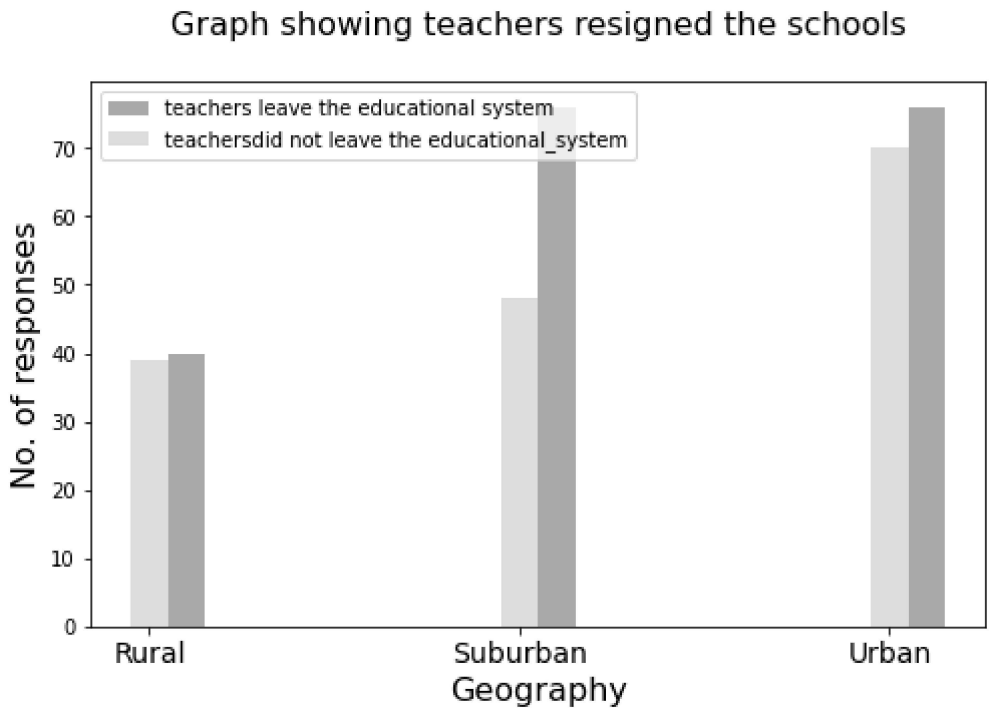
In [1]:
```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np

table1 = pd.read_csv("secondary data (2).csv")
table1
```

Out[1]:

	geography	enrolled_students_to_skiped_school(3-17yrs)	students_who_stopped_enrolling_in_primary_e
0	Suburban	1	
1	Suburban	1	
2	Urban	1	
3	Suburban	0	
4	Suburban	1	
...	...	...	
344	Suburban	0	
345	Suburban	1	
346	Suburban	0	
347	Suburban	1	
348	Suburban	1	

