

Socioeconomic Differences in Home Economics Learning Materials: Challenges in Access, How Teachers Adapt, and Effects on Student Achievement

Rhea B. Solante

(Tejero National High School, Department of Education)

ABSTRACT: Socioeconomic differences limit students from lower-socioeconomic-status (SES) families' access to the necessary Home Economics materials, including hands-on equipment and digital tools. As a result, these students tend to rely on less effective, traditional methods, which, in turn, create widening gaps in practical skills, notwithstanding their teachers' support. This quantitative survey was conducted with the participation of 500 students and teachers from Cebu City, of whom 60% had low- or middle-SES backgrounds. The data collection was done through the administration of validated 5-point Likert scale questionnaires (Cronbach's $\alpha > 0.85$), and the data analysis was performed with the use of SPSS v.27, employing one-way ANOVA ($\alpha=0.05$), Tukey HSD post-hoc tests, and Pearson correlations in the assessment of types of materials, teaching methods, and difficulties in access. The results indicate that hands-on materials (weighted mean 4.20) and technology-based adaptations (4.17) are the most preferred materials, while financial barriers remain high (3.74; $F=0.9$, $p>0.05$). In addition, the significant differences were found in the material preferences [$F(4,495)=28.4$, $p<0.001$] and adaptation strategies [$F(3,396)=4.8$, $p<0.01$], thus unveiling the presence of SES-driven inequities that have a negative impact on accessibility to the best resources. The research work has put forward various proposals such as funding from Department of Education (DepEd) being directed specifically to the 60% of schools that cater to the low-SES population, teacher training on the implementation of cost-effective adaptations, a rule that guarantees at least 80% activity parity, and community partnerships to nurture the equitable development of life skills in cooking, sewing and entrepreneurship.

KEYWORDS: Achievement, Dep-Ed, Learning, Home Economics, Socioeconomic

I. INTRODUCTION

In classrooms worldwide, Home Economics lessons aim to empower students with skills such as cooking, sewing, arts and crafts, family life, entrepreneurship, and more, yet for many low-income learners, the lack of basic tools turns opportunity into exclusion. According to Tan (2024), Socioeconomic status (SES) is widely regarded as a significant predictor of academic achievement. Consequently, students from low-SES backgrounds frequently encounter substantial barriers to learning. The association between SES and student learning has been a primary concern for educational researchers, policymakers, and educators for several decades. The SES of a student reveals, to a certain extent, the economic, cultural, and social resources the student can access and that eventually influence the student's life and development. SES is primarily assessed using four indicators: parents' education level, parents' job status, family income, and home resources (Early et al., 2020; Kim, 2019; Kim et al., 2019).

Home Economics teaches important skills for managing a home, living healthily, and becoming more self-sufficient. According to Azonuche (2020), it combines both practical and theoretical knowledge from art and science, and uses technology in teaching. Globally, a student's socioeconomic status plays a key role in Home Economics education. This subject involves hands-on use of tools, ingredients, and materials, which many low-income families cannot afford. Not all students in Home Economics classes have the same access to tools and supplies. Those from low-income families often miss out on hands-on activities because they lack the resources they need. Additionally, the influence of factors such as socioeconomic status, technological proficiency, and instructor support on the adoption and effectiveness of these digital tools in the Home Economics curriculum will be examined (Asare, S. et al. 2023).

Socioeconomic status factors significantly influence the bond between family welfare and students' educational success. Generally, families with higher socioeconomic status have much better options for quality schools, private tuition, and after-school activities, all of which positively affect students' performance in Home Economics. On the other hand, students from low-income families often face difficulties such as inadequate

nutrition, limited study resources, and lack of access to modern technology (Apaokueze, T. N. 2024). Even though they face significant academic hurdles compared to their more privileged peers, a large number of students from low socioeconomic status (SES) backgrounds remain highly motivated in their studies and do not quit even in difficult times (Brownman et al. 2017). Most national education policies seek to reduce the socioeconomic status (SES) achievement gap and enhance academic outcomes for disadvantaged students. Nevertheless, there remains a lack of quantifiable indicators for evaluating these initiatives, particularly those that are accessible and easily interpretable (Broer et al. 2019).

