Minnesota Department of Education

Examining and Developing Statewide Swimming Resources

Inventory Report

Fiscal Year 2016

Report

To the

Legislature

As required by

Minnesota 2015 Special Session Law,

Chapter 3, Article 2, section 66(a).

COMMISSIONER:

Brenda Cassellius, Ed. D.

Existing Resources and Best Practices Available for Swimming Instruction in Minnesota Public Schools

February 2016

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Report to the Legislature

As required by

Minnesota 2015 Special Session Law,

Chapter 3, Article 2, section 66(a)

Cost of Report Preparation

The total cost for the Minnesota Department of Education (MDE) to prepare this report was approximately $15,500. Most of these costs involved staff time in analyzing data from surveys and preparing the written report. Incidental costs include paper, copying and other office supplies.

Estimated costs are provided in accordance with Minnesota Statutes 2011, section 3.197, which requires that at the beginning of a report to the Legislature, the cost of preparing the report must be provided.

Introduction

This report presents the results of the swimming instruction inventory administered by Hanover Research on behalf of the Minnesota Department of Education (MDE) to identify existing resources and best practices in swimming instruction provided in Minnesota public schools.

MDE does not collect information on swimming resources or instructional practices nor is the information included in any database or data collection system at the agency. Agency staff identified a survey approach as the best option to gather the requested data and produce a report within the established timeframe. Hanover Research was engaged to provide support to MDE staff in the development, administration and analysis of the survey.

Hanover Research conducted a literature review to identify best practices in swimming instruction and developed questions to determine whether Minnesota schools were following these practices. Physical education and evaluation experts at MDE worked with Hanover Research to develop the survey questions to identify the resources, curriculum, personnel and other costs associated with swimming instruction in district and charter schools across the state. Additionally, MDE provided contact information for principals and charter school directors.

The principals and charter school directors of 1,651 public schools received invitations to complete the survey. Responses were received from 1,240 schools for a response rate of 75.1 percent. While not every school completed the survey, the respondents are representative of Minnesota district and charter schools. (See Figure 1.)

Figure 1: Inventory School Demographics

	Number of participating schools	Percentage of participating schools in each category	Percentage of Minnesota schools in each category
School Type (n=1,240)			
Charter Schools	134	11 percent	13 percent
District Schools	1,106	89 percent	87 percent
School Level (n=1,237)			
Elementary Schools	702	57 percent	58 percent
Middle / Junior High Schools	188	15 percent	15 percent
High / Secondary Schools	347	28 percent	27 percent
School Region (n=1,224)			
Greater Minnesota	719	59 percent	58 percent
Twin Cities	505	41 percent	42 percent

Legislative Charge

Consistent with the Laws of Minnesota 2015, chapter 3, article 2, section 66(a), the commissioner of education “must use existing budgetary resources to inventory and report to the education committees of the legislature by February 1, 2016, on the extent of existing resources and best practices available for swimming instruction in Minnesota public schools.”

Analysis and Key Findings

Hanover Research produced a report that presents the results of the swimming instruction inventory they administered on behalf of the Minnesota Department of Education (MDE). The

inventory included questions about the resources, curriculum, personnel and costs associated with swimming instruction in Minnesota's public schools, including charter schools. What follows are key findings from that report on the existing resources and best practices available for swimming instruction in Minnesota public schools. The full report submitted by Hanover Research is included in this report as Appendix A.

Resources summary

Very few schools in Minnesota own and operate a swimming pool. The inventory process identified 185 pools in schools across 117 school districts. Because not all schools completed the survey, MDE staff compared the list of school pools identified in the survey to a Minnesota Department of Health list of all licensed pools in the state to determine this number. Survey results indicate that 53 schools share a pool with one or more schools and 247 schools have access to a swimming pool. About half (51 percent) of all middle/junior high schools and 29 percent of high schools in Minnesota have a swimming pool. Only eight percent of elementary schools report owning a pool and no charter schools own a pool. Click here to view an interactive map showing the location of each school pool. (http://arcg.is/1YLW1rA)

Analysis of the survey responses shows that one in five public schools in Minnesota provides swimming instruction. Middle/junior high schools and schools that own a swimming pool are much more likely to offer swimming instruction. Nearly half of the middle/junior high schools that responded to the survey said that they provide water-based swimming instruction (47 percent) compared to 24 percent of high schools and 11 percent of elementary schools. (See figure 1.2, page seven of Appendix A.) Seventy-one percent of schools that have a swimming pool offer water-based swimming instruction as compared to only seven percent of schools that do not own a pool. (See figure 1.4, page eight of Appendix A.)

The majority of district schools that offer water-based swimming instruction (65 percent) require all of their students to participate at least once while enrolled in the school. Middle/junior high schools, when compared to elementary and high schools are more likely to require participation and devote more time to swimming instruction. Schools with a swimming pool are two times more likely to require all students to participate in swimming instruction. (See figure 2.4, page 14 of Appendix A.)

While owning a pool is associated with higher rates of swimming instruction for students, it is also associated with higher costs. Staffing and pool maintenance costs are among the largest expenses identified by schools that provide swimming instruction. Additionally, the survey found that owning a pool is associated with a higher proportion of directly employed staff, suggesting that running a swimming program with a school-owned pool requires significant investments in maintenance and personnel. In fact, schools that own a swimming pool report significantly higher operational costs and perceive the costs of running a swimming program to be more significant than schools without a pool. (See Section V, pages 31-34 of Appendix A.)

The largest sources of funding for district school swimming instruction programs are state funding, local funding, and revenue from pool fees. More middle/junior high schools identified federal funds as a significant source of funding than elementary schools or high schools.

Best Practices

Hanover Research conducted a review of swimming instruction literature and worked with MDE staff to identify best practices for implementing a water-based swimming instruction program. The following section highlights some of the best practices, along with data from the swimming inventory that demonstrates the extent to which they are implemented.

Utilizing a curriculum that teaches life-saving safety skills and swimming technique skills. The majority of district schools (60 percent) use school- or district-developed curricula in their swimming instructions programs. Other curricula used in schools include the American Red Cross Learn-to-Swim (30 percent) and YMCA Aquatics (eight percent). (See figure 3.1, page 19 of Appendix A.) Nearly all schools that provide water-based swimming instruction (91 percent) teach basic aquatic skills and most (71 percent) teach stroke development. (See figure 3.3, page 21 of Appendix A.)

Pretesting students to determine swimming ability. Most district schools (62 percent) pre-test students to determine swimming ability. This is most common in middle/junior high schools (81 percent), while fewer elementary schools (48 percent) or high schools (55 percent) pre-test students. (See figure 3.4, page 21 of Appendix A.)

Providing students with documentation of their progress in the swimming instruction program. Fewer than half of all schools provide documentation of progress (40 percent). The practice is most common in middle/junior high schools (47 percent) with elementary schools (36 percent) and high schools (38 percent) lagging behind. (See figure 3.5, page 22 of Appendix A.)

Securing parent or guardian permission in order to participate in water-based swimming instruction. While only 29 percent of all schools that offer water-based swimming instruction require parent or guardian permission, it is required in 60 percent of elementary schools. Middle/junior high schools are least likely to require parent or guardian permission (11 percent) and the requirement is in place in 20 percent of high schools. (See figure 3.6, page 22 of Appendix A.)

Providing exemptions from participating in water-based swimming instruction. Most of the responding schools (70 percent) report that they granted exemptions from participation in water-based swimming instruction in the past year. (See figure 3.7, page 23 of Appendix A.)

Requiring credentialed staff to be present during swimming instruction. The vast majority of schools that provide water-based swimming instruction require the presence of physical education teachers (88 percent) and nearly half of schools (46 percent) require lifeguards to be present during instruction. The most common credentials required for physical education teachers include certification in American Red Cross lifeguard training (51 percent), cardiopulmonary resuscitation and automatic external defibrillator training (48 percent), and standard first aid training (48 percent). For swimming instructors, 69 percent require American Red Cross lifeguard training and 69 percent require certification as an American Red Cross water safety instructor. Lifeguards are generally required to have American Red Cross lifeguard training. Schools determine the staff to student ratios for swimming instruction and these ratios range from 1:10 or lower to 1:31 or higher. Most middle/junior high and high school programs have a range of 1:16 to 1:30. Most elementary schools (68 percent) have a staff to student ratio of 1:15 or lower.

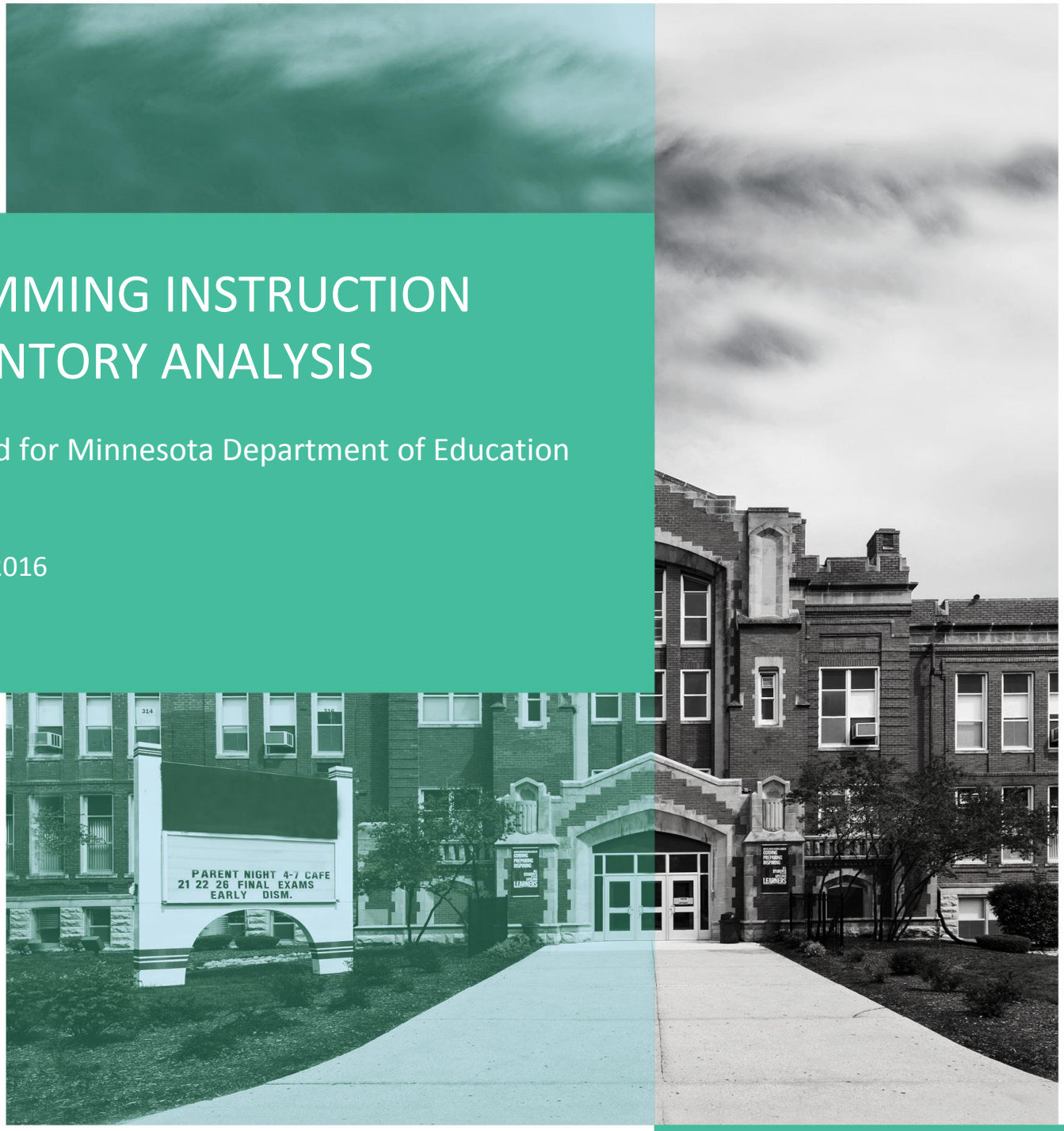
Appendix A

Swimming Instruction Inventory Analysis prepared for the Minnesota Department of Education by Hanover Research.

SWIMMING INSTRUCTION INVENTORY ANALYSIS

Prepared for Minnesota Department of Education

January 2016



In the following report, Hanover Research presents the results of the swimming instruction inventory administered on behalf of the Minnesota Department of Education. This report focuses on findings related to swimming instruction within district schools, including resources, curriculum, personnel, and costs.

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www.hanoverresearch.com

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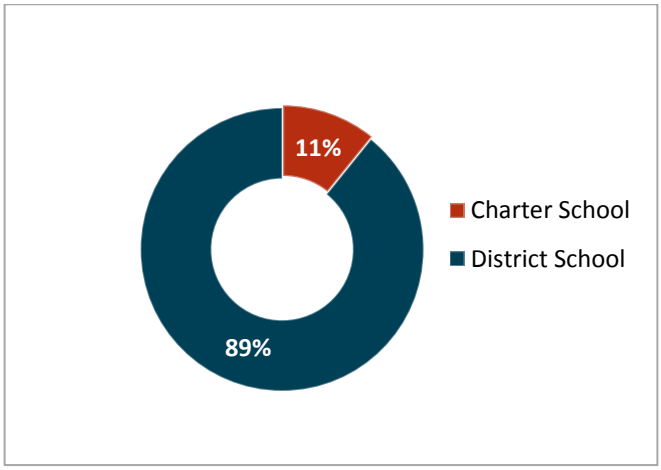
EXECUTIVE SUMMARY AND KEY FINDINGS

INTRODUCTION

In this report, Hanover Research presents the results of the swimming instruction inventory administered on behalf of the Minnesota Department of Education. The inventory seeks to examine the resources, curriculum, personnel, and costs associated with swimming instruction delivered in district and charter schools across the state. In addition to the report, Hanover Research provides a data supplement that contains the complete breakdown of overall and segmented results for district school respondents.

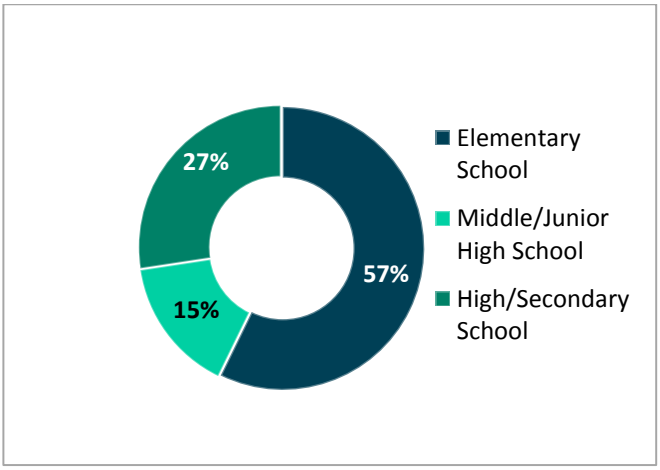
The inventory elicited 1,240 responses, with 11 percent representing charter schools and 89 percent representing district schools (Figure E.1). Because of the low representation of charter schools among survey respondents, the majority of this report presents results from district schools only. District school results are presented in aggregate, as well as segmented by school level (Figure E.2) and by swimming pool ownership. Hanover Research uses Pearson's chi-square tests to determine whether there are statistically significant differences at the 95 percent confident level across segments, and notes such differences by adding an asterisk in the figures.

Figure E.1: School Type



n=1,238

Figure E.2: School Level – District Schools Only



n=1,106

KEY FINDINGS

- **One in five district schools in Minnesota provides swimming instruction.** Thirteen percent of district schools offer water-based swimming instruction and 7 percent of schools offer both land- and water-based swimming instruction.