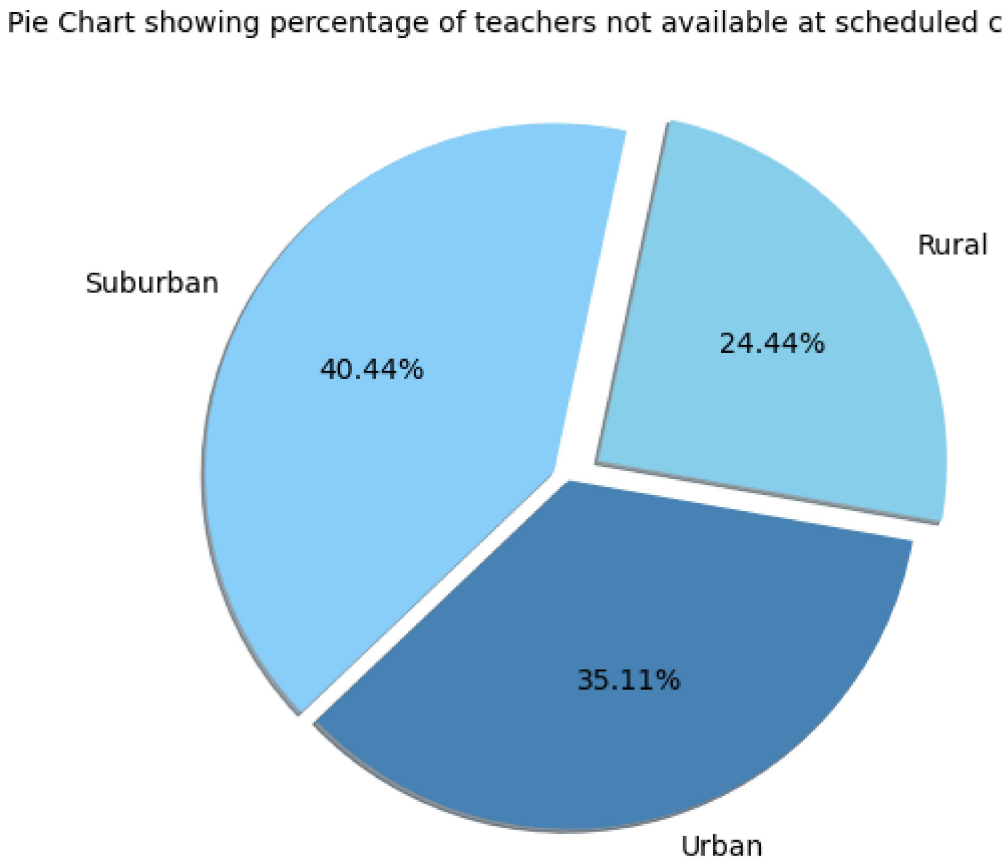
349 rows × 14 columns

In [6]:
```
geography = ['Rural','Suburban','Urban']

one = [40, 76, 76]
zero = [39, 48, 70]


plt.figure(figsize=(8, 5))
X_axis = np.arange(len(geography))
plt.bar(X_axis+0.1, one, 0.1, label = 'teachers leave the educational system'
plt.bar(X_axis, zero, 0.1, label = 'teachersdid not leave the educational_sys

plt.xticks(X_axis, geography, fontsize = 14)
plt.xlabel("Geography", fontsize = 16)
plt.ylabel("No. of responses", fontsize = 16)
plt.title("Graph showing teachers resigned the schools", fontsize = 16, pad =
plt.legend()
plt.show()
```

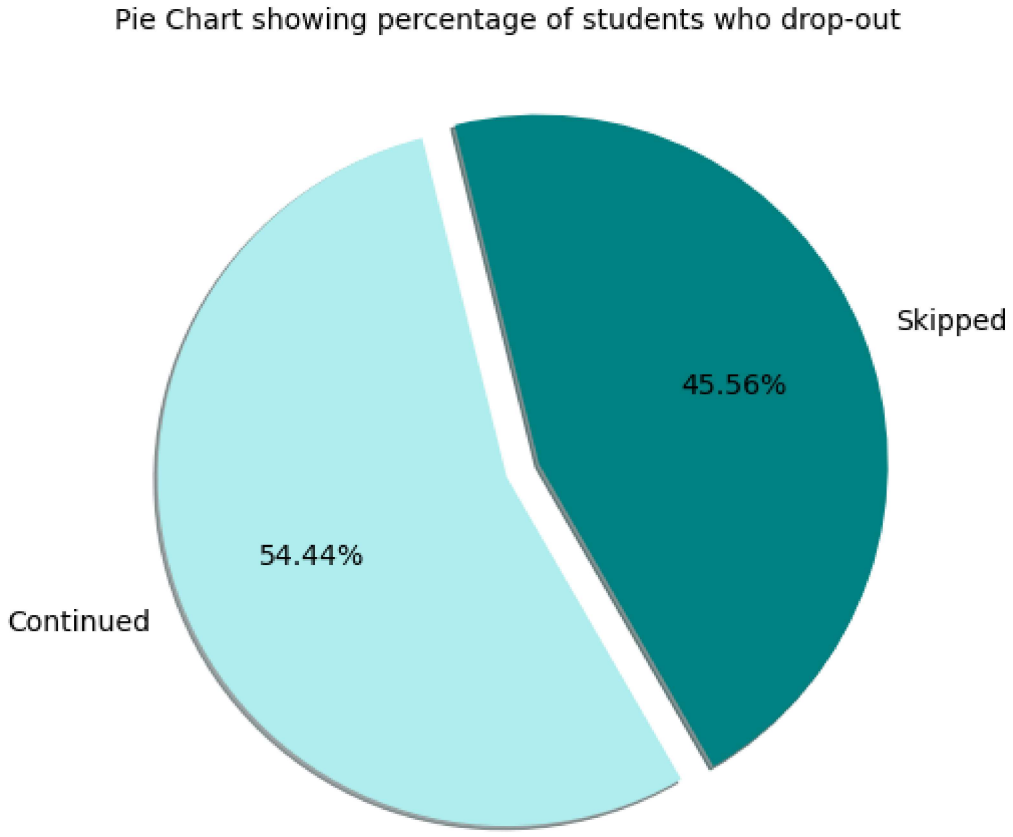


In [16]:

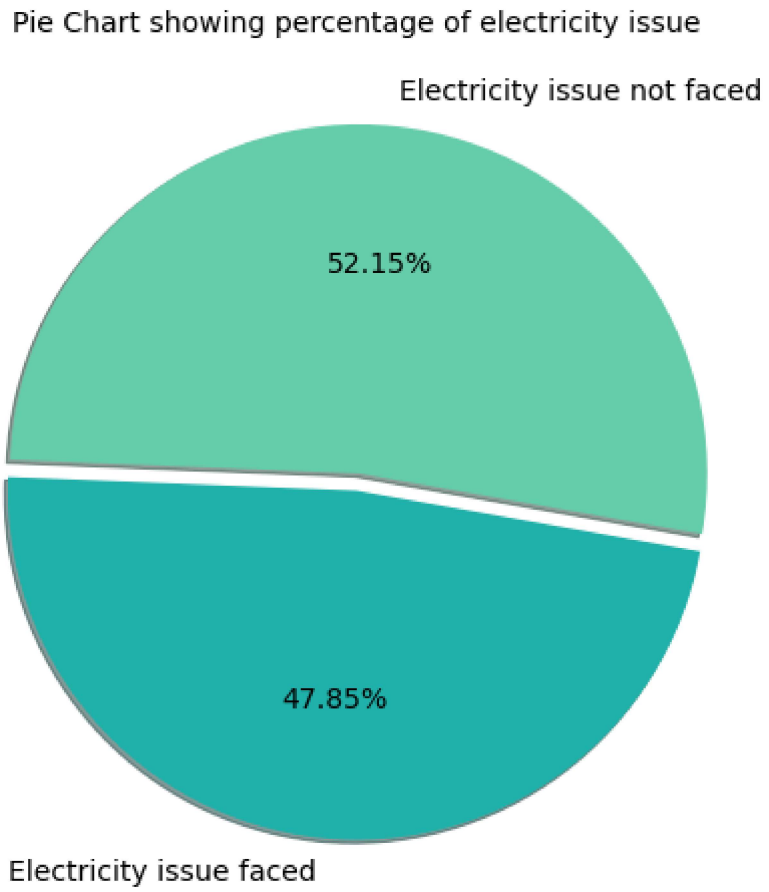
```
geography = ["Rural", "Suburban", "Urban"]
responses = [55, 91, 79]
colors = ["skyblue", "lightskyblue", "steelblue"]
textprops = {"fontsize":14}
explode = [0.2,0.1, 0]
plt.pie(responses, labels = geography, colors = colors, textprops =textprops,
plt.title("Pie Chart showing percentage of teachers not available at schedule
plt.show()
```



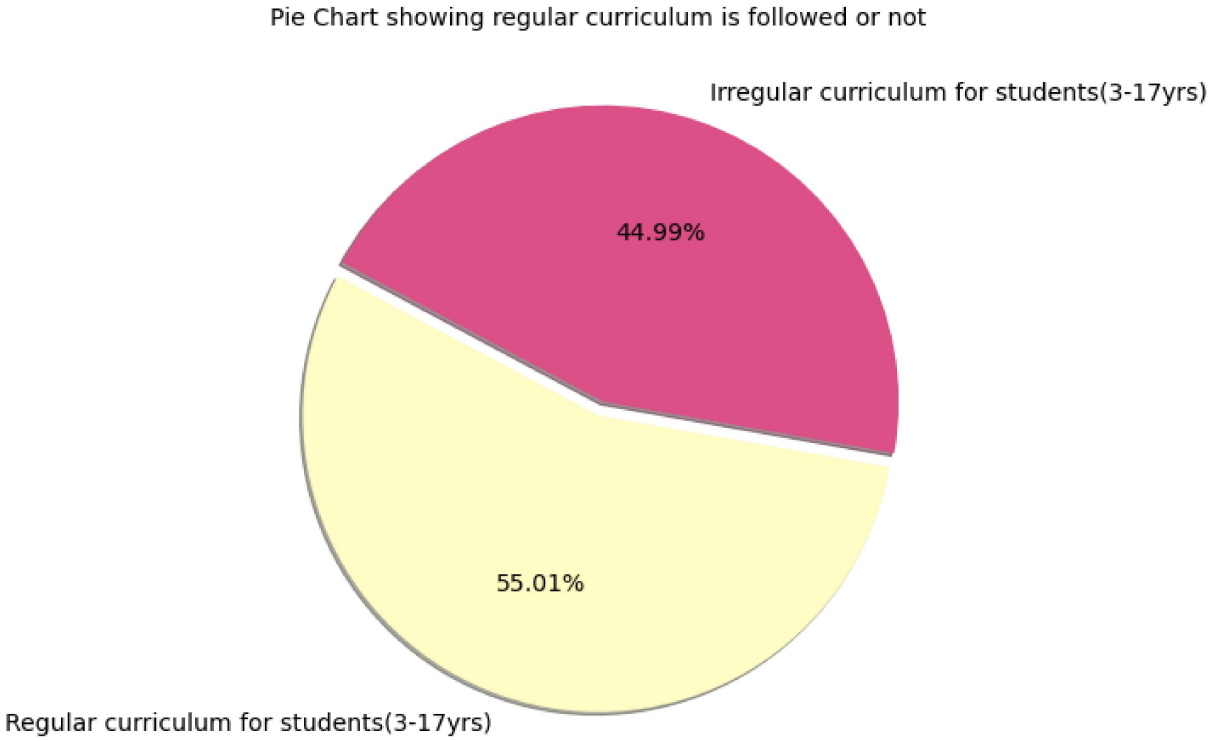
In [9]:
```
geography = ["Skipped", "Continued"]
responses = [159, 190]
colors = ["teal", "paleturquoise"]
textprops = {"fontsize":14}
explode = [0.2,0]
plt.pie(responses, labels = geography, colors = colors, textprops =textprops,
plt.title("Pie Chart showing percentage of students who drop-out", pad=115, f
plt.show()
```