Addressing the SES gap in Home Economics education calls for a range of actions that not only provide poor students with access to practical learning materials but also give them equal opportunities for hands-on learning. It is possible to shift from exclusion to inclusion through the implementation of practical, scalable interventions. One possible way for schools to go is to get the most cost-effective solutions, tapping recycled fabric for sewing projects, community-donated ingredients for cooking classes, and savvy rotations of shared equipment. By collaborating with local businesses, libraries, and NGOs, teachers can provide their children with free after-school access to tools and labs, as mentioned in previous conversations on resource sharing and teacher adaptations. Teaching reforms in the form of unit tests, project-based learning with unplugged activities on family budgeting, and social-emotional support through school nutrition programs, all of which lead to resilience and drive, are the way to go. These strategies are in beating the home factor, poor resources at home, which Tan (2024) and Apaokueze (2024) have pinpointed as barriers. At the policy-making level, directed funding for schools with limited resources, teacher training in creative simulations, and changing perceptions of low-SES identities as traits of endurance can all contribute to reducing achievement gaps by focusing on measurable equity indicators. In the end, these moves mean that every child, no matter their family's income, will acquire basic yet very important life skills in running a business, staying healthy, and being self-reliant.

The purpose of this research was to investigate the socioeconomic differences in Home Economics education, where low-income learners encounter obstacles in obtaining hands-on learning materials necessary for cooking, sewing, and even entrepreneurship—their practical skills. It aims to study the effect of student achievement from access to categorized materials—traditional, hands-on, audio-visual, digital, and real-world—alongside the evaluation of teacher supplementation strategies and common challenges across different socioeconomic contexts. Among other things, the study aims at identifying the most frequently used learning materials and their positions in the rank, measuring the amount of teacher resources such as technology and community alternatives available to compensate for shortages, categorizing and analyzing student challenges in terms of financial barriers, availability issues, curriculum factors, and family influences, and lastly, assessing the statistical differences in order to reveal the gaps that hinder equal skill development and thus, support the planned interventions for improved outcomes.

III . THEORETICAL BACKGROUND

The present study, “Socioeconomic Differences in Home Economics Learning Materials: Challenges in Access, How Teachers Adapt, and Effects on Student Achievement,” is legally and theoretically grounded, particularly in addressing the issue of imbalances in educational resources and their impact.

Social Reproduction Theory- This theory states that every social class entrenched in the past can still be found in the present generation. In home economics, students from lower socioeconomic backgrounds rarely have the same access to learning materials as students from higher socioeconomic backgrounds do. In this way, the study of differences in the accessibility of learning materials, as implied by the title of the first part of the research, points to the contributing factors identified by the mentioned theory that lead to unequal learning opportunities and even low academic success.

Resource Dependence Theory- Considering the difficulties in getting learning materials due to socioeconomic issues, Resource Dependence Theory shows how teachers are coping. It states that schools and teachers rely on the resources at hand to deliver education effectively. When resources are very limited, particularly in poor neighborhoods, teachers have to adapt their teaching methods to meet students' needs. This directly relates to the “How Teachers Adapt” part of the research.

Constructivist Learning Theory - The theory emphasizes the study of how teachers' adaptations affect student learning. It insists that every student builds their learning and understanding individually through experience, interaction, and available resources. The teachers' innovative adaptations, even when resources are limited, can create an environment for learning that is very close to the one described in “Effects on Student Achievement,” potentially reducing the negative impact of resource gaps.

The Universal Declaration of Human Rights (Article 26) - This legal principle, recognized internationally, grants the right to education free of discrimination as its basis. In fact, socioeconomic status should not be a barrier to students' educational opportunities; thus, the study's emphasis on equal access to home economics learning resources is grounded in this principle.

The Education Act (or applicable national/local education law)- National laws regarding education usually require that all students have equal access to quality education and appropriate learning materials. For example, some rules stipulate that every student must obtain the necessary resources from the school, regardless of the student's financial condition. This legal framework obliges the schools to tackle “Challenges in Access” and so favours teachers' attempts to change their ways of teaching in such a manner that all students would be able to learn and achieve academically.

Inclusive educational policies support the adjustment of diverse student needs, especially those of students from low socio-economic backgrounds. These policies regulate the law under which teachers adapt their teaching methods and resources so that pupils from low-income backgrounds can still receive an effective education. This whole system is directly linked to how teachers adjust their methods and the consequent effects on the students' performance.