- **Swimming instruction is most commonly offered at middle schools and at schools with a swimming pool.** For water-based instruction specifically:
  - Nearly half of responding middle schools provide water-based swimming instruction (47%), compared to 24 percent of high schools and 11 percent of elementary schools.
  - Seventy-one percent of schools that have a swimming pool offer water-based swimming instruction as compared to only 7 percent of schools that do not own a pool.
- **Approximately 65 percent of district schools that provide swimming instruction require *all* their students to participate in land-based or water-based swimming instruction at least once while enrolled in the school.**
  - Middle schools are generally more likely to require student participation in the swimming program, and to devote more time to swimming instruction per year, compared to elementary and high schools.
  - Schools that own a swimming pool are two times more likely to require *all* students to participate in a land-based or water-based program. Relatedly, these schools tend to allocate more time per year to swimming instruction, especially for students in Grade 6 to Grade 8.
- **Swimming instruction requires a high level of staff involvement.** For swimming instruction during the school day, 88 and 46 percent of district schools that provide swimming instruction require the presence of physical education teachers and lifeguards, respectively. In addition, nearly 70 percent of elementary schools require a staff to student ratio of 1:15 or lower and most middle schools and high schools require a ratio of 1:16 to 1:30 (65%).
- **The majority of schools with swimming programs do not find the programs to be a financial burden.** Around two thirds of responding schools report the operation cost of running a swimming program to be less than $50,000 per year and claim that the total cost to the school is "somewhat significant" or "not significant." Middle schools and high schools report higher price ranges than elementary schools for running a swimming program, and indicate more frequently that the total cost to the school is at least "somewhat significant" (elementary-48%; middle-71%; high-75%).
- **Swimming programs can be resource-intensive for schools that own swimming pools.** Staffing and pool maintenance are among the largest expenditures associated with running a swimming program. As owning a pool is associated with a higher proportion of directly employed staff, this suggests that running a swimming program with a school-owned pool requires considerable investment in maintenance and personnel. Indeed, schools that own pools report higher operational costs for swimming programs and are more likely to rate these costs as at least "somewhat significant."

SECTION I: RESOURCES FOR SWIMMING INSTRUCTION

This section examines the resources that district schools in Minnesota dedicate to swimming instruction.[1] On the whole, swimming instruction is more prevalent among district schools than it is among charter schools. Among all responding schools, more district schools indicate that they provide water- or land-based swimming instruction to students during the regular school day, compared to respondents from charter schools. Also, a higher proportion of district schools own a pool than do charter schools (20 percent and zero percent, respectively) (Figure 1.1).

Similarly, swimming instruction and the infrastructure needed for its delivery are most common at the middle school level. Across school levels, nearly half of middle schools provide water-based swimming instruction (47 percent), compared to 24 percent of high schools and 11 percent of elementary schools. In addition, a higher proportion of middle schools provide land-based swimming instruction (18 percent) than do elementary schools (3 percent) and high schools (12 percent). Further, middle schools are more likely to own a pool (51 percent) than elementary schools (8 percent) and high schools (29 percent) (Figure 1.2).

When looking at overall swimming instruction offerings, we find that 13 percent of all district schools offer water-based swimming instruction only, 7 percent provide both water-based and land-based instruction to students during the regular school day, and 80 percent of schools offer neither type of swimming instruction. A nominal number of schools (3 out of 1,104) offer land-based instruction only (Figure 1.3). **This suggests that land-based swimming instruction is primarily offered as a component of water-based swimming programs.**

During the regular school day, most district schools that provide water-based swimming instruction provide it at a pool in the school building (64 percent), rather than at a pool in another location (2 to 17 percent). More elementary schools provide water-based swimming instruction at a pool outside of the school building compared to other school levels, while a large majority of middle schools and high schools provide instruction at a pool in their school building (Figure 1.5).

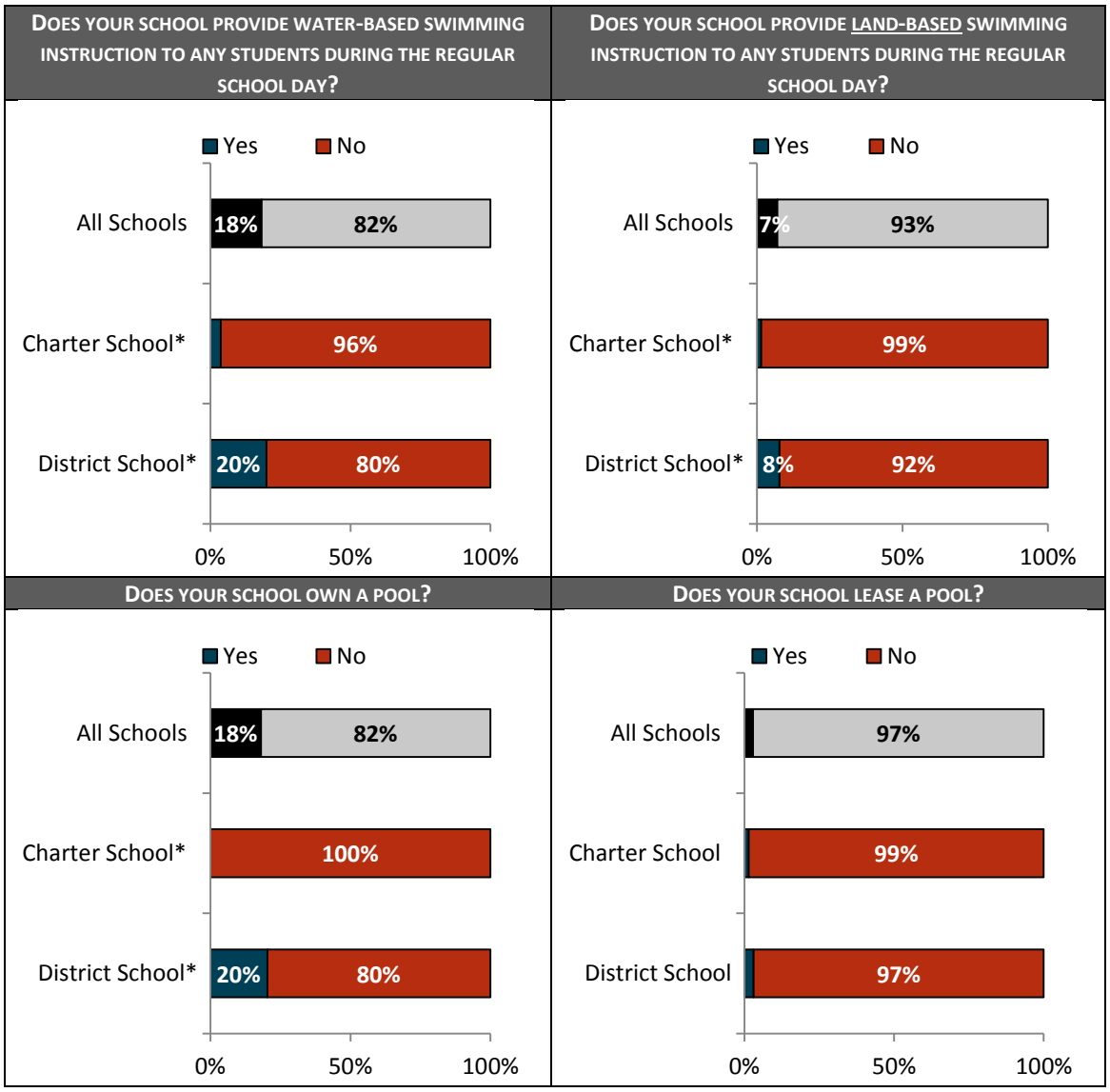
Owning a swimming pool is highly indicative of whether schools offer swimming instruction. As depicted in Figure 1.4, compared to schools without a pool, schools that own a swimming pool are much more likely to offer water-based swimming instruction (71 versus 7 percent) and land-based instruction (31 versus 2 percent). Very few schools (2 percent) that provide water-based swimming instruction charge fees to students for

[1] With the exception of Figure 1.1, the results displayed in this section and throughout the remainder of the report exclude charter school responses and rely on responses from district schools only.

participation in water-based swimming instruction (Figure 1.6), and these schools typically waive or reduce swimming instruction fees for low-income families.[2]

FIGURES

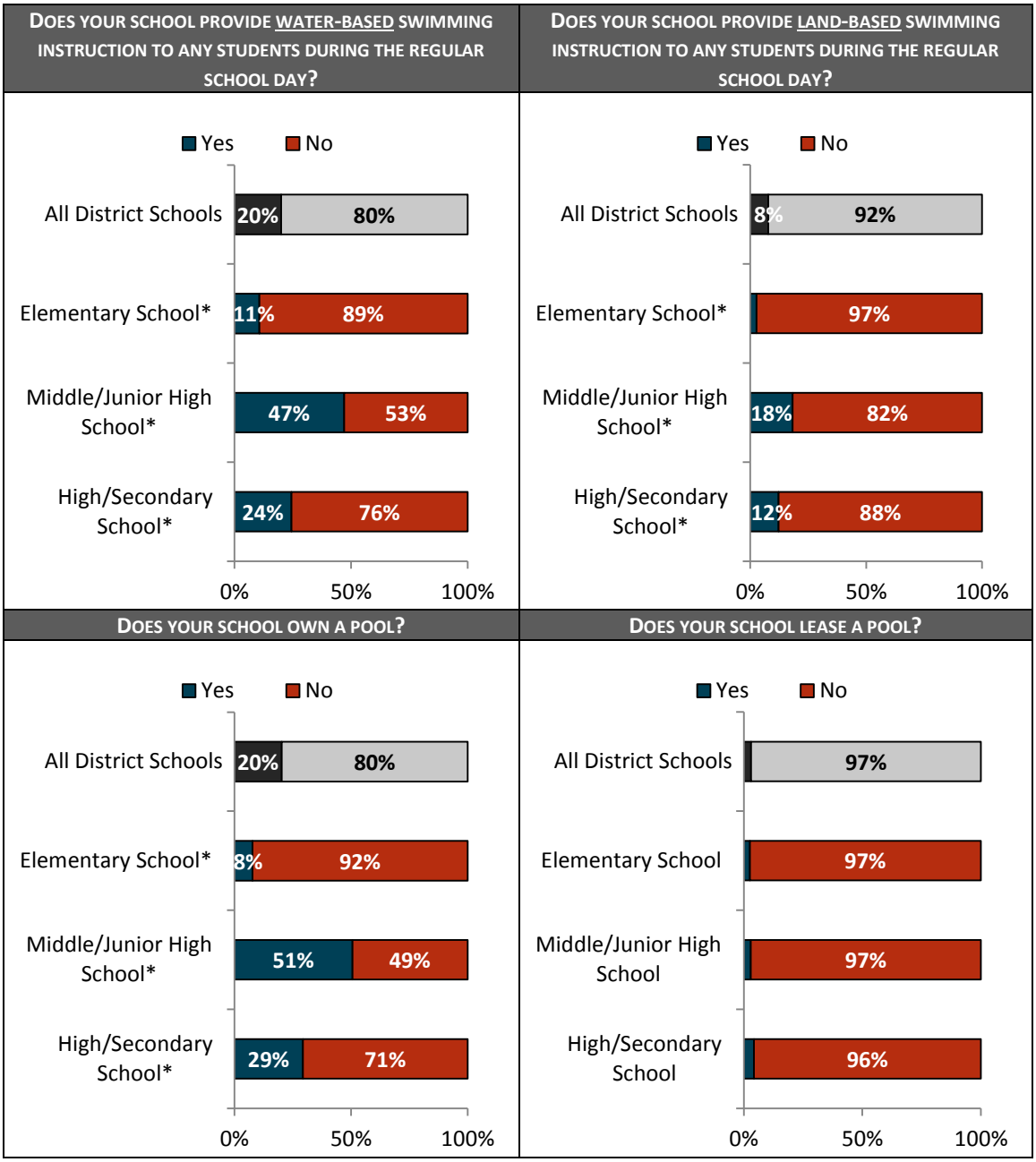
Figure 1.1: Resources by School Type



*Indicates significant differences between responses from charter schools and district schools.
Note: All Schools (n=1,238); Charter School (n=134); District School (n=1,104).

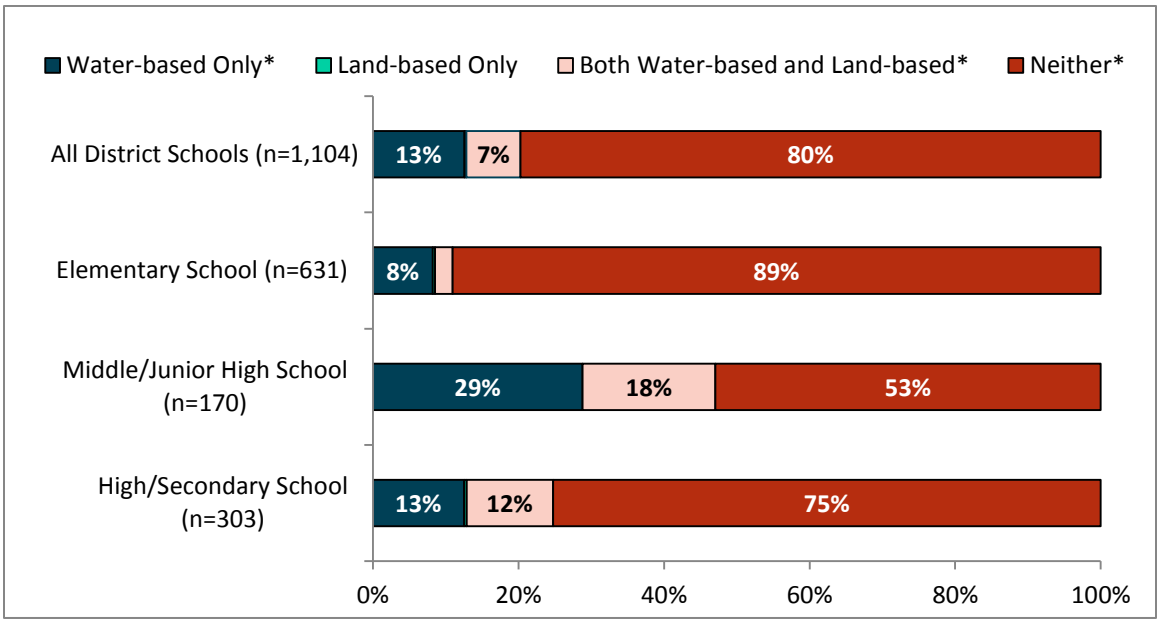
[2] Please see the data supplement for the results related to this question.

Figure 1.2: Resources by School Level



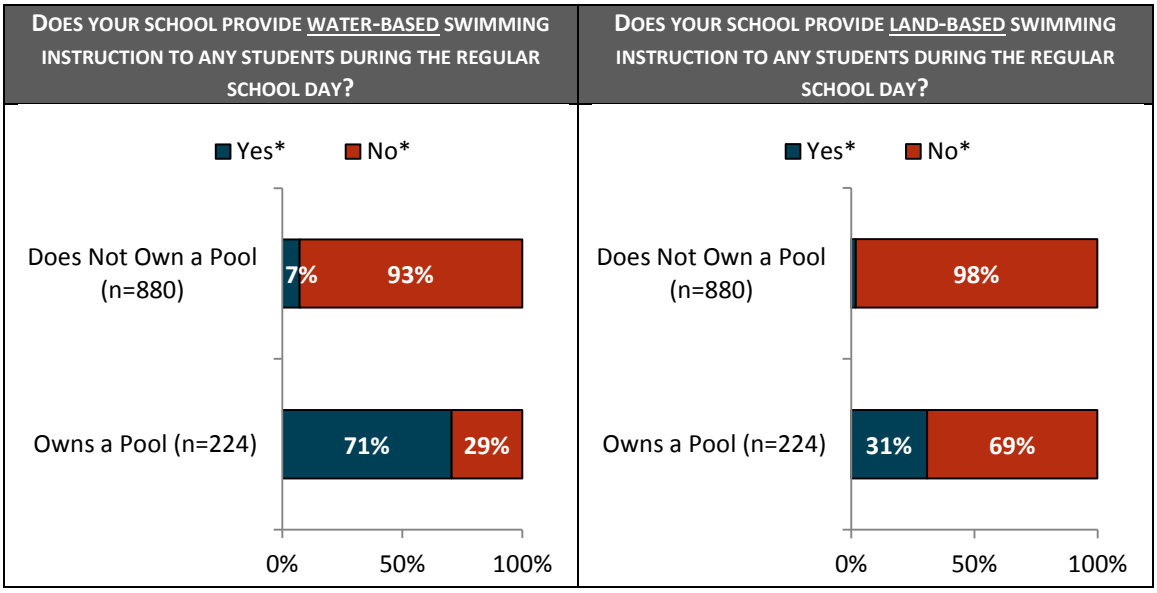
*Indicates significant differences across school levels.
Note: All District Schools (n=1,104); Elementary School (n=631); Middle School (n=170); High School (n=303).