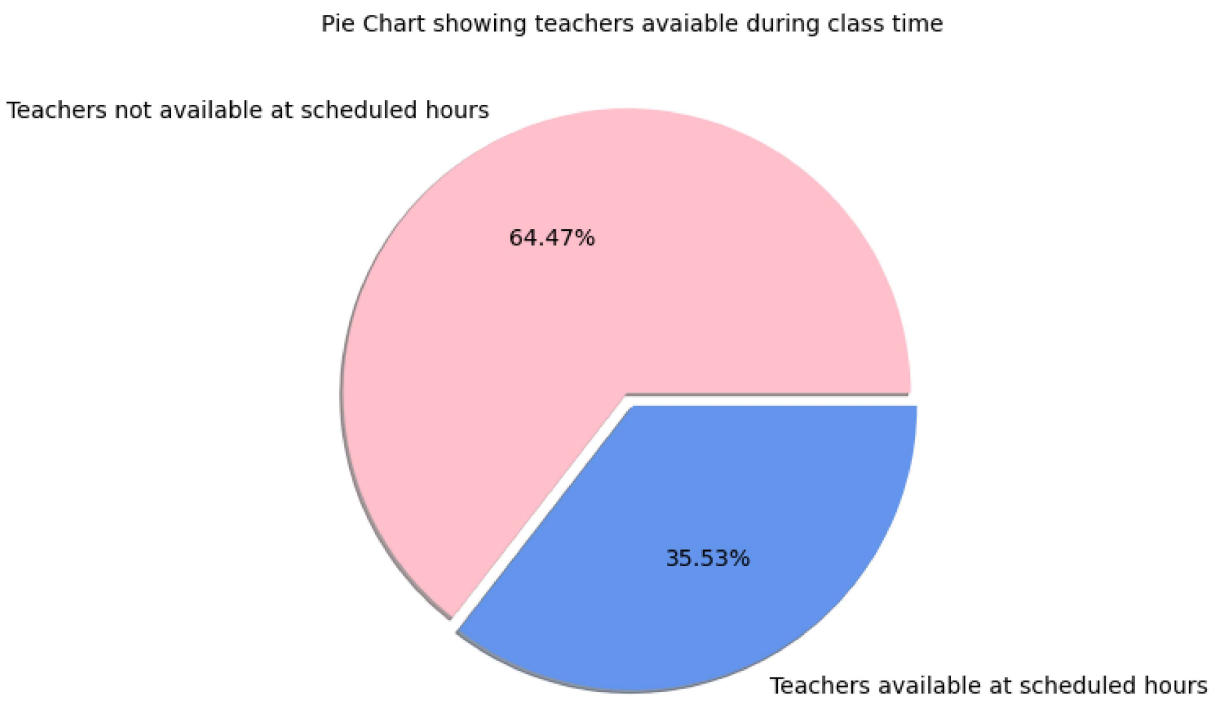
In [135]:
```
geography = ["Electricity issue not faced", "Electricity issue faced"]
responses = [182, 167]
explode = [0.1,0]
colors = ["mediumaquamarine", "lightseagreen"]
textprops = {"fontsize":14}
explode = [0.1,0]
plt.pie(responses, labels = geography, colors = colors, textprops =textprops,
plt.title("Pie Chart showing percentage of electricity issue", pad=120, fonts
plt.show()
```



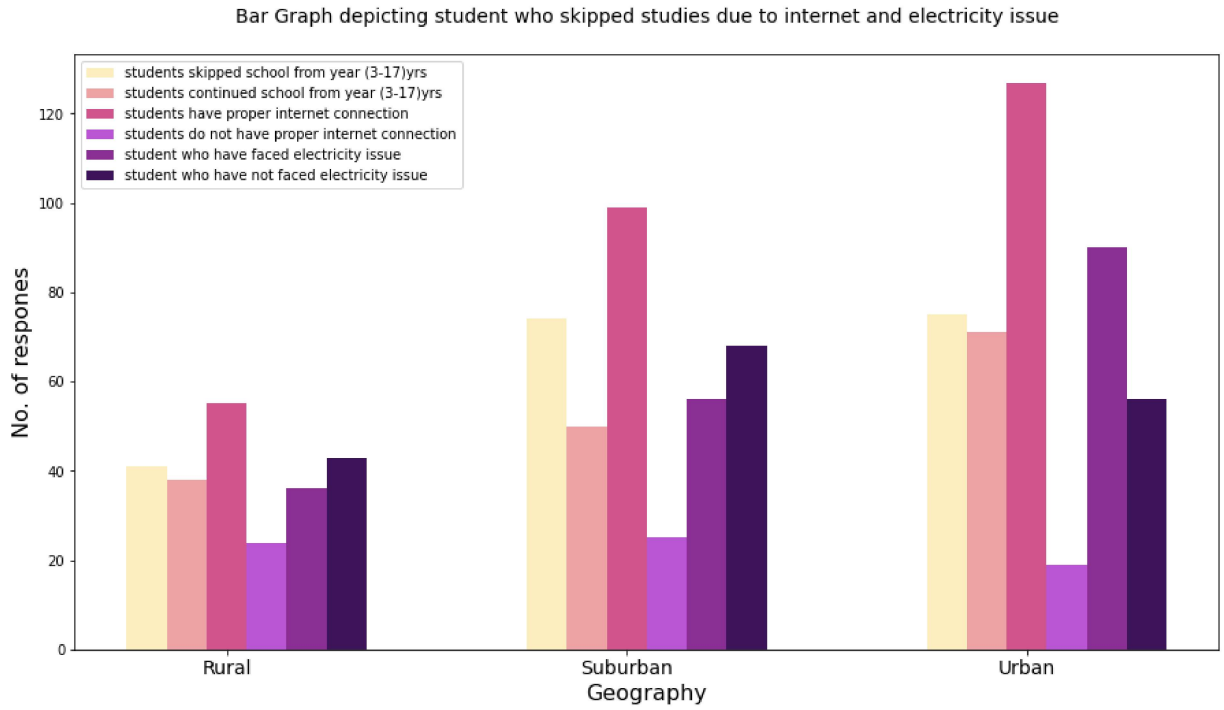
In [125]:
```
geography = ["Irregular curriculum for students(3-17yrs)", "Regular curriculu
responses = [157, 192]
explode = [0.1,0]
colors = ["#db5186", '#fefbc4']
textprops = {"fontsize":14}
explode = [0.1,0]
plt.pie(responses, labels = geography, colors = colors, textprops =textprops,
plt.title("Pie Chart showing regular curriculum is followed or not", pad=120,
plt.show()
```