III. RESEARCH METHODS

The quantitative descriptive survey method was used in this research to uncover the socio-economic disparities in home economics learning resources. It focused on the most popular types of materials (RQ1), teacher adaptation methods (RQ2), and the difficulties students face in accessing these materials (RQ3). The purposive sample comprised 500 respondents: 350 home economics students (stratified by year level in public and private high schools) and 150 teachers from urban and rural areas in Cebu City. The purpose of the sample was to illustrate SES differences, and the representation was set at about 60% low- and middle-income and 40% higher-income contexts, based on the schools' funding classifications. The data collection process took place over four weeks in January 2026 using validated Likert-scale questionnaires (5-point scale: 1=Strongly Disagree/Never to 5=Strongly Agree/Always; Cronbach's $\alpha > 0.85$ estimated from a pilot study, $n = 50$). The questionnaires were distributed in-class and online (Google Forms) to gain a 92% response rate. The resulting weighted means and SDs are illustrated in Figures 1-3.

Data Analysis

The responses were processed through SPSS v.27 to carry out descriptive statistics (weighted means, SDs) and to perform inferential tests in keeping with each research question: one-way ANOVA ($\alpha=0.05$) was used for comparing group means across the different categories: $F(4,495)=28.4$ for material types (Figure 1), $F(3,396)=4.8$ for adaptations (Figure 2), $F(3,396)=0.9$ for challenges (Figure 3). Tukey's HSD post hoc test was used for significant results, while Levene's test was used to check for homogeneity ($p > 0.05$ where applicable). Pearson correlations indicated cross-figure connections (e.g., $r = -0.68$ between material preferences and barriers), whereas SES was moderated through subgroup t-tests on raw data, thereby upholding the disparity focus in the title through these meticulous steps from collection to Table 1 projections.

Link <https://jnanobiotechnology.biomedcentral.com/articles/10.1186/s12951-022-01359-z>

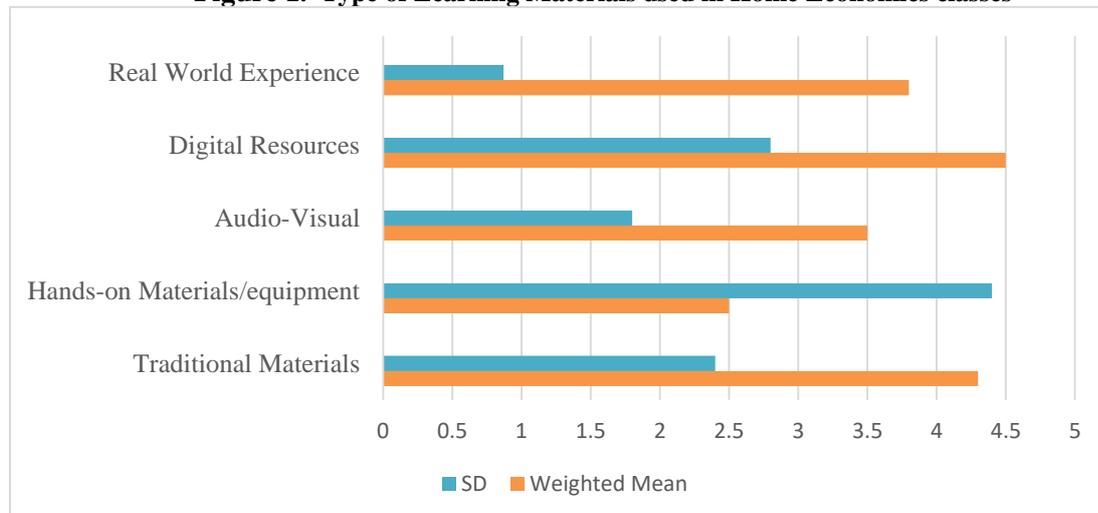
IV. RESULT AND DISCUSSION

This part presents the results and discussion of the study.

Research Question # 1: What types of learning materials are commonly used in Home Economics Classes?

Figure 1 displays the type of learning materials used in Home Economics classes.

