



# Home Education: Needs, Challenges, and the Role of Higher Education Institutions

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## Abstract

Home education has garnered significant attention from governments worldwide. This educational approach prompts inquiries about quality, social-emotional development, potential child abuse, curriculum, academic outcomes, and parental involvement. Despite its historical presence in the United States since the 1900s, homeschooling has experienced gradual growth, influenced by regulatory efforts and family dynamics. The emergence of COVID-19 further accelerated this trend, with the number of homeschooling families in the US rising from 1,690,000 in 2016 to 2.6 million in 2020 and reaching 3 million by 2021. Globally, over 300 million families have embraced this educational model. This research employs a mixed, non-experimental, descriptive methodology and focuses on Puerto Rico. It examines demographic data, needs, and obstacles encountered by homeschooling families, categorizing them by groups, regions, teaching methods, and religious affiliations. Additionally, the study explores the role of universities as potential partners in supporting and serving homeschooling families. Furthermore, we present international research findings on academic achievement and socialization among homeschooled students, drawing from several studies and university entrance scores.

**Keywords:** families, homeschooling, opportunities, reasons, academic achievements

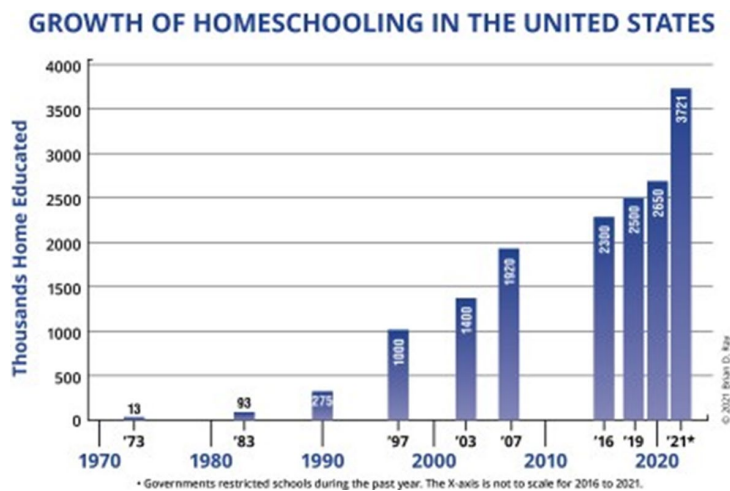
## 1. Introduction

The global educational landscape has undergone significant transformations in recent times, largely driven by the unprecedented impact of the COVID-19 pandemic. Among the various educational modalities, home education (commonly known as homeschooling) has emerged as a critical area of exploration. This research aims to delve into the multifaceted aspects of homeschooling, shedding light on its challenges, opportunities, and implications for both families and higher education institutions.

The effects of the pandemic on traditional schooling systems have been profound. Schools worldwide swiftly transitioned to online learning, prompting educators, parents, and policymakers to grapple with novel challenges. In this context, homeschooling gained

prominence as an alternative approach—one that allows families to take charge of their children’s education within the home environment.

Figure 1: Growth of Homeschooling in the United States



Source: U.S. National Home Education Research Institute (2021)

Before 1900, homeschooling was the norm in the United States, although it nearly disappeared by the 1970s when there were already around 13,000 estimated homeschools. Then, there was rapid growth between 1980 and 1990 (Ray, 2021a). The U.S. Department of Education reported in 2021 that at least 3.3% of children aged 5 to 17 were homeschooled, equivalent to 1.68 million in 2016. However, other research indicated that 2.0 million children and youth were homeschooled in spring 2016, and 2.6 million during March 2020 (Ray, 2021b), representing an increase of 5.4% to 11.1%.

This shift might represent a rupture in educational processes and the need to investigate whether it is due to discrimination, inequality, poverty, financial limitations, special needs or other reasons.