Figure 1.3: Swimming Instruction Offering



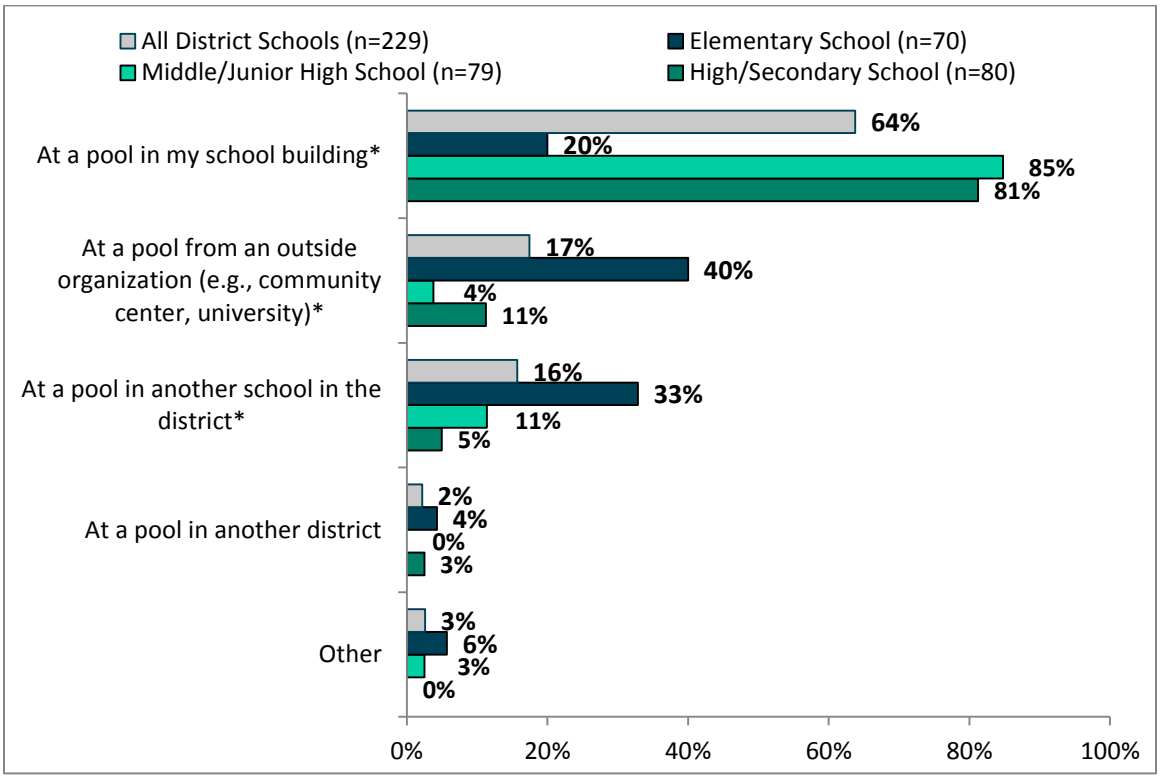
*Indicates significant differences across school levels.

Figure 1.4: Swimming Instruction by Pool Ownership



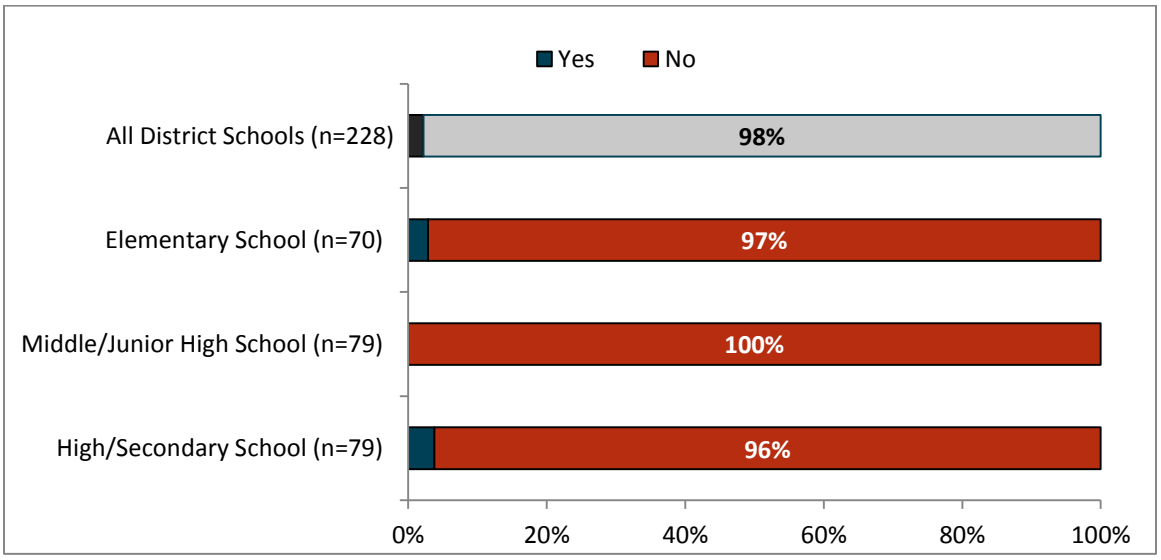
*Indicates significant differences between schools that own a pool and those that do not own a pool.

Figure 1.5: Where does your school provide water-based swimming instruction during the regular school day? Select all that apply.



*Indicates significant differences across school levels.
Note: This question is only visible to respondents who indicate that their school offers water-based swimming instruction to students during the regular school day; no respondents selected "In a lake."

Figure 1.6: Does your school charge fees to district students for participation in water-based swimming instruction during the regular school day?



Note: This question is only visible to respondents who indicate that their school offers water-based swimming instruction to students during the regular school day.

SECTION II: SWIMMING INSTRUCTION REQUIREMENTS

This section examines the requirements in place for swimming instruction in Minnesota's district schools. Of those district schools that offer swimming instruction (land- or water-based), **approximately 65 percent require all students to participate in certain grade levels at least once while enrolled.** Schools generally allocate more time to water-based instruction than land-based instruction per year and middle schools spend the most time on swimming instruction. Moreover, owning a swimming pool is an indicator of more stringent requirements for swimming instruction, both in terms of participation requirements and time requirements.

LAND INSTRUCTION

Swimming instruction on land, if offered at a school, is often required for *all* students (64 percent). If required for all students, it is usually focused on particular grade levels (78 percent) (Figure 2.1 and Figure 2.2). **Land-based swimming instruction requirements are concentrated among Grade 2 to Grade 10. Within this grade span, the most common time requirement is less than 10 hours per year.** Middle schools tend to require more hours of land-based instruction than do elementary and high schools (Figure 2.3).

Three schools (4 percent) require *some* students (e.g., non-swimmers) to participate in swimming instruction on land, and approximately one third of schools do *not* require any students to receive swimming instruction on land. When comparing the requirement for land-based swimming instruction by pool ownership, we find that **more schools that own a swimming pool require swimming instruction on land for *all* students than do those without a pool** (71 versus 31 percent) (Figure 2.1).

WATER INSTRUCTION

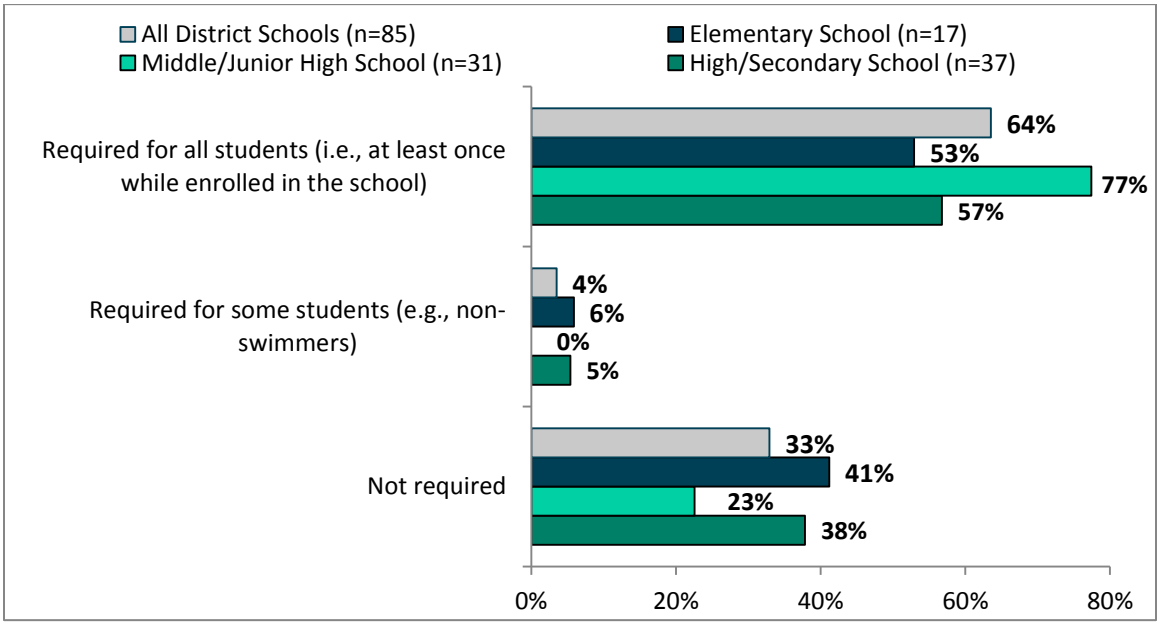
The majority of district schools that offer water-based swimming instruction require *all* students to participate (65 percent). This trend is even more prevalent for schools that own a pool, 77 percent of which require water-based instruction for all students. In addition, **a higher proportion of middle schools require *all* students to participate in water-based instruction than do elementary schools (44 percent) or high schools (66 percent)** (Figure 2.4)**.** Most schools that require all students to participate focus on students in particular grades (86 percent) (Figure 2.5).

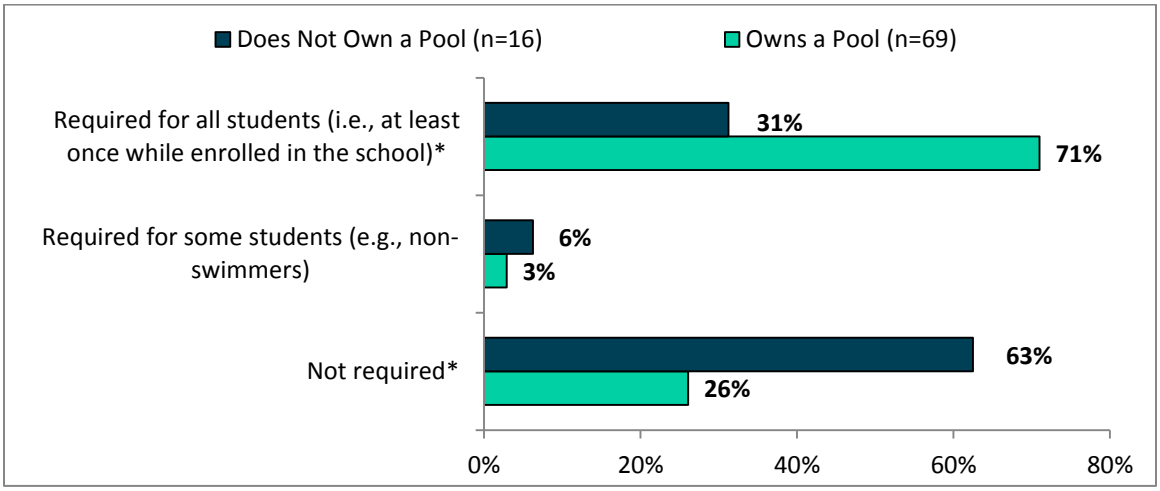
Similar to requirements for land-based instruction, most district schools do not require students in Pre-K, Grade 1, Grade 11, and Grade 12 to participate in water-based swimming instruction. Among the other grades, **the number of hours required for water-based instruction increases from Grade 2 to Grade 5, and peaks in Grades 6 through 8. In this span, approximately 58 percent of schools that require water-based swimming instruction by grade-level require students to participate in 10 to 29 hours of water-based swimming**

instruction. Accordingly, across school levels, middle schools require the most time per year for water-based instruction (Figure 2.6). Further, **district schools that own a swimming pool tend to require more water-based swimming instruction per year as compared to schools that do not own a pool, and the differences are most prominent at Grade 6 to Grade 8**.[3]

FIGURES

Figure 2.1: At my school, swimming instruction <u>on land</u> (e.g., water safety, dry land strokes) is...

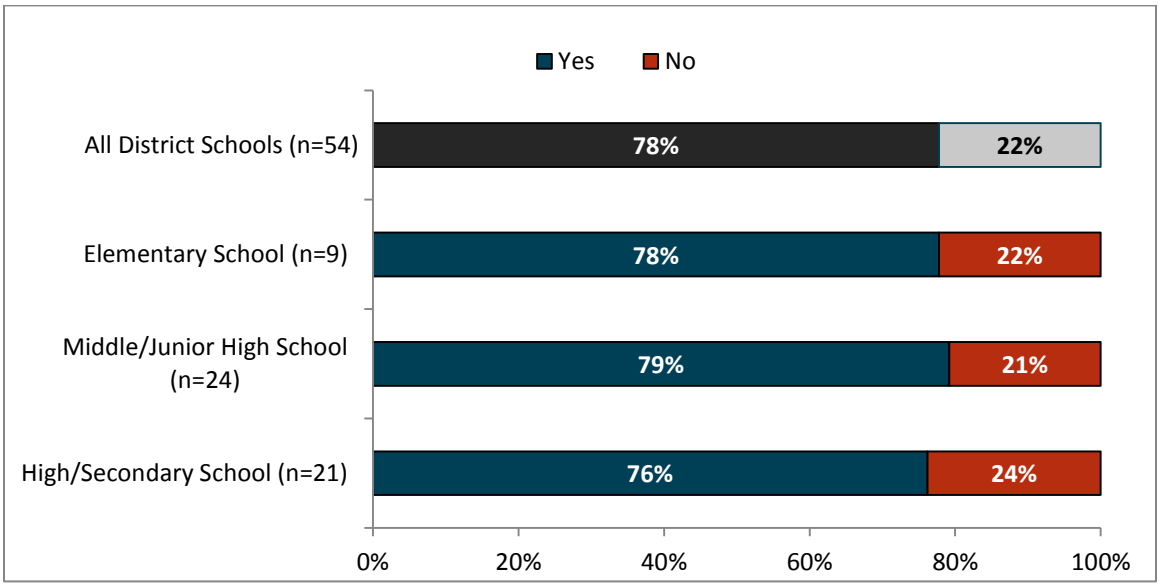




*Indicates significant differences between schools that own a pool and those that do not own a pool.