In [108]:
```
geography = ["Teachers not available at scheduled hours", "Teachers available
responses = [225, 124 ]
explode = [0.1,0]
colors = ["pink", 'cornflowerblue']
textprops = {"fontsize":14}
plt.pie(responses, labels = geography, colors = colors, textprops =textprops,
plt.title("Pie Chart showing teachers avaiable during class time", pad=120, f
plt.show()
```

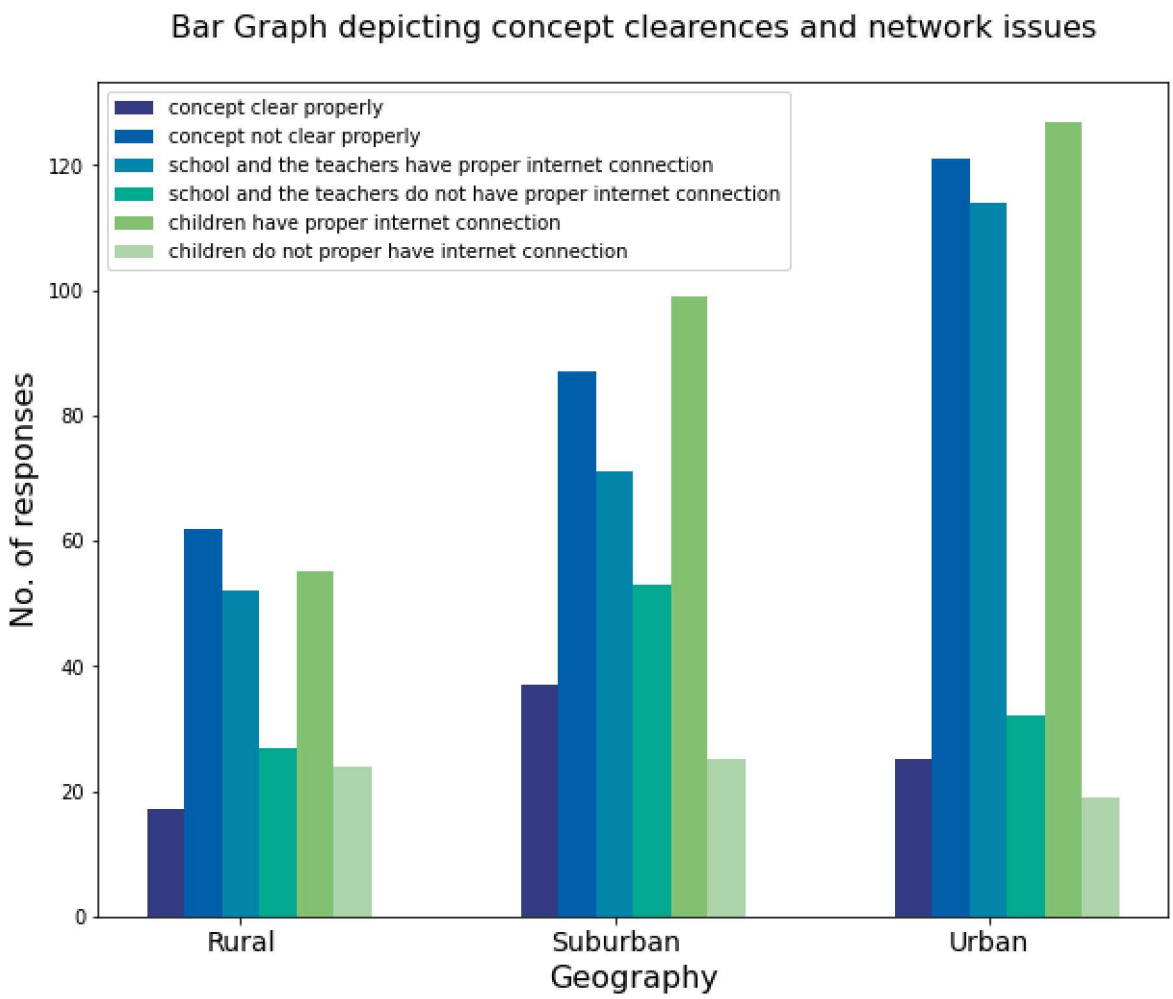


In [7]:
```
geography = ['Rural','Suburban','Urban']

oneen = [41, 74, 75]
zeroen = [38, 50, 71]

onec = [55, 99, 127]
zeroc = [24, 25, 19]

oneel = [36, 56, 90]
zeroel = [43, 68, 56]

plt.figure(figsize=(15, 8))
X_axis = np.arange(len(geography))
plt.bar(X_axis-0.5, oneen, 0.1, label = 'students skipped school from year (3
