and is manifested in the action carried out in reality and in the action of conceptualisation. This approach emphasises that learning is a primary human action, and is a major component of human development (Kolb and Kolb 2009; Moon 2013; Miettinen 2000).

Indeed, as described in the above section on constructivist learning, respondents discussed the active component of learning, but in-line with the experiential learning approach, they also noted that it is impossible not to learn and that learning occurs, among other things, in order to fulfil needs and for the purposes of self-improvement. Respondents also stated that learning occurs through experience and reflection, and at times trial and error. This approach directly coincides with the main principle of action/reflection in experiential learning.

Third, some of the respondents’ answers correspond with the life-long learning approach (Aspin and Chapman 2000; Schuetze 2008). This approach has gained increasing momentum in the 21st century within the field of education in the West, with growing recognition that knowledge is now rapidly updated, and that contrary to other periods in human history, people today must learn their entire lives in order to function successfully in a changing environment.

According to the life-long learning approach, the learning process is not limited to a certain location (such as a classroom), time (such as the morning hours), or age group (such as childhood), but is rather a fundamental, ongoing action, performed anywhere and throughout life.

In this vein, respondents noted that learning applies to every subject and occurs all the time.

Finally, respondents’ answers to the question, “why do we learn?” can be seen through the prism of the self-determination theory )Ryan & Deci, 2000; Deci & Ryan 1985, 2008). This theory, which is rooted in the humanistic approach, assumes that human beings have an innate desire to develop and grow. It delineates three basic human needs whose fulfilment can produce wellness (or “happiness”) as well as development and growth. According to this theory, one can function out of intrinsic motivation or extrinsic motivation, which are divided into various categories. A person who operates out of intrinsic motivation is effectively driven by curiosity, interest, and pleasure, and indeed, some of respondents’ answers to the question of why one learns coincide with this approach (curiosity, interest, enjoyment). On the other hand, answers that cited “development and improvement” and the “fulfilment of needs” as motivations for learning can attest to actions that stem from either intrinsic or extrinsic motivation.

To summarize, the analysis of respondents’ answers to questions about learning demonstrates that some of the responses coincide with the constructivist approach, the experiential learning approach, the life-long learning approach, and the intrinsic and extrinsic learning principle of the self-determination theory.

##### Research Limitations

The current study is preliminary one, and uses qualitative tools to examine learning attitudes among a limited number of teens in Israel. The study suggests possible congruity between the יattitudes of the interviewees and a number of learning theories. However, future studies can further examine the degree to which these theories indeed prevail among homeschooled teens by using designated quantitative tools and disseminating them among a larger number of subjects. This examination could yield data regarding the prevalence of these attitudes within said population.

An additional research limitation is that the current study applies to homeschooling in only one country. In this sense, it may reflect the attitudes of homeschooled youth in a certain society and not in others. It would be of interest for further studies to examine whether homeschooled teens in other countries have similar or dissimilar learning attitudes. It would also be of interest to conduct a similar research process in several countries simultaneously, and observe the differences and similarities in attitude across the different locations.

Another research limitation stems from the fact that information was collected strictly from homeschooled youth. Further studies could collect information from school-educated children as well, and compare the attitudes between the two groups.

Despite the above limitations, the current study offers both theoretical and practical value. From a theoretical perspective, the study examines an aspect of homeschooling that suffers from a significant information gap – what are the learning attitudes of homeschooled teens? As mentioned, this question is important as it may directly affect different aspects of the learning process for homeschooled learners. Nonetheless, studies thus far have focused on attitudes among parents rather than among the teens raised in homeschooling frameworks.

For instance, answers to this question can help in mapping different types of homeschooling according to the learning attitudes of homeschooled teens rather than the educational approach of parents. Examining the different methods of homeschooling through this prism can illuminate homeschooling from a new angle.

From a practical perspective, studies of this kind can serve as a helpful tool for parents, professionals, and of course, learners themselves. As discussed above, learning attitudes can influence learning goals, processes, and more. In this sense, understanding learning attitudes through this study and others like it can guide learning processes as well as support for such processes when needed.

Once a mapping of learning attitudes among homeschooled youth is conducted, a comparison can be made between homeschooling and school learning, as learning attitudes directly influence learning goals and outcomes, among other things. This type of mapping can aid the comparison by “pairing” similar approaches in the two educational methods.

Lastly, mapping the learning attitudes of homeschooled teens can help parents adjust learning goals and processes accordingly, and thereby support them in creating a pleasant learning experience and achieving good results.

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Table 1. Summary of findings by question

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| Question | Answers |
| What is learning? | * Acquiring knowledge and information * In-depth understanding * Physiological change |
| When do we learn? | * All the time |
| What do we learn? | * Anything * Whatever is interesting * Information * Social skills |
| How do we learn? | * Experience * Repetition * Imitation * External sources of knowledge |
| Why do we learn? | * It is impossible not to learn * Development and improvement * To fulfil a need * Curiosity and interest * Enjoyment |