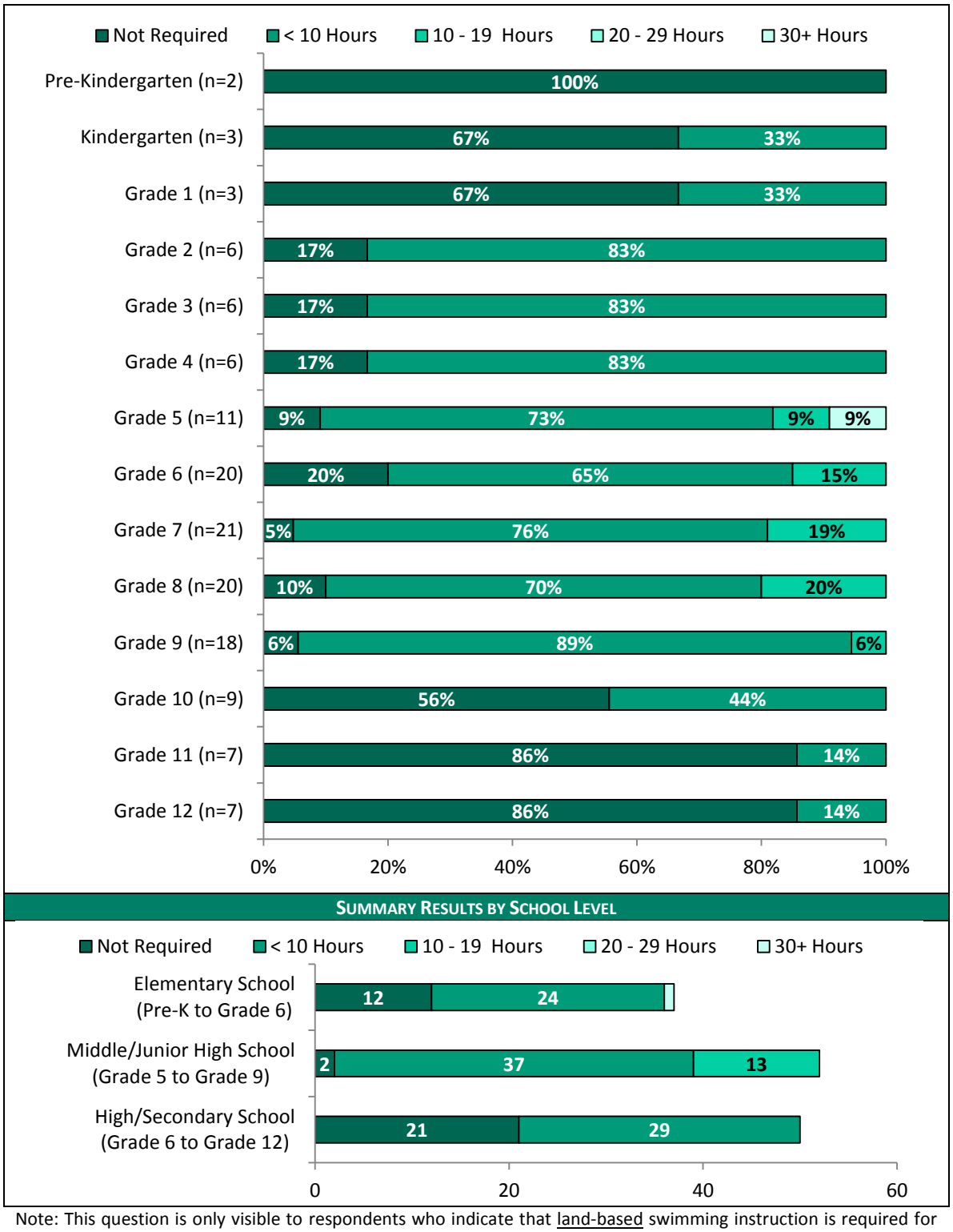
[3] Due to the small sample sizes, differences between schools that own or do not own a pool are mostly *not* statistically significant across grade levels. Please see the data supplement for comparative results.

Figure 2.2: Is land-based swimming instruction required for students in particular grade levels?



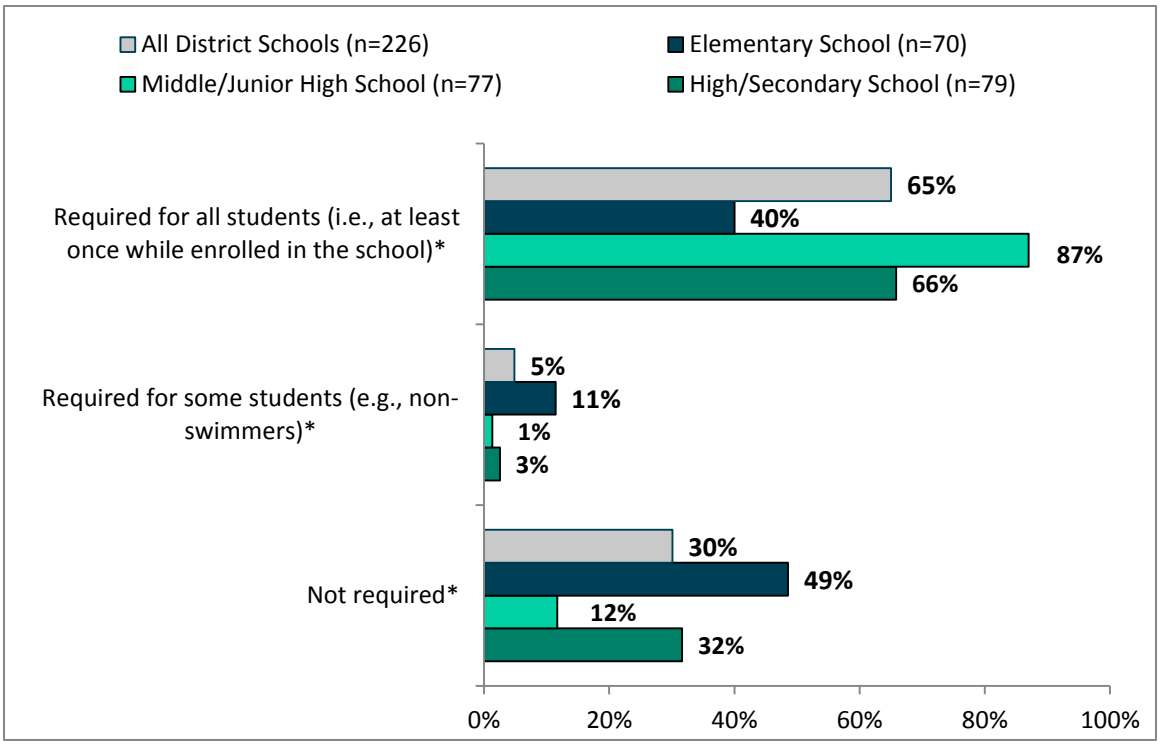
Note: This question is only visible to respondents who indicate that swimming instruction on land (e.g., water safety, dry land strokes) is "Required for all students (i.e., at least once while enrolled in the school)."

Figure 2.3: How many hours per year are students required to participate in land-based swimming instruction for each of the following grades?

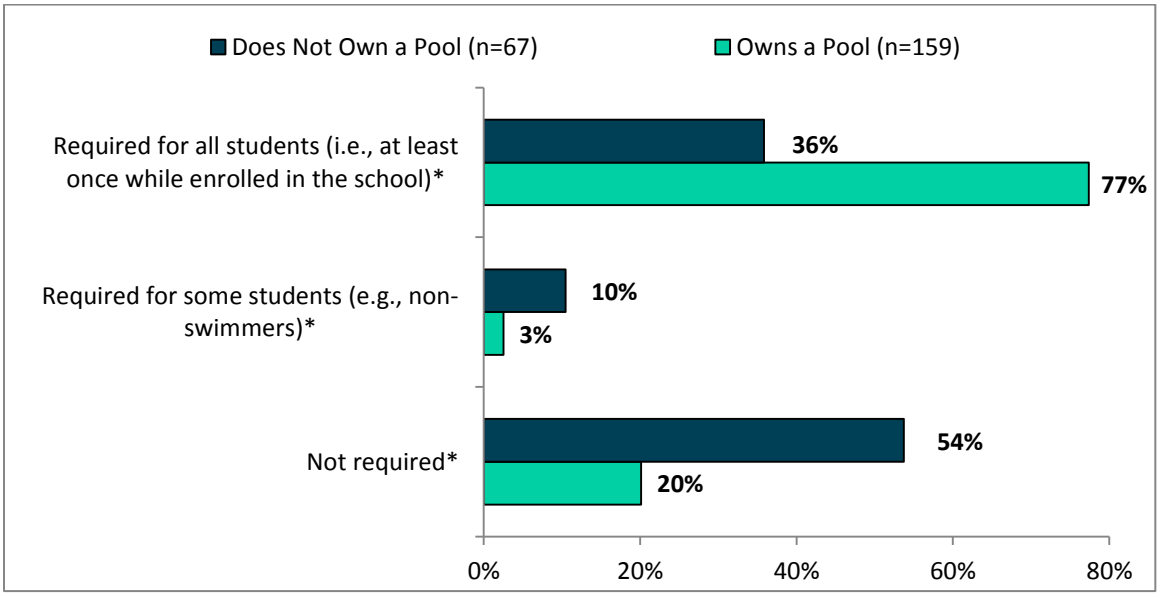


Note: This question is only visible to respondents who indicate that land-based swimming instruction is required for students in particular grade levels.

Figure 2.4: At my school, swimming instruction in water is...

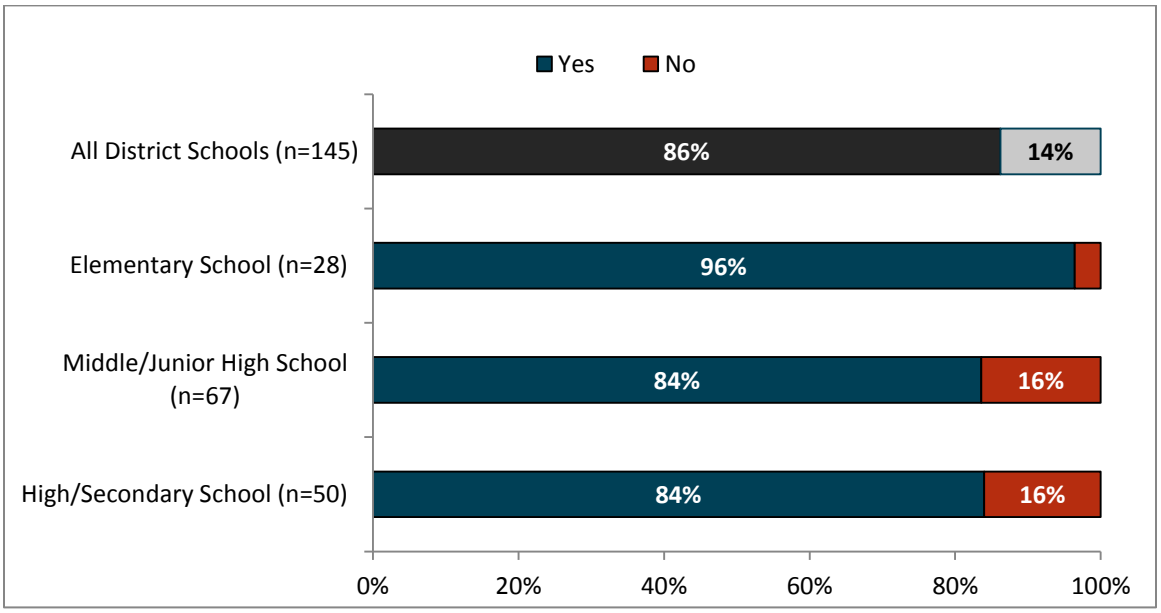


*Indicates significant differences across school levels.



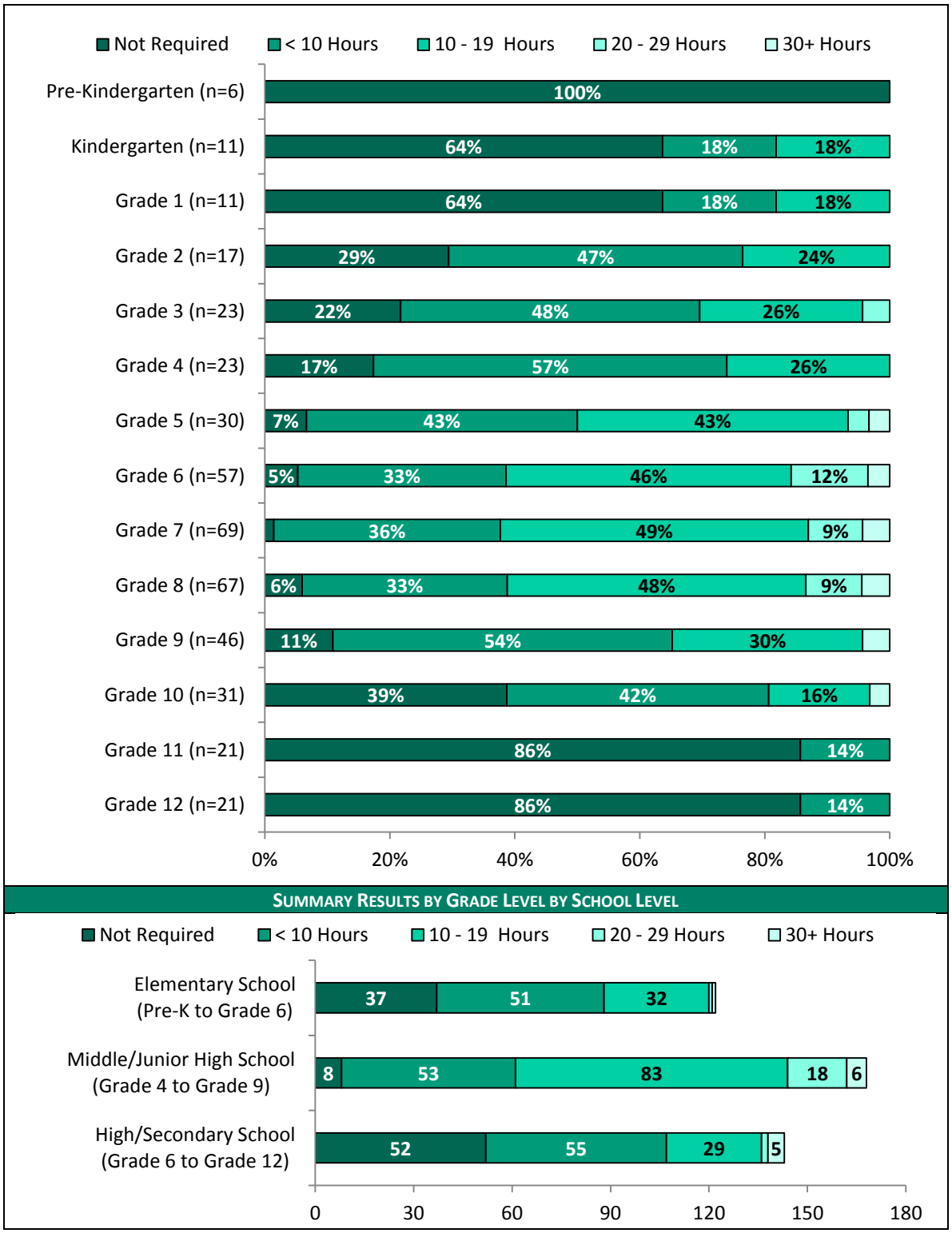
*Indicates significant differences between schools that own a pool and those that do not own a pool.

Figure 2.5: Is water-based swimming instruction required for students in particular grade levels?



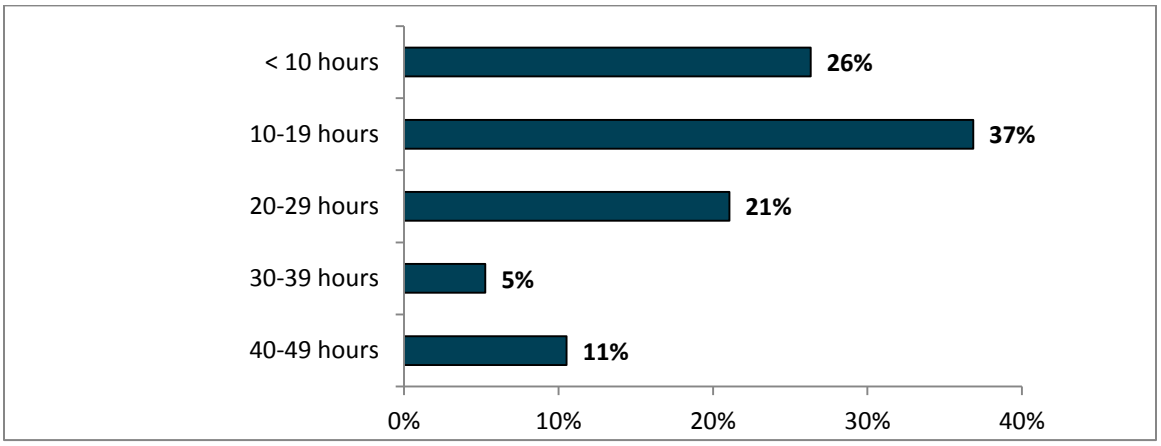
Note: This question is only visible to respondents who indicate that swimming instruction in water is "Required for all students (i.e., at least once while enrolled in the school)."

Figure 2.6: How many hours per year are students required to participate in water-based swimming instruction for each of the following grades?



Note: This question is only visible to respondents who indicate that water-based swimming instruction is required for students in particular grade levels.

Figure 2.7: How many hours are students required to participate in water-based swimming instruction while enrolled in your school?



n=19

Note: This question is only visible to respondents who indicate that water-based swimming instruction is *not* required for students in particular grade levels.