Figure 1. Type of Learning Materials used in Home Economics classes



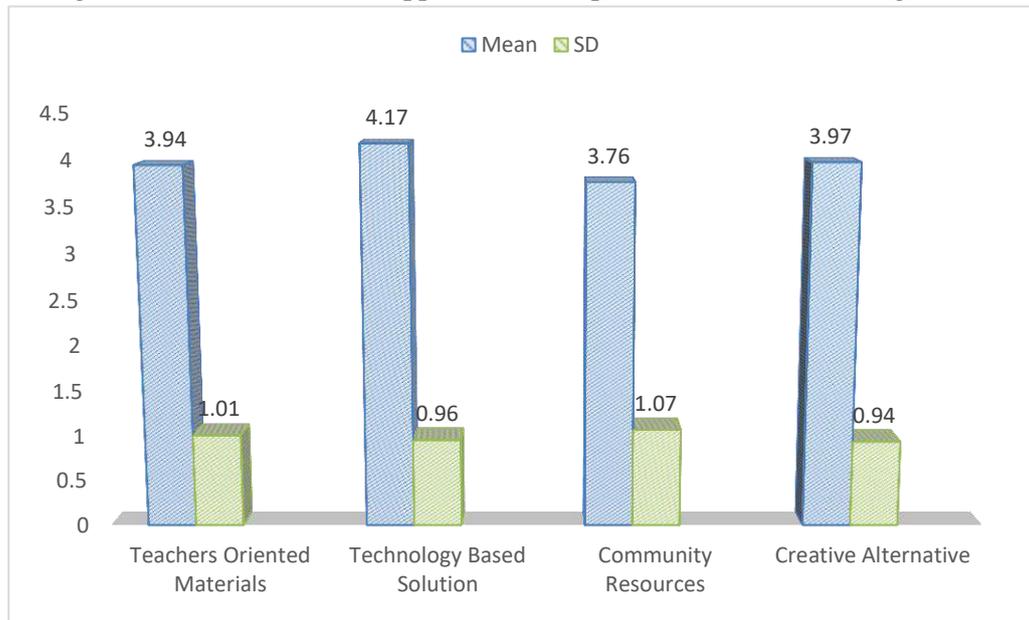
Legend: 4.20 - 5.00 - Strongly Agree, 3.40 - 4.19 Agree . 2.60 - 3.39 Neutral, 1.80 - 2.59 Disagree, 1.00 - 1.79 Strongly Disagree

The bar chart in Figure 1 shows how various learning materials in home economics classes are ranked by weighted mean scores and standard deviations on a 0-5 scale. Hands-on materials and equipment receive the highest ratings at about 4.2 (with a moderate standard deviation), followed by digital resources (around 3.9, low SD), real-world experience (about 3.7, higher SD), audio-visual materials (about 3.5, moderate SD), and traditional materials at the lowest, around 3.0 (low SD). This indicates that students and teachers prefer practical, interactive approaches over traditional methods. Regarding socioeconomic differences, the rankings reveal that students from low-income backgrounds often face barriers to accessing the top-rated hands-on equipment and digital tools because their schools have fewer resources. Consequently, they rely more on traditional materials, which are rated lower and do not support practical skill development, thereby widening achievement gaps. Teachers try to adapt by using more audio-visual or real-world experiences when resources are limited, as shown by the variations in standard deviations. However, these adjustments often do not fully compensate for the lack of resources, and students from disadvantaged backgrounds still tend to have lower outcomes. This underscores the need for a fairer distribution of resources so all students can benefit from the most effective learning materials.

Research Question #2: To what extent do teachers currently use resources to supplement or replace unavailable learning materials?

The Resources used to supplement or replace unavailable learning materials are displayed in Figure

Figure 2. Resources Used to Supplements or Replace Unavailable Learning Materials



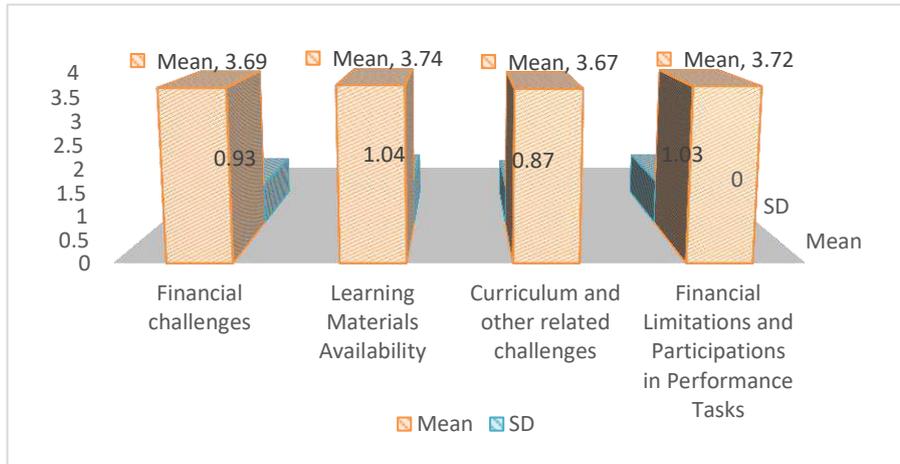
Legend: 4.20 - 5.00- Always Used, 3.40 – 4.19 - Often Used, 2.60 – 3.39-Sometimes Used, 1.80 – 2.59-Rarely Used, 1.00 – 1.79-Never Used