plt.bar(X_axis-0.4, zeroen, 0.1, label = 'students continued school from year
plt.bar(X_axis-0.3, onec, 0.1, label = 'students have proper internet connect
plt.bar(X_axis-0.2, zeroc, 0.1, label = 'students do not have proper internet
plt.bar(X_axis-0.1, oneel, 0.1, label = 'student who have faced electricity i
plt.bar(X_axis, zeroel, 0.1, label = 'student who have not faced electricity
plt.xticks(X_axis-0.3, geography, fontsize = 14)
plt.xlabel("Geography", fontsize = 16)
plt.ylabel("No. of respones", fontsize = 16)
plt.title("Bar Graph depicting student who skipped studies due to internet an
plt.legend()
plt.show()
```

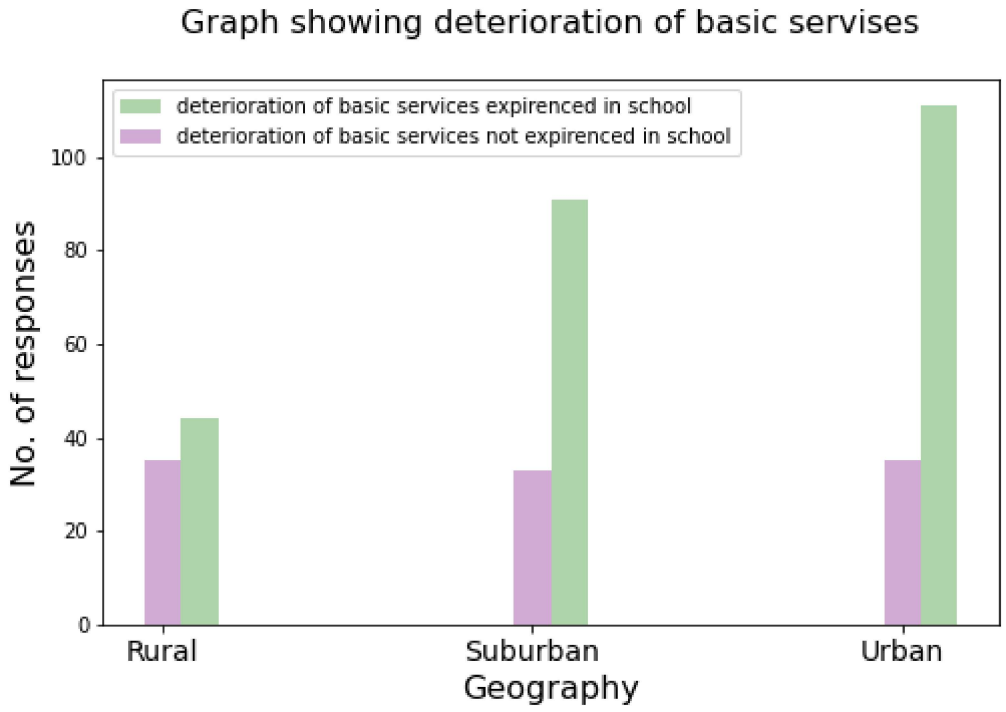


In [152]:

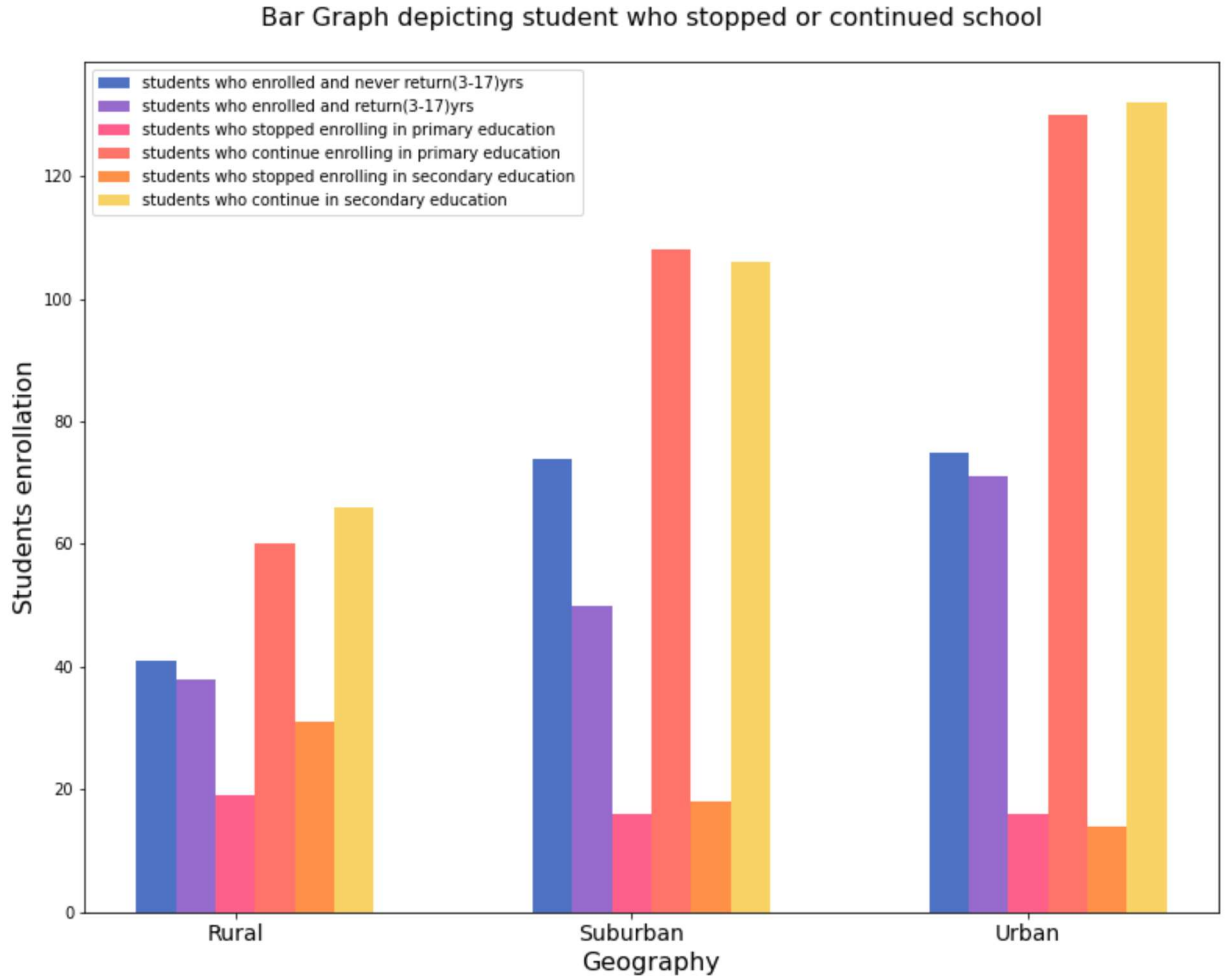
```
geography = ['Rural','Suburban','Urban']

onec = [17, 37, 25]
zeroc = [62, 87, 121]

oneti = [52, 71, 114]
zeroti = [27, 53, 32]

onesi = [55, 99, 127]
zerosi = [24, 25, 19]

plt.figure(figsize=(10, 8))
X_axis = np.arange(len(geography))

plt.bar(X_axis-0.5, onec, 0.1, label = 'concept clear properly ',color="#333a
plt.bar(X_axis-0.4, zeroc, 0.1, label = 'concept not clear properly ', color
plt.bar(X_axis-0.3, oneti, 0.1, label = 'school and the teachers have proper
plt.bar(X_axis-0.2, zeroti, 0.1, label = 'school and the teachers do not have
plt.bar(X_axis-0.1, onesi, 0.1, label = 'children have proper internet connec
plt.bar(X_axis, zerosi, 0.1, label = 'children do not proper have internet co
plt.xticks(X_axis-0.3, geography, fontsize = 14)
plt.xlabel("Geography", fontsize = 16)
plt.ylabel("No. of responses", fontsize = 16)
plt.title("Bar Graph depicting concept clearences and network issues", fontsi
plt.legend()
plt.show()
```


Bar Graph depicting concept clearences and network issues
concept clear properly
concept not clear properly
school and the teachers have proper internet connection
school and the teachers do not have proper internet connection
children have proper internet connection
children do not proper have internet connection
No. of responses
0
20
40
60
80
100
120
Rural
Suburban
Urban
Geography

In [11]:
```
geography = ['Rural','Suburban','Urban']

one = [44, 91, 111]
zero = [35, 33, 35]


plt.figure(figsize=(8, 5))
X_axis = np.arange(len(geography))
plt.bar(X_axis+0.1, one, 0.1, label = 'deterioration of basic services expire
plt.bar(X_axis, zero, 0.1, label = 'deterioration of basic services not expir

plt.xticks(X_axis, geography, fontsize = 14)
plt.xlabel("Geography", fontsize = 16)
plt.ylabel("No. of responses", fontsize = 16)
plt.title("Graph showing deterioration of basic servises", fontsize = 16, pad
plt.legend()
plt.show()
```