SECTION III: SWIMMING INSTRUCTION CURRICULUM

The following subsection describes the curricula that guide swimming instruction in Minnesota district schools. **The majority of responding district schools that provide swimming instruction use school- or district-developed swimming curricula in their swimming programs (60 percent).** Smaller proportions use American Red Cross (30 percent) and YMCA Aquatics (8 percent) curricula. Across school levels, more middle schools and high schools use school- or district-developed swimming curricula or American Red Cross than do elementary schools, while elementary schools use YMCA Aquatics slightly more than other school levels (Figure 3.1).

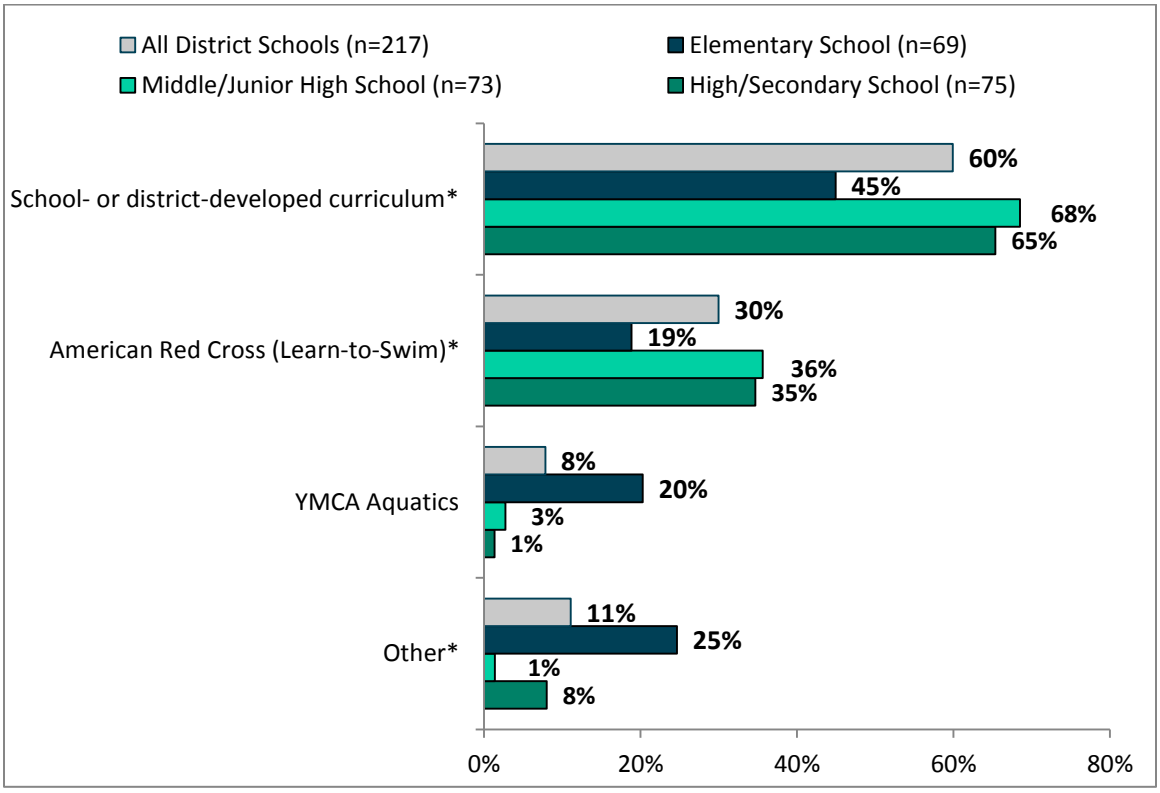
Within reporting district schools that provide swimming instruction, land-based instruction comprises personal water safety (93 percent), dry land strokes (60 percent), and rescue (36 percent). In particular, dry land strokes are more frequently reported among middle schools (79 percent) compared to elementary schools (44 percent) or high schools (53 percent) (Figure 3.2). Water-based instruction typically includes basic aquatic skills (91 percent) and stroke development (71 percent), while fewer schools offer stroke refinement (36 percent) and swimming endurance and proficiency (28 percent). **Amongst water-based programs, middle schools appear to teach the widest array of skills (Figure 3.3).**

Among district schools that provide water-based instruction, students are most commonly pre-tested to determine their swimming ability at the middle school level (81 percent), while fewer elementary schools (48 percent) or high schools (55 percent) conduct pre-testing for students (Figure 3.4). At most district schools that offer swimming instruction (60 percent), students do not receive documentation of their progress in the swimming instruction program (e.g., badges, certificates, report cards) (Figure 3.5).

Sixty percent of elementary schools that provide swimming instruction require parent/guardian permission for students to participate in water-based swimming instruction, compared to 11 percent of middle schools and 20 percent of high schools (Figure 3.6). In addition, 70 percent of responding district schools report that they granted students (around one to 10 students) exemption from participation in water-based swimming instruction in the past year (Figure 3.7 and Figure 3.8).

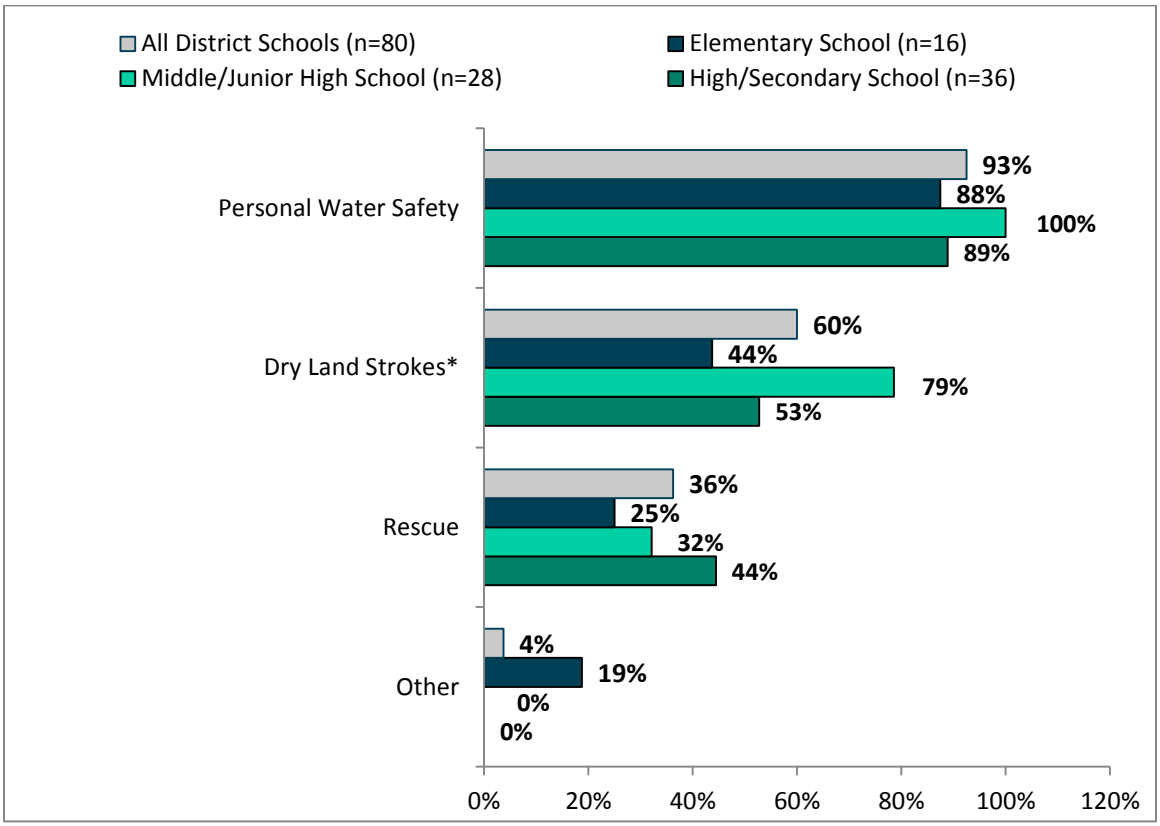
FIGURES

Figure 3.1: Swimming Program/Curriculum



*Indicates significant differences across school levels.
Note: Respondents were asked to "Select all that apply." No respondent selected “Starfish Aquatics Institute (Starfish Swimming)” or “SwimAmerica.”

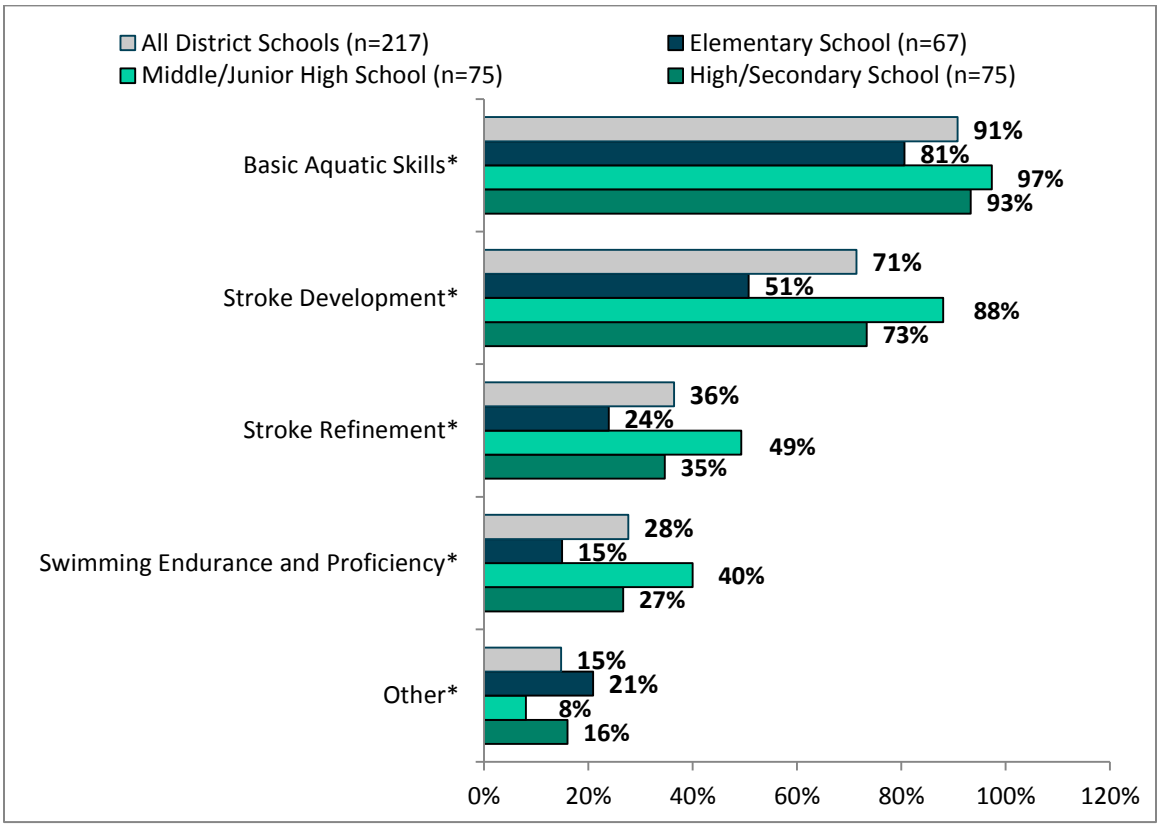
Figure 3.2: Skill Categories Included in Land-Based Swimming Instruction Program/Curriculum



*Indicates significant differences across school levels.

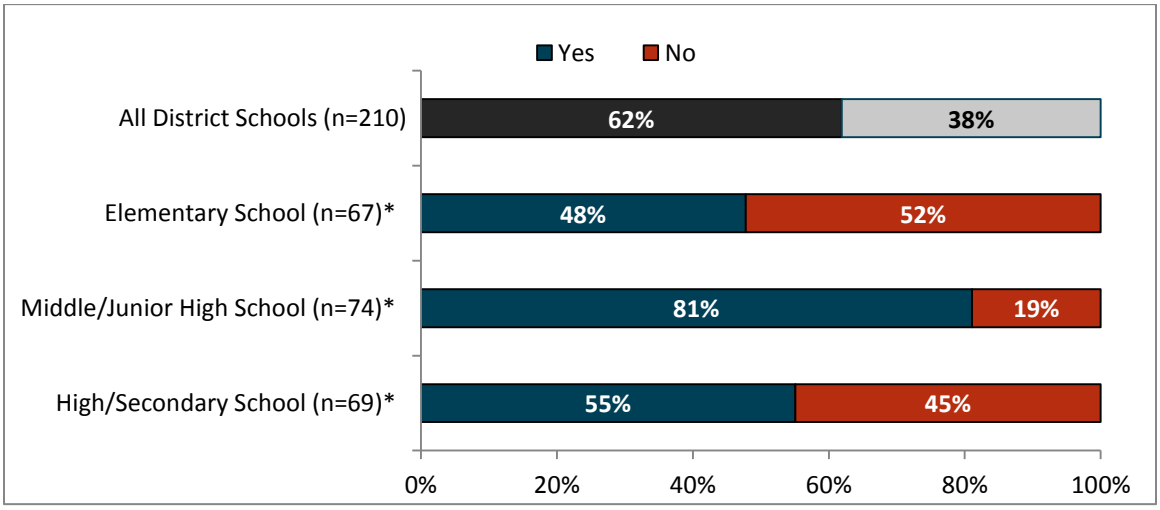
Note: This question is only visible to respondents who indicate that their school offers land-based swimming instruction to students during the regular school day.

Figure 3.3: Skill Categories Included in Water-Based Swimming Instruction Program/Curriculum



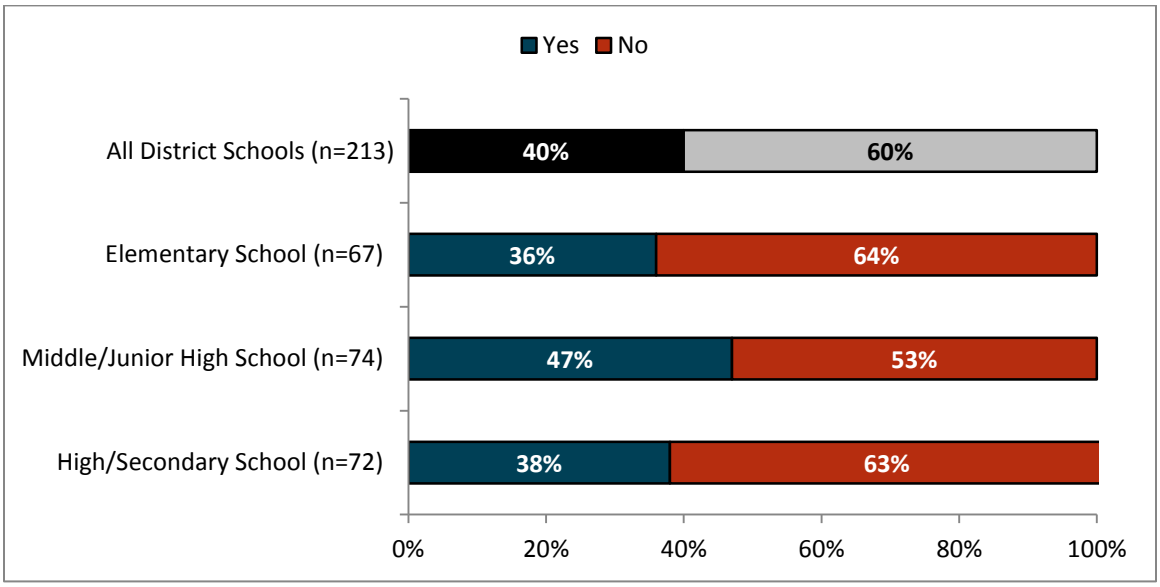
*Indicates significant differences across school levels.
Note: This question is only visible to respondents who indicate that their school offers water-based swimming instruction to students during the regular school day.

Figure 3.4: Are students at the school pre-tested to determine swimming ability?