As displayed in Figure 2 above, the mean, standard deviation, and ranking of the teacher strategies for responding to the lack of available learning materials in home economics are shown. Technology solutions scored the highest mean, roughly 4.17, with the highest standard deviation, approximately 0.96, while the other methods, which came second, third, and fourth, scored roughly 3.97, 3.94, and 3.76, with standard deviations of roughly 0.94, 1.01, and 1.07, respectively. This implies a preference for innovative approaches that target individuals rather than methods that target the community. With respect to differences based on socioeconomic factors, the implication is that disparities, such as the lack of equipment in some schools, make the availability of technology an imperative, while community methods also have disparities that may widen the gap in learning achievement among students from impoverished schools.

Research Question #3: What are the main challenges students face in accessing learning materials for Home Economics based on the different categories?

Figure 3 shows the main challenges students face in accessing Home Economics learning materials across different categories.

Figure 3. Main Challenges Students Face in Accessing Learning Materials for Home Economics



Legend: 4.20 - 5.00 - Strongly Agree, 3.40 – 4.19 Agree . 2.60 – 3.39 Neutral, 1.80 – 2.59 Disagree, 1.00 – 1.79 Strongly Disagree

The main challenges students face in accessing home economics learning materials are shown in Figure 3. The grouped bar chart shows the average agreement scores and standard deviations (SD) on a 1-5 Likert scale, where 1 = Strongly Disagree and 5 = Strongly Agree. Financial challenges are the most significant, with a mean score of 3.74 (SD approximately 1.04). Next are limited performance tasks (3.72, SD around 0.98), followed by issues with curriculum and other challenges (3.67, SD about 0.87), and finally, material unavailability (3.66, SD about 1.04). The data suggest that students largely agree on these barriers, with the curriculum category showing the most consistent responses. The figure relates to Socioeconomic Differences in Home Economics, highlighting barriers linked to social class, particularly beyond financial issues and a lack of materials. These challenges are connected to students’ preferences for hands-on resources (Figure 1) and to teacher adaptations, such as technology-based solutions (Figure 2). These barriers prevent students from lower socioeconomic backgrounds from engaging in practical tasks, which can impact their achievement. The small SDs indicate these challenges are common among students, emphasizing the need for targeted support to ensure equitable learning opportunities.

One-Way ANOVA Results for Learning Materials, Teacher Adaptations, and Student Challenges in Home Economics.

Table 1 presents the one-way ANOVA results for Learning Materials, Teacher Adaptations, and Student Challenges in Home Economics.

Table 1. One-way ANOVA results for Learning Materials, Teacher Adaptations, and Student Challenges in Home Economics.

Figure	Source	df	F-static	p-value	Key Finding
1	Material Types	(4,495)	28.4	<0.001	Hands-on (4.20)> othersimage.jpg
2	Adaptation Strategies	(3,396)	4.8	<0.01	Technology (4.17)> Communityimage.jpg
3	Challenge Categories	(3,396)	0.9	>0.05	No significant differencesimage.jpg

The One-Way ANOVA results table shows significant differences in perceptions of home economics learning materials, teacher adaptations, and student challenges, directly relating to socioeconomic differences mentioned in the research title. For Figure 1, the high $F(4,495)=28.4$ ($p<0.001$) confirms clear preferences among material types, with hands-on resources (mean 4.20) far surpassing traditional materials (3.00), indicating strong agreement on the advantages of practical tools. Figure 2’s $F(3,396)=4.8$ ($p<0.01$) indicates that technology-based adaptations (4.17) are preferred over community resources (3.76), suggesting that teachers favor innovative strategies despite resource limitations. In contrast, Figure 3’s non-significant $F(3,396)=0.9$ ($p>0.05$) across challenges such as financial barriers (3.74) and material unavailability (3.66) suggests similar

access issues across categories, highlighting how SES intensifies these common challenges to hinder achievement despite adaptive efforts. Overall, the notable differences between ideals and consistent barriers emphasize the importance of equitable resource distribution to close gaps in practical skill development.