## 2. Background and rationale

Homeschooling is considering the initial phase of teaching provided by parents that children and infants experienced. It emerges as the primary responsibility of parents, who must educate their children from birth through natural infant development to social and emotional development during adolescence. Therefore, it has always existed. Social changes, poverty, and the protection and safety of children have been and should be the primary responsibility of parents. However, as society changed and women gained equal rights to participate in the workforce, the need for schools and laws led us to send our children to educational institutions. For many years, decades, and an entire century, school education was the norm, a requirement, and a necessity. However, in most countries home education is not regulated, others don’t see the rationale for regulations, but still raise concerns about the quality of education that children may be receiving. The U.S National Home Education Research Institute, defined Homeschooling in 2021, as:

*“...a parent-led home-based education; home education – is an age-old traditional educational practice that a decade ago appeared to be cutting-edge and “alternative” but is now bordering on “mainstream” in the United States. It may be the fastest-growing form of education in the United States. Home-based education has also been growing around the world in many other nations (e.g., Australia, Canada, France,*

*Hungary, Japan, Kenya, Russia, Mexico, South Korea, Thailand, and the United Kingdom)*”.

The focus of this research was based on five areas of interest:

- a) Quantifying Homeschooling in Puerto Rico (PR): identify the number of homeschooling families or groups in PR. By understanding the prevalence of this educational choice, we can contextualize its significance within the broader educational landscape.
- b) Comparative Analysis: compare the growth of homeschooling in PR with that in the United States (US) and other countries. This comparative lens will provide insights into global trends and variations.
- c) Motivations and Age Groups: the research explores the reasons behind choosing home education. Additionally, we examine the age groups of children who are educated at home. Understanding these factors is crucial for tailoring educational support.
- d) Parental Preparedness and Challenges: delve into the preparedness of parents who embark on homeschooling. What challenges do they face? How do they navigate the transition from traditional schooling to a home-based educational model?
- e) Opportunities for Higher Education Institutions: Universities play a pivotal role in shaping educational pathways. exploring the potential opportunities for collaboration between higher education institutions and homeschooling families to understand, how can universities support and serve the group of home education families?

### **3. Methodology**

This research employs a mixed, non-experimental, descriptive methodology (Creswell, 1997). By combining qualitative and quantitative approaches, we gain a comprehensive understanding of homeschooling dynamics in P.R. The mixed methodology analyzes and quantifies the data through collection instruments, using the analysis of questions that allow us to know the perceptions, emotions, or feelings of the surveyed population. Allowing the understanding and deepening of the phenomenon of study in the educational field. It also allows to collect and aggregate of quantitative and qualitative data, in different instances of research. (Creswell, 2008). The method is a concomitant one, WHICH + when, where primary qualitative data and secondary quantitative data are simultaneously revealed and received and analyzed, and interpreted for the same phenomenon, (Creswell, 2009) For this research, a peer-validated self-created instrument was used. It was divided into three areas that allowed answering the research questions:

- 1) demographic - number of children homeschooled and their ages; the age of parents; academic preparation of parents; the geographical area where they reside, reasons to becomehomeschoolers;
- 2) needs and challenges- of families when homeschooling (academic, curricular; socialization, planning, subjects,etc.);
- 3) role of the university, how the university can assist these families to minimize challenges

The instrument was created and distributed using Microsoft Forms. Third-party home education groups, The Caribbean Center of Home Education Resources (TCHERs) and *Casa Escuela*), agreed to the distribution of the questionnaire among their families (members). A total of 109 families delivered on homeschool education, for a total of approximately 189 children ages 4 to 17. This study contributes to the broader discourse on education by

examining an alternative and inclusive model that has gained prominence during extraordinary times.

#### **4. Results and discussion**

Among the significant results identified in the study, which encompassed 109 families residing in Puerto Rico, parents' responses demonstrate:

- a) Homeschoolers are organized into various groups based on geographical region, religious affiliation, chosen curriculum, and specific needs, with many seeking support from associations across the island. Presenting that in Puerto Rico, there are over 80 home school groups or associations, each catering to a membership ranging from 30 to 200 families.
- b) Regarding parent preparedness, the study found that 47% of parents held a bachelor's degree, 4% had obtained a doctorate, 26% possessed a master's degree, and 23% held a high school diploma.
- c) The findings regarding factors influencing homeschooling decisions are distributed among several key areas, prioritized as follows: security concerns 32%, particularly relating to school bullying, and health considerations rank foremost; followed by considerations regarding curriculum and academic achievements 23%; the importance of instilling religious and moral values 18%; and concerns regarding discrimination 11%, the provision of special education 9%, and financial factors 7%.
- d) Parental challenges in homeschooling, identified in order of significance, include achieving a balance between household responsibilities and educational commitments 18%, selecting an appropriate curriculum 16%, planning and structuring classes effectively 13%, determining the scope and sequence of academic content 11%, making decisions about subject-specific activities 9%, validating academic progress 8%, managing discipline effectively 9%, and addressing the unique needs of children with special educational requirements 8%.
- e) In terms of extracurricular activities practiced at home, prioritized activities include engagement in artistic endeavors and collaborative painting with other homeschoolers 27%, participation in sports activities 23%, cultivation of a home garden 19%, visits to museums 15%, and regular trips to the library 12%.
- f) Additional handwritten comments provided by parents highlight significantly positive observations regarding the social and emotional well-being of their children, expressing satisfaction with the flexibility and structure afforded by homeschooling in the ability to progress at their own pace, and the nurturing and secure familial environment provided 93%.
- g) Lastly, the study identifies the key educational needs of parents seeking higher education opportunities for their homeschooled children. These needs are ranked in order of importance as follows: facilitating the integration of homeschoolers into extracurricular activities within larger educational contexts, incorporating STEAM (Science, Technology, Engineering, Arts, and Mathematics) projects into homeschooling curriculum 63%, offering workshops tailored for both students (65%) and parents (56), providing access to pre-university courses or dual enrollment programs 53%, ensuring access to library resources 53%, and offering university orientation programs specifically designed for homeschooling families 47%.

Similarly, the Global Home Education Exchange, (GHEX), which is an international non-governmental organization with a mission to advance, connect, and equip the global home education community, advocates for homeschooling and consists of researchers from different universities who are or have been homeschool educators or were homeschooled children. They investigate what is happening in homeschooling around the world and share their findings through webinars and global conferences.

Some of their findings integrate social emotional and psychological development in homeschoolers.

- 87% of peer-reviewed studies on social, emotional, and psychological development demonstrate that homeschooled students statistically and significantly outperform those in conventional schools. (Ray, 2017).
- Homeschooled students regularly participate in social and educational activities outside their homes and with individuals who are not members of their immediate family. They typically engage in activities such as field trips, exploration, 4-H, political campaigns, church ministry, sports teams, and community volunteer work. (Seiver & Pope, 2022).

Other important information was the results of the College entrance examination test in Puerto Rico. From 2004 to 2020, homeschoolers achieved scores significantly higher or equal to those students in public or private schools, as shown in Figures 2, in the areas of English, Spanish and Math.

Figure 2. College Board Results 2004 – 2007

Informe comparativo de promedios de la Prueba de Evaluación y Admisión Universitaria desde el 2004 al 2017 (PEAU)									
	Núm. Estudiantes	Tipo Escuela	Verbal	Matemáticas	Estudiantes	Tipo Escuela	Inglés	Matemáticas	Español
College Board 2004-05	650	No definido	430	447	616	No definido	407	444	415
	35327	Pública	442	462	32435	Pública	421	458	430
	13381	Privada	512	536	11530	Privada	537	542	486
	1277	Otros Prog.	447	464	1240	Otros Prog.	430	464	429
College Board 2005-06	23	Homeschooling	543	583	23	Homeschooling	645	611	524
	836	No definido	422	446	778	No definido	419	443	413
	34745	Pública	441	462	32068	Pública	423	458	429
	14726	Privada	513	535	12619	Privada	542	541	481
College Board 2006-07	1370	Otros Prog.	445	464	1334	Otros Prog.	432	463	429
	45	Homeschooling	507	546	46	Homeschooling	579	540	465
	975	No definido	425	438	915	No definido	425	440	407
	31992	Pública	440	454	29600	Pública	423	455	427
College Board 2006-07	13567	Privada	503	531	11696	Privada	537	534	489
	1256	Otros Prog.	446	456	1210	Otros Prog.	434	456	427
	61	Homeschooling	481	522	60	Homeschooling	585	539	463

Source: College Board Analysis – Prueba de Evaluación y Admisión Universitaria (PEAU)

In Figure 3 and 4, the results for the College entrance examination test, shows that there were no significant differences between home schoolers and students form private or public schools. These data although shows the growing amount of families that identify themselves as home schoolers, noticing that there is an amount of students that appears as undefined (No definido).