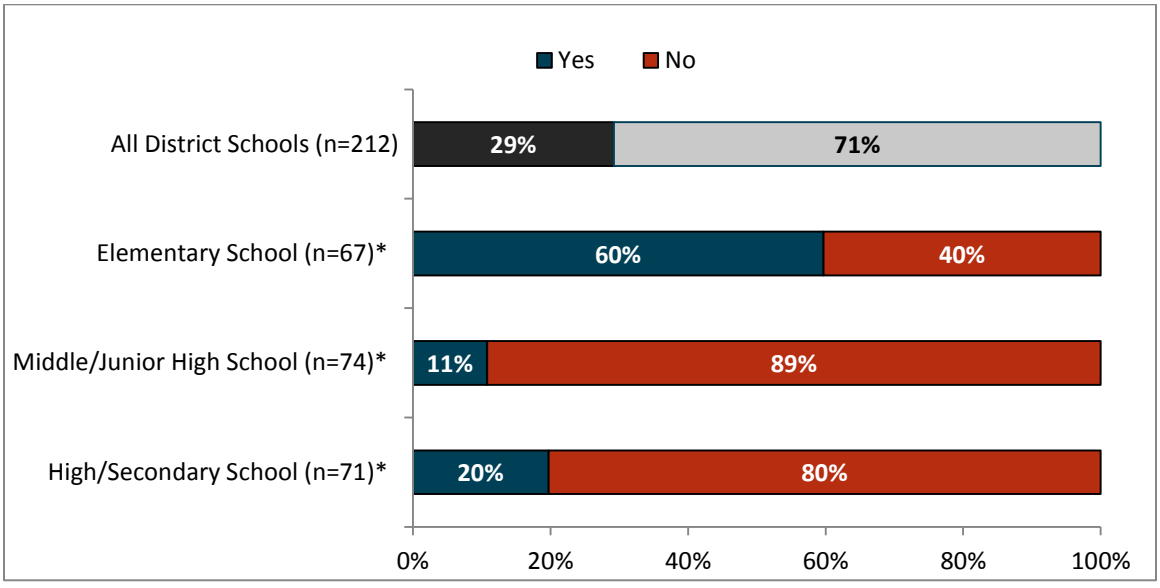
*Indicates significant differences across school levels.
Note: This question is only visible to respondents who indicate that their school offers water-based swimming instruction to students during the regular school day.

Figure 3.5: Do students receive documentation of their progress in the swimming instruction program (e.g., badges, certificates, report cards)?



Note: This question is only visible to respondents who indicate that their school offers water-based swimming instruction to students during the regular school day.

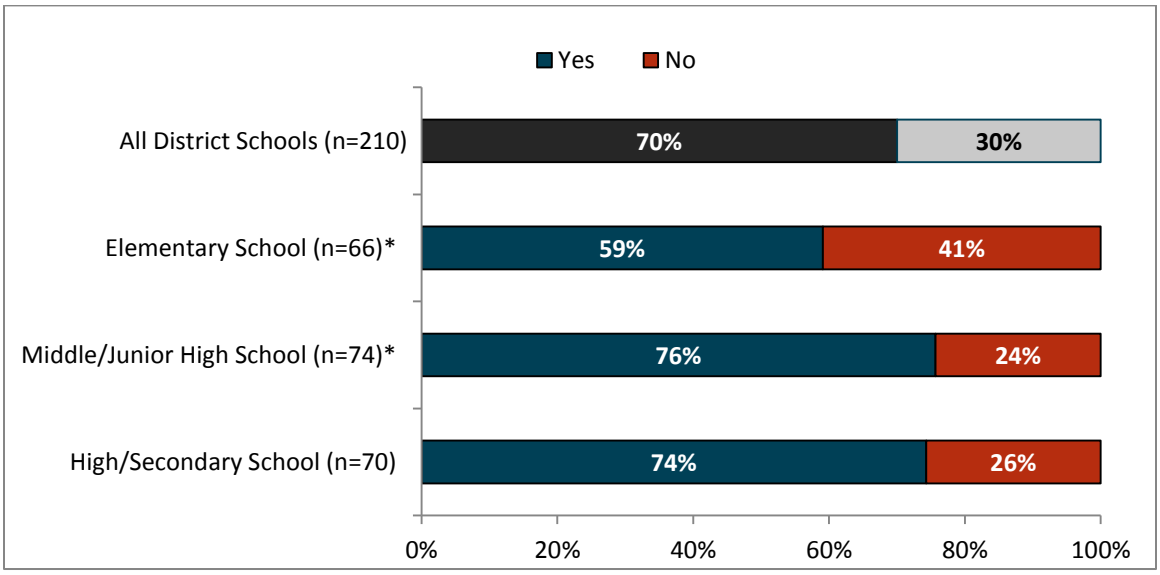
Figure 3.6: Is parent or guardian permission necessary to participate in the school's water-based swimming instruction program?



*Indicates significant differences across school levels.

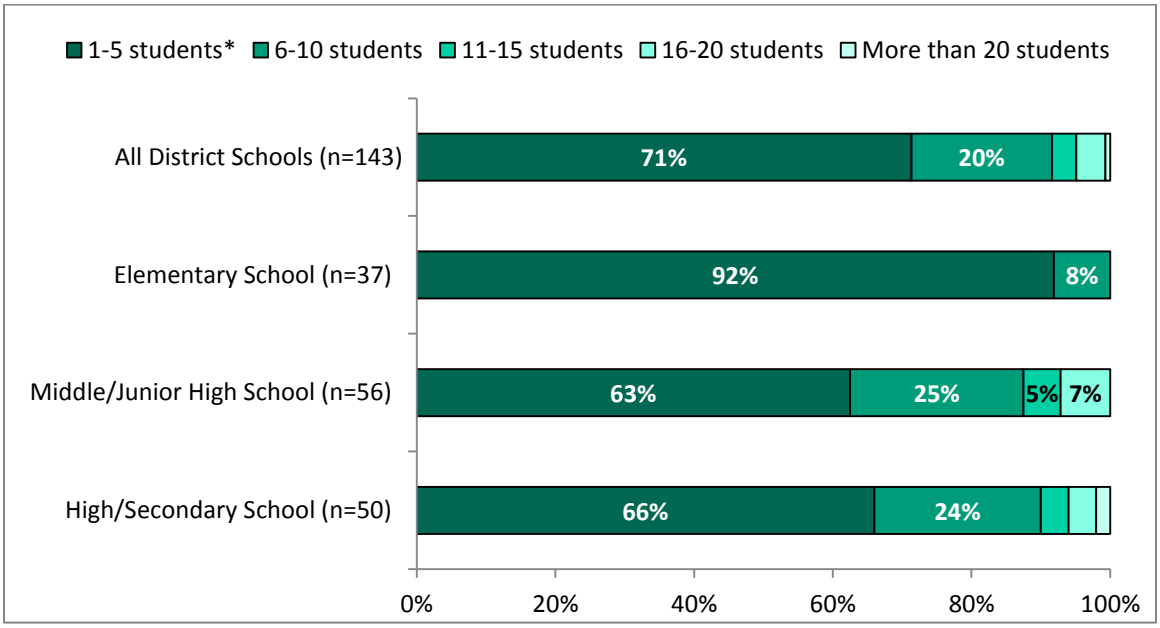
Note: This question is only visible to respondents who indicate that their school offers water-based swimming instruction to students during the regular school day.

Figure 3.7: In the past year, did your school grant any students an exemption from participating in water-based swimming instruction?



*Indicates significant differences across school levels.
Note: This question is only visible to respondents who indicate that their school offers water-based swimming instruction to students during the regular school day.

Figure 3.8: In the past year, how many students received an exemption from participating in water-based swimming instruction?



*Indicates significant differences across school levels.
Note: This question is only visible to respondents who indicate that their school offers water-based swimming instruction to students during the regular school day.

SECTION IV: SWIMMING INSTRUCTION PERSONNEL

This section describes staffing requirements, including staffing ratios and certification, for swimming instruction programs in Minnesota district schools.

STAFFING

For swimming instruction during the school day, nearly 90 percent of schools that provide swimming instruction require the presence of physical education (P.E.) teachers (88 percent) and about half of schools (46 percent) require the presence of lifeguards. Across school levels, nearly all middle schools and high schools require P.E. teachers to be present, compared to 69 percent of elementary schools (Figure 4.1).

Swimming instruction demands a high level of staff involvement, especially for elementary schools. The required staff to student ratio at district schools ranges widely from 1:10 or lower to 1:31 or higher, with slightly more schools falling into the 1:11 to 1:20 range (42 percent). As depicted in Figure 4.2, 68 percent of elementary school swimming programs have a staff to student ratio of 1:15 or lower, whereas the majority of middle school and high school programs have a slightly higher ratio (1:16 to 1:30). This suggests that, given the same number of students, an elementary school may need more staff in order to run a swimming program, compared to higher school levels.

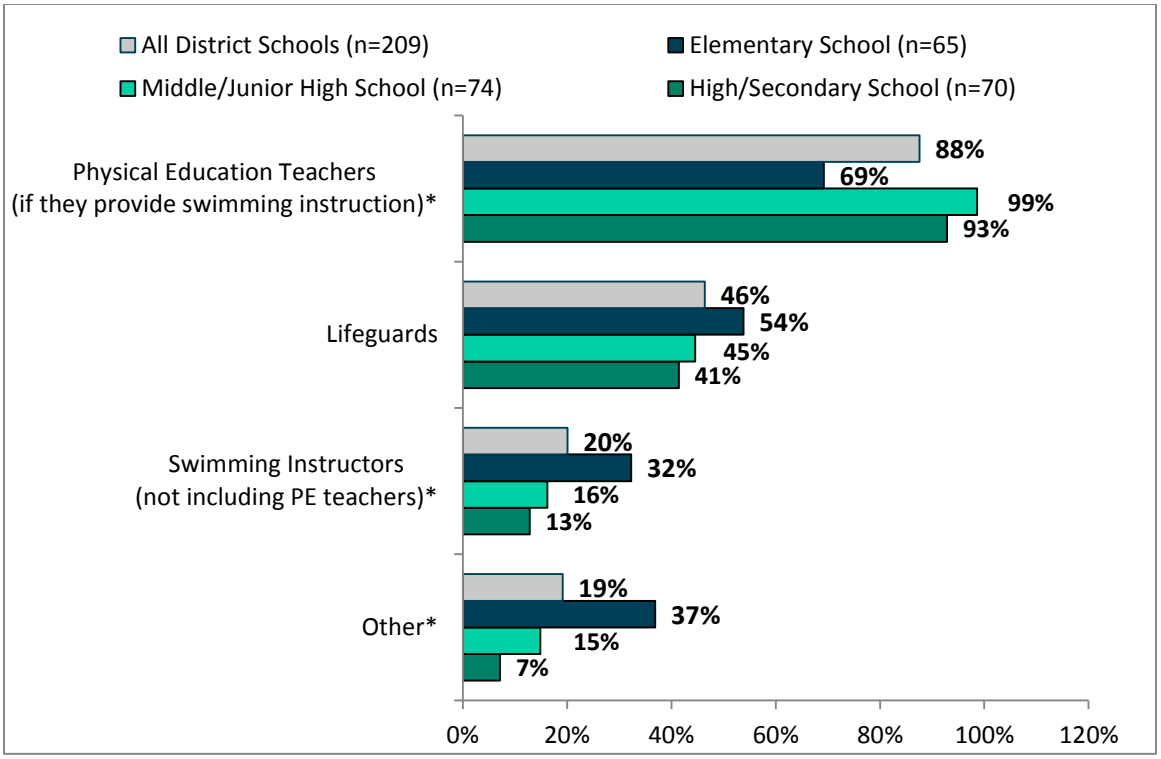
EMPLOYMENT AND CERTIFICATION REQUIREMENTS

Between 70 and 75 percent of district schools that provide swimming instruction directly employ P.E. teachers and pool maintenance staff. A smaller proportion directly employs swimming instructors (19 percent) and lifeguards (37 percent). **Elementary schools generally have fewer directly employed staff than middle schools or high schools**, **as shown in Figure 4.3 to Figure 4.6.** This may be due to the fact that a smaller proportion of elementary schools offer swimming instruction or own swimming pools. **Additionally, schools with swimming pools report a higher percentage of directly employed staff than do those that do not own a pool (Figure 4.7).** Around half of all district schools with swimming programs require onsite facility orientation for newly hired P.E. teachers (48 percent) and swimming instructors (51 percent). A higher proportion, 67 percent, requires lifeguards to participate in onsite orientation (Figure 4.8).

With regards to certification requirements, P.E. teachers must hold a variety of American Red Cross certifications such as lifeguard training (51 percent), CPR/AED (48 percent), and standard first aid (48 percent). The most common certification requirements for swimming instructors are American Red Cross lifeguard training (69 percent) and American Red Cross water safety instructor (69 percent). Lifeguards are generally required to receive American Red Cross lifeguard training (82 percent) on top of all other common trainings (Figure 4.9).

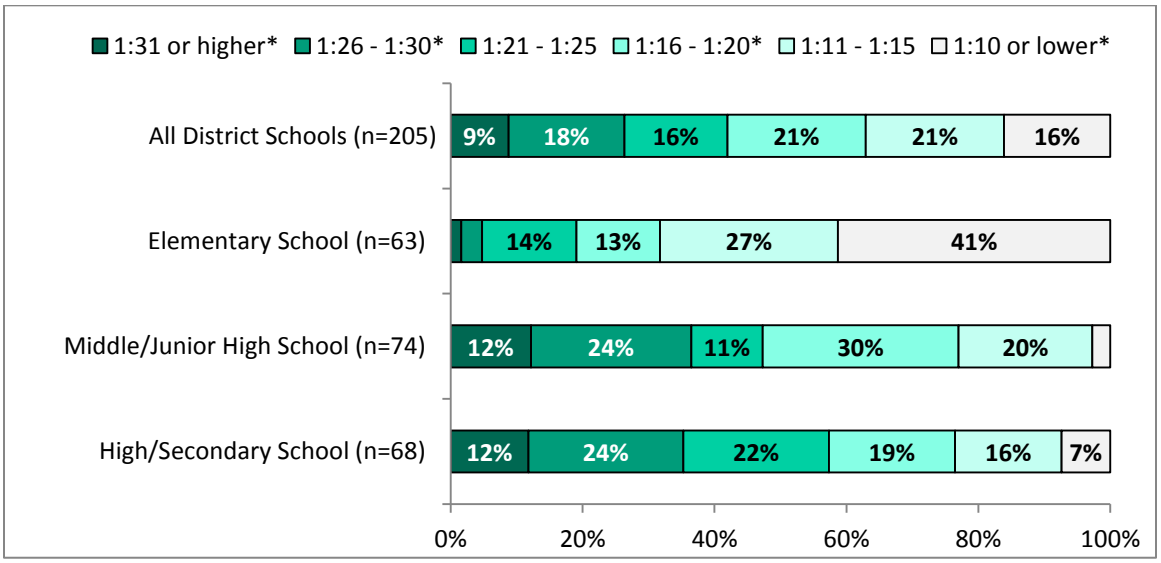
FIGURES

Figure 4.1: Which of the following staff are required to be present for student swimming instruction during the school day? Please select all that apply.



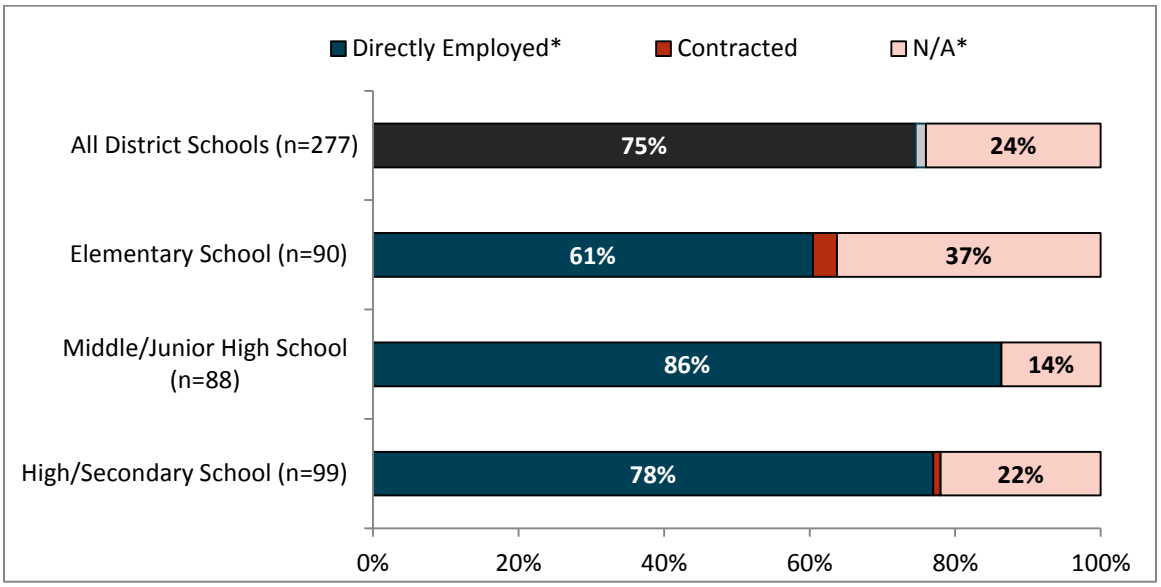
*Indicates significant differences across school levels.
Note: One percent of all district schools indicate "N/A."
Note: This question is only visible to respondents who indicate that their school offers swimming instruction to students during the regular school day.