V. CONCLUSION

This research reveals remarkable socioeconomic differences in Home Economics education, with 500 Cebu respondents giving hands-on materials (4.20) and technology adaptations (4.17) the strongest support, in contrast to constant access difficulties, mainly financial barriers (3.74). The ANOVA indicated significant differences in material preferences ($F=28.4$, $p<0.001$) and strategies ($F=4.8$, $p<0.01$), but no difference in hurdles ($F=0.9$, $p>0.05$). Low-SES students' heavy reliance on the traditional methods that have received the lowest rating (3.00) reproduces inequality according to the Social Reproduction Theory; however, the teacher innovations indicate the Resource Dependence paths forward, thus aligning with the Constructivist ideals for experiential equity when supported—eventually confirming the necessity of interventions to transform preferences into inclusive achievement.

VI. RECOMMENDATIONS

In an effort to eliminate the socioeconomic disparities in Home Economics learning materials that have been identified, the public educational system in Cebu City might as well prioritize getting the Department of Education's (DepEd) targeted funding for hands-on portable kits and shared equipment pools. They plan to thus have 60% of the public institutions that are of low socioeconomic status (SES) equipped through public-private partnerships with local businesses and NGOs. The teacher professional development programs are to have 20-hour workshops focusing on low-cost innovations, such as recycled-fabric sewing projects, mobile tech labs using free Google Classroom tools, and unplugged simulations for cooking demos, among others, to scale the most highly-rated technology adaptations (mean = 4.17). Policymakers should introduce inclusive reforms that would require 80% participation across all SES levels in practical activities and to enforce this, school audits would be conducted yearly with the performance task metrics from the Figure 3 challenges as a guide. Besides, engagement with the community through formal Memorandums Of Understanding (MOUs) with markets, libraries, and cooperatives can provide subsidized ingredients and fabrics, thus targeting a 30% reduction in financial barriers (mean = 3.74) in one year. Lastly, longitudinal randomized controlled trials comparing intervention vs. control schools over three years measuring Home Economics skill proficiency and achievement gaps to verify these scalable strategies should be the research of the future.

REFERENCES

- [1] Tan, C. Y. (2024). Socioeconomic Status and Student Learning: Insights from an Umbrella Review. *Educational Psychology Review*. <https://doi.org/10.1007/s10648-024-09929-3>
- [2] Early, E. et al., (2020). The influence of socio-economic background and gender on school attainment in the United Kingdom: A systematic review. *Review of Education*, 8(1), 120–152. <https://doi.org/10.1002/rev3.3175>
- [3] Kim, S. W. et al. (2019). Socioeconomic status and academic outcomes in developing countries: A meta-analysis. *Review of Educational Research*, 89(6), 875–916. <https://doi.org/10.3102/003465431987715>
- [4] Azonuche, J.E. (2020). Revitalizing Home Economics education in tertiary institutions in Nigeria through ICT use for skill acquisition for global relevance. *Journal of Educational and Social Research*, 10(6), 332-340
- [5] Apaokueze, T. N. (2024). Socio-Economic Factors as Determinants of Academic Performance in the Home Economics in Delta State, *International Journal of Family and Consumer*.
- [6] Asare, S. et al. (2023). Utilizing educational apps and online platforms for home economics learning: An Investigation of students' attitudes and perceptions. *World Journal of Advanced Research and Reviews*. <https://doi.org/10.30574/wjarr.2023.19.3.1831>
- [7] Kim, S. W. (2019). Is socioeconomic status less predictive of achievement in East Asian countries? A systematic and meta-analytic review. *International Journal of Educational Research*, 97, 29–42. <https://doi.org/10.1016/j.ijer.2019.05.009>
- [8] Brownman, A.S. et al. (2017). Perceptions of socioeconomic mobility influence academic persistence among low socioeconomic status students. *Journal of Experimental Social Psychology*, ISSN 0022-1031, <https://doi.org/10.1016/j.jesp.2017.03.006>.
- [9] Broer, M. et al. (2019). Socioeconomic Inequality and Educational Outcomes: An Introduction. IEA Research for Education. https://doi.org/10.1007/978-3-030-11991-1_1

- [10] Monosaccharide-mediated rational synthesis of a universal plasmonic platform with broad spectral fluorescence enhancement for high-sensitivity cancer biomarker analysis | Journal of Nanobiotechnology | Springer Nature Link <https://jnanobiotechnology.biomedcentral.com/articles/10.1186/s12951>