Figure 3. College Board Results 2015 - 2018

College Board 2015-16	277	No definido	414	406	255	No definido	439	401	406
	54446	Pública	427	426	53837	Pública	448	434	428
	14997	Privada	505	517	13328	Privada	551	522	492
	1491	Otros Prog.	365	381	1460	Otros Prog.	390	376	360
	119	Homeschooling	495	505	116	Homeschooling	551	507	460
College Board 2016-17	132	No definido	403	403	130	No definido	415	413	378
	52707	Pública	437	424	52323	Pública	447	443	429
	15134	Privada	501	520	13432	Privada	560	529	498
	1305	Otros Prog.	385	366	1275	Otros Prog.	378	380	353
	129	Homeschooling	487	501	123	Homeschooling	565	500	475
College Board 2017-18	23	No definido	446	445	22	No definido	503	462	449
	442	Pública	489	506	375	Pública	549	520	483
	3695	Privada	499	519	3360	Privada	571	534	487
	136	Otros Prog.	387	400	132	Otros Prog.	430	404	389
	30	Homeschooling	447	471	30	Homeschooling	533	483	464

Source: College Board Analysis – Prueba de Evaluación y Admisión Universitaria (PEAU)

The scores in Figure 4, shows, that even after the path of Hurracain Maria and Irma, homeschoolers were achevent scores with no significant difference of those in private or public schools.

Figure 4. College Board Results 2017 - 2020

Informe comparativo de promedios de la PAA desde el 2017 al 2020 - Versión rediseñada de la prueba para admisión universitaria

	Núm. Estudiantes	Tipo Escuela	Lectura y Redacción	Matemáticas	Inglés
College Board 2017-18	57	No definido	444	415	456
	45719	Pública	437	417	434
	9944	Privada	490	486	546
	881	Otros Prog.	374	373	363
	68	Homeschooling	475	498	553
College Board 2018-19	1	No definido	380	347	578
	44923	Pública	438	420	435
	13430	Privada	489	488	555
	1142	Otros Prog.	386	377	379
	116	Homeschooling	488	478	560
College Board 2019-20		No definido			
	12307	Pública	486	493	562
	21274	Privada	434	428	444
	1023	Otros Prog.	364	371	388
	141	Homeschooling	473	467	579

Source: College Board Analysis – Prueba de Evaluación y Admisión Universitaria (PEAU)

## 5. Conclusion

As homeschooling continues to evolve, research and dialogue are essential to navigate the complexities of this field, acknowledging the importance of evidence-based insights. These insights might serve as a compass to understand the motivations behind this educational choice, guiding policy formulation to benefit parents who undergo this path, shaping educational practices, and sustaining support mechanisms. Results indicate the need for universities to reach out to these home school parents, creating new academic services for them, mentoring parents and students, in preparation for university life. Although, parents expressed satisfaction with the flexibility and structure afforded by homeschooling in the ability to progress at their own pace, and the nurturing and secure familial environment, this information compares with tone of the Key findings published by Ed Choice Report, Hanover Research, (2021), where parents identify greater flexibility and control over their child's education as a key motivation to become homeschoolers.

By fostering informed discussions, we empower parents and stakeholders to make deliberate choices. Analyzing specific findings, challenges, and opportunities related to homeschooling enables higher education institutions, governments, and families to develop strategies that strengthen a new and inclusive family lifestyle. Equally, research may continue to investigate other possible reasons, and areas of opportunities to provide for special education and gifted homeschoolers, specific parent support services, and continue looking for evidence of the non-significant difference in academic achievement, and psychological and social development of children. This parallel approach, where homeschooling coexists with traditional education, invites thoughtful exploration, adaptation, and collaboration efforts to nurture lifelong learners.

## 6. Recommendations

Understanding the global landscape of homeschooling heightens our awareness of the need for universities to engage with this demographic of students. It induces us to consider what programs and initiatives can be developed to support both parents and students involved in homeschooling. Additionally, there is a pressing need for further research into how parents can effectively integrate the rapid advancements in technology and artificial intelligence into their homeschool curriculum. Furthermore, it raises questions about the potential role that universities can play in addressing these challenges and opportunities.

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