Figure 4.2: What is the required staff (e.g., lifeguard, instructor) to student ratio for swimming instruction in your school?



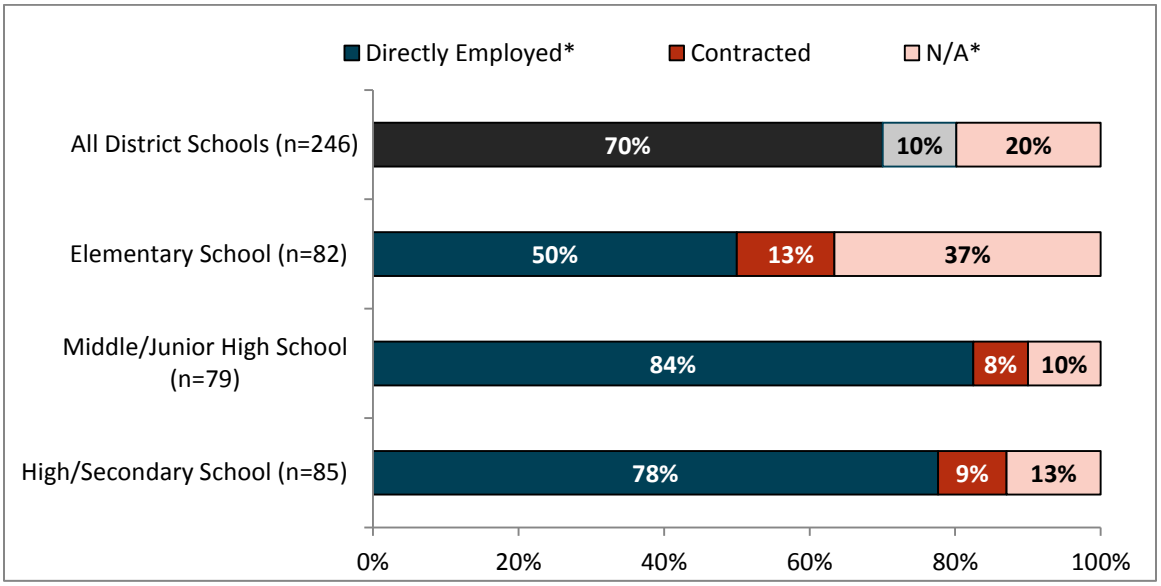
*Indicates significant differences across school levels.

Figure 4.3: Physical Education Teachers



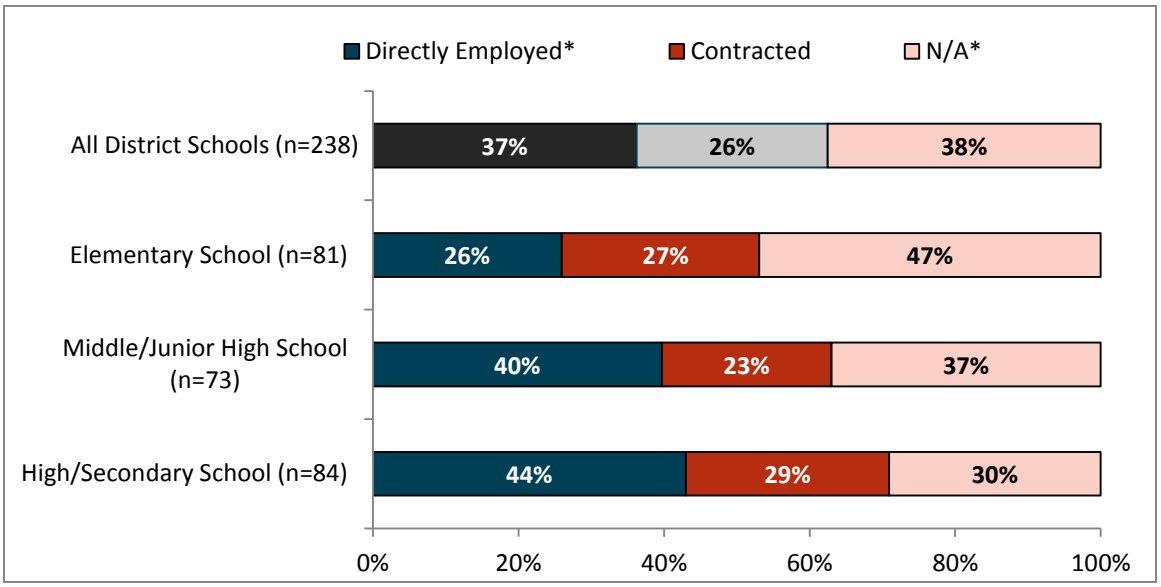
*Indicates significant differences across school levels.

Figure 4.4: Pool Maintenance Staff



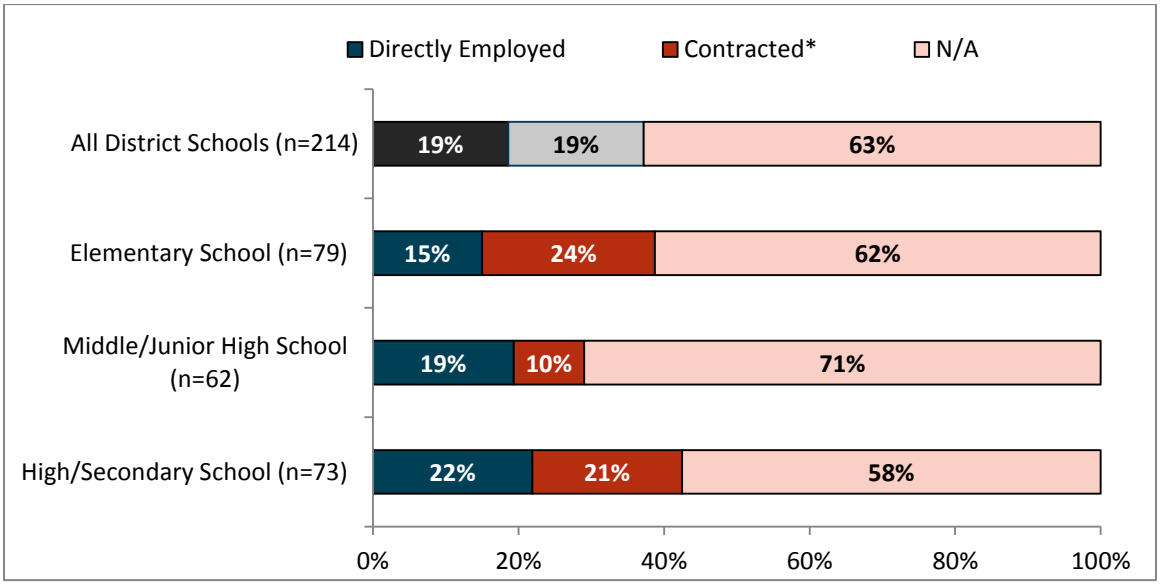
*Indicates significant differences across school levels.

Figure 4.5: Lifeguards



*Indicates significant differences across school levels.

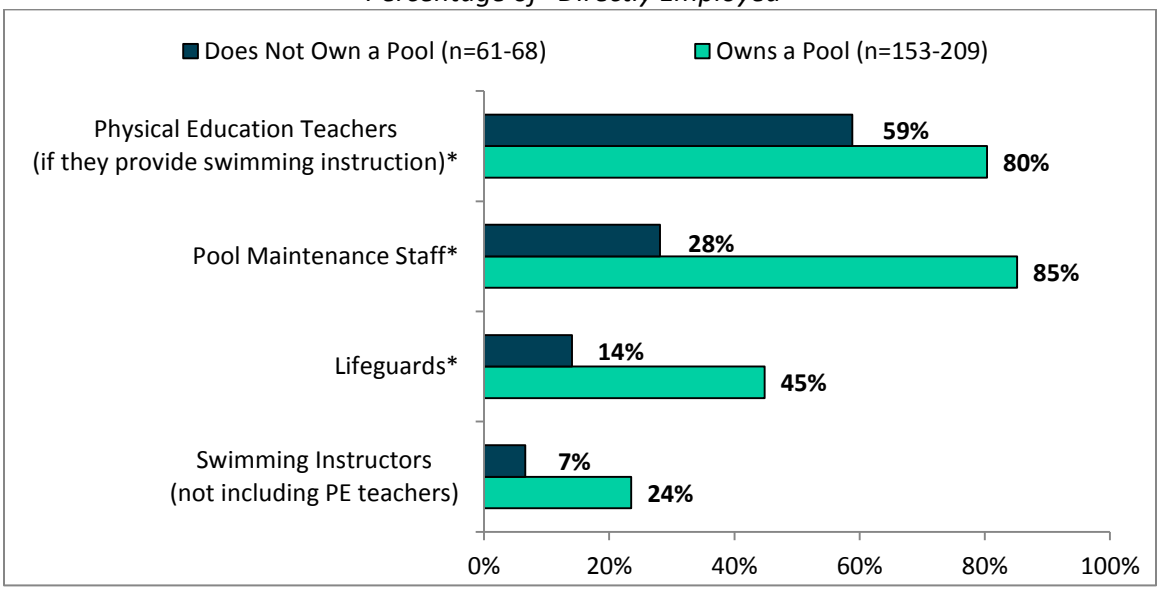
Figure 4.6: Swimming Instructors (not including PE teachers)



*Indicates significant differences across school levels.

Figure 4.7: Personnel Employment by Pool Ownership

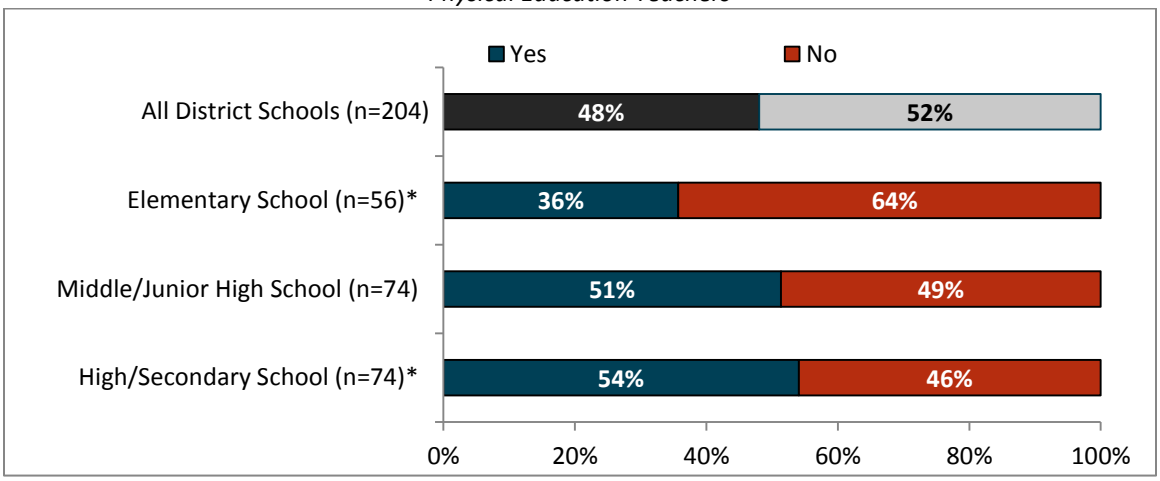
Percentage of "Directly Employed"



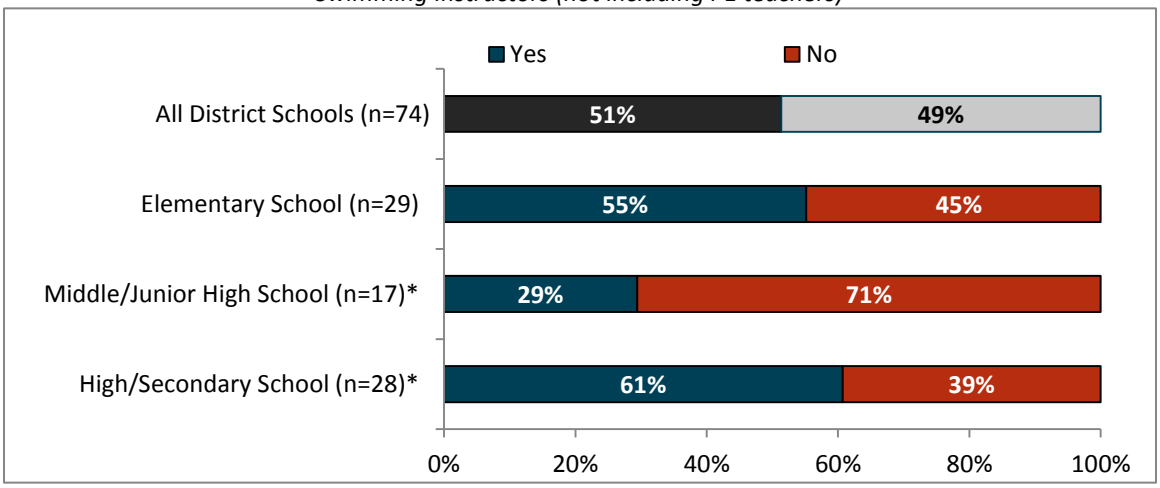
*Indicates significant differences between schools that own a pool and those that do not own a pool.

Figure 4.8: Does your school require onsite facility orientation for newly hired…?

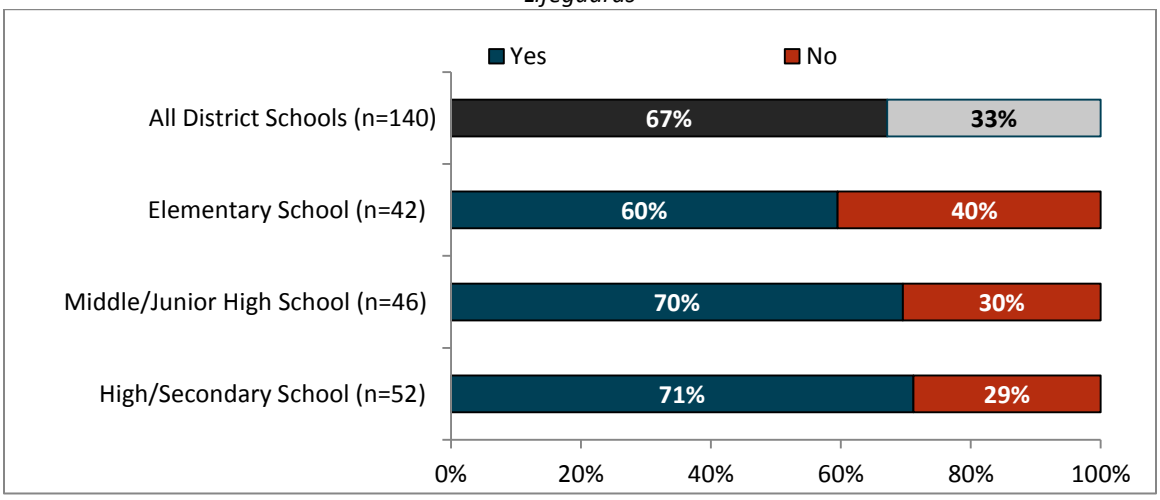
Physical Education Teachers



Swimming Instructors (not including PE teachers)

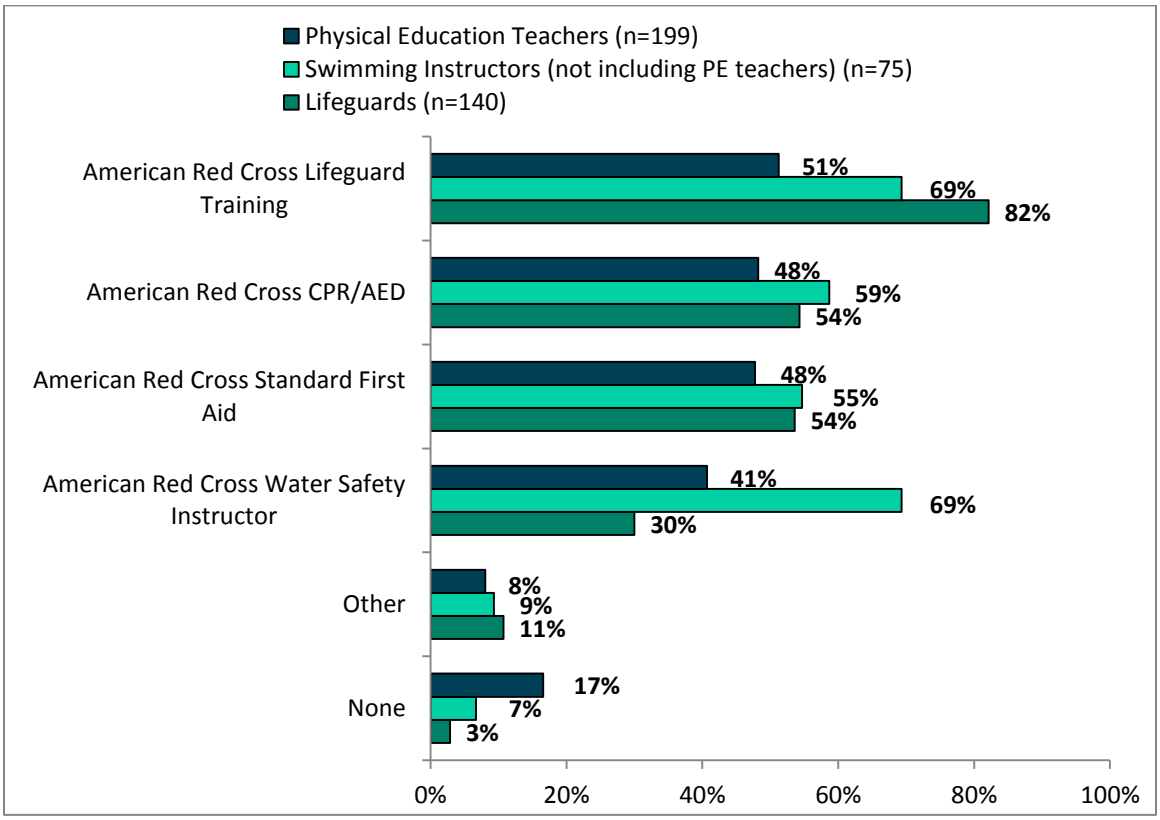


Lifeguards



*Indicates significant differences across school levels.

Figure 4.9: What are the certification requirements for the following staff at your school? Please select all that apply.



SECTION V: SWIMMING INSTRUCTION COSTS

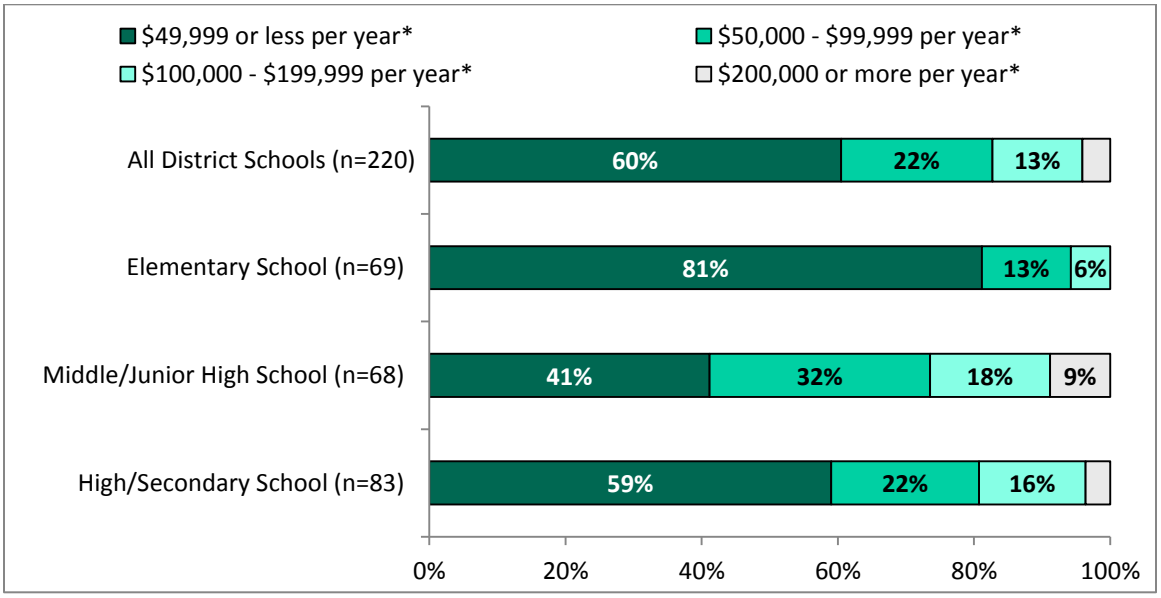
On average, the cost of running a swimming program at a district school is less than $50,000 per year (60 percent), but varies across school levels. Specifically, 81 percent of elementary schools that provide swimming instruction or own a pool report $49,999 or less per year, compared to 41 and 59 percent of middle schools and high schools, respectively. Thirty-two and 22 percent of middle schools and high schools, respectively, report an operation cost of $50,000 to $99,999 per year (Figure 5.1). Further, more elementary schools (52 percent) with swimming programs indicate that the total cost to run a swimming program is not significant, compared to fewer than 30 percent of middle schools and high schools (Figure 5.2).

The higher costs reported by middle schools and high schools are likely due to a range of factors, such as owning a pool and directly employing more staff. For instance, schools that own a pool report significantly higher operational costs and perceive the total cost of a swimming program to be more significant to the school, as compared to schools without a pool (Figure 5.3 and Figure 5.4). As demonstrated in Figure 5.5, staffing, pool maintenance, and utilities are among the largest expenses across all school levels. Notably, transportation is ranked higher for elementary schools compared to higher school levels.

Lastly, the largest funding sources for district school swimming programs are state funding, local funding, and revenue from pool fees. However, middle schools rely substantially on federal funding, in addition to state funding and local funding (Figure 5.6).

FIGURES

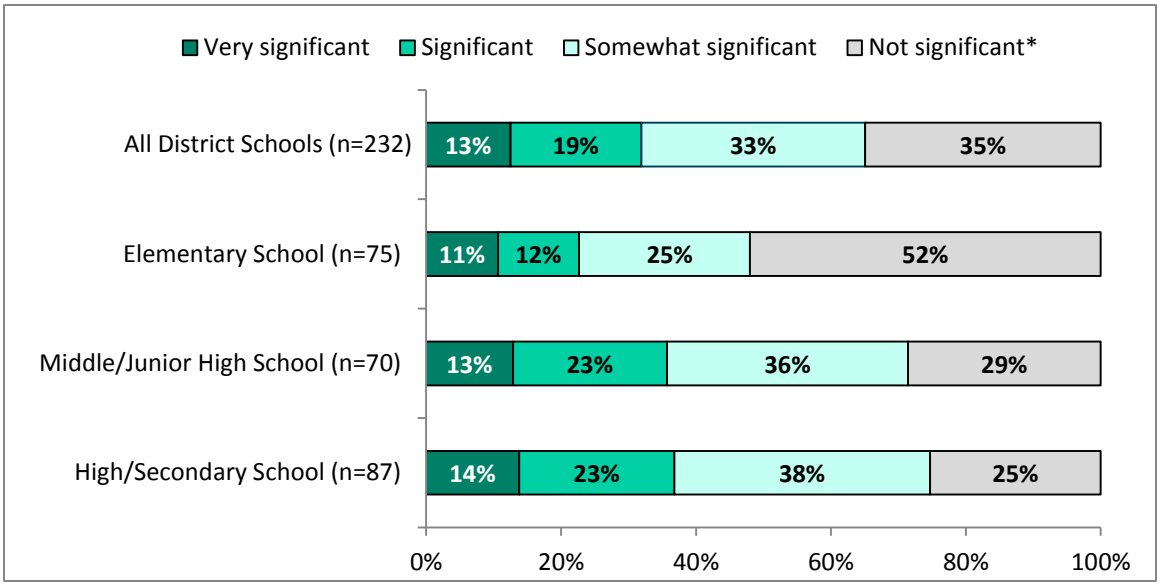
Figure 5.1: Operation Costs of Running the Swimming Program



*Indicates significant differences across school levels.

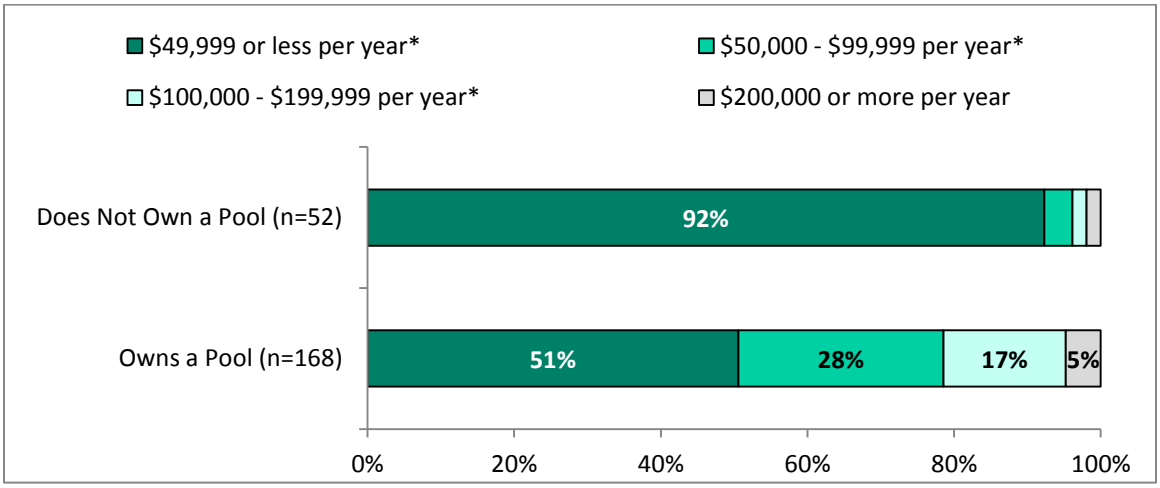
Note: This question is only visible to respondents who indicate that their school offers swimming instruction to students during the regular school day or that their school owns/leases a pool.

Figure 5.2: The total cost to the school to run your swimming program is...



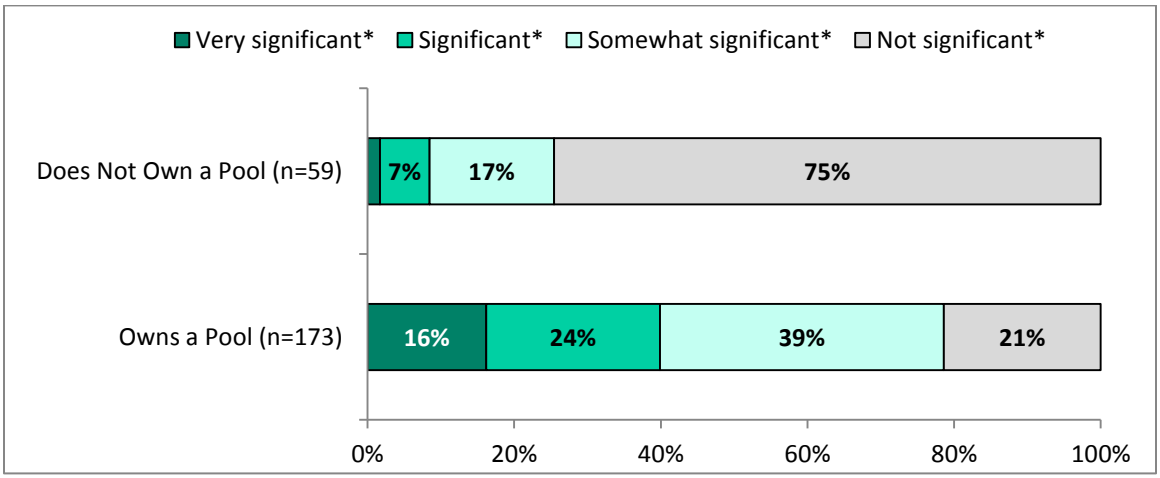
*Indicates significant differences across school levels.

Figure 5.3: Operation Costs of Running the Swimming Program by Pool Ownership



*Indicates significant differences between schools that own a pool and those that do not own a pool.

Figure 5.4: The total cost to the school to run your swimming program is... (by Pool Ownership)



*Indicates significant differences between schools that own a pool and those that do not own a pool.

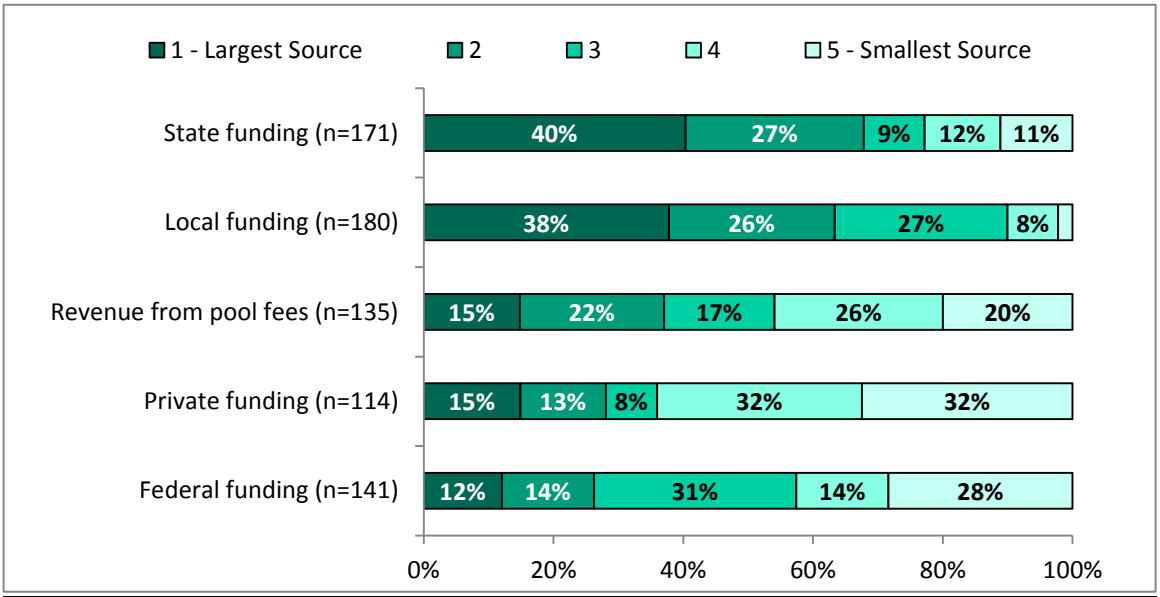
Figure 5.5: Expenses of Running the Swimming Program

Rank Items from Largest to Smallest Expenses

Expenses	Elementary School (n=11-40)	Middle/Junior High School (n=6-57)	High/Secondary School (n=3-70)
Staffing	158	155	189
Pool maintenance	88	157	200
Utilities	90	139	168
Insurance	58	65	110
Transportation	109	22	29
Curriculum	38	24	44
Pool rental	38	14	30
Equipment rental/purchase	27	26	26
Other	27	19	10

Note: The scores reflect the sum of all weighted rank counts for each item.
Items are sorted by weighted rank across all district schools, which is calculated by adding the products of rank count and weights (i.e., 1 - Largest Expense: 4pt, 4 - Smallest Expense: 1pt).

Figure 5.6: Swimming Program Funding Sources



Rank	Elementary School (N=34-56)	Middle/Junior High School (N=29-53)	High/Secondary School (N=51-74)
1	Local funding	State funding	Local funding
2	State funding	Local funding	State funding
3	Revenue from pool fees	Federal funding	Revenue from pool fees
4	Federal funding	Revenue from pool fees	Federal funding
5	Private funding	Private funding	Private funding

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