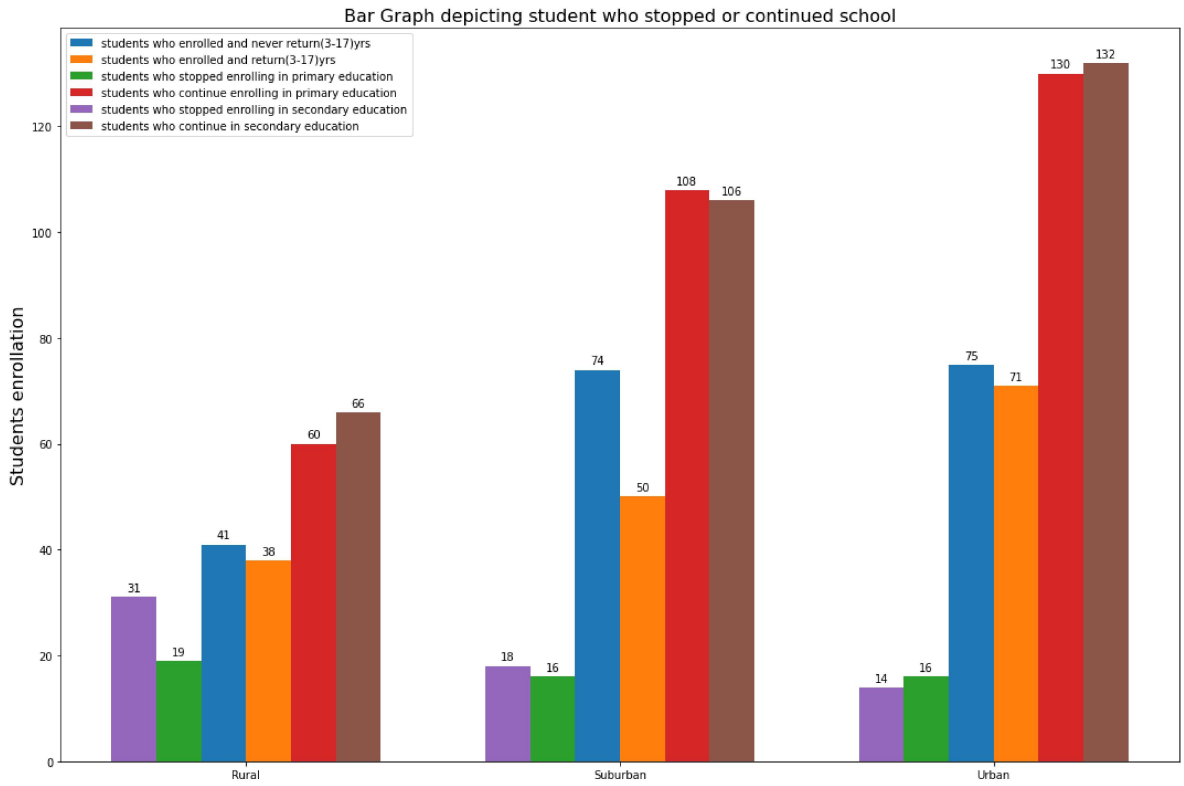


In [157]:
```
geography = ['Rural','Suburban','Urban']

one = [41, 74, 75]
zero = [38, 50, 71]
onep = [19, 16, 16]
zerop = [60, 108, 130]
ones = [31, 18, 14]
zeros = [66, 106, 132]

plt.figure(figsize=(13, 10))
X_axis = np.arange(len(geography))
plt.bar(X_axis-0.5, one, 0.1, label = 'students who enrolled and never return
plt.bar(X_axis-0.4, zero, 0.1, label = 'students who enrolled and return(3-17
plt.bar(X_axis-0.3, onep, 0.1, label = 'students who stopped enrolling in pri
plt.bar(X_axis-0.2, zerop, 0.1, label = 'students who continue enrolling in p
plt.bar(X_axis-0.1, ones, 0.1, label = 'students who stopped enrolling in sec
plt.bar(X_axis, zeros, 0.1, label = 'students who continue in secondary educa
plt.xticks(X_axis-0.3, geography, fontsize = 14)
plt.xlabel("Geography", fontsize = 16)
plt.ylabel("Students enrollation", fontsize = 16)
plt.title("Bar Graph depicting student who stopped or continued school", font
plt.legend()
plt.show()
```



In [55]:

```
import matplotlib
import matplotlib.pyplot as plt
import numpy as np


geography = ['Rural','Suburban','Urban']
one = [41, 74, 75]
zero = [38, 50, 71]
onep = [19, 16, 16]
zerop = [60, 108, 130]
ones = [31, 18, 14]
zeros = [66, 106, 132]


x = np.arange(len(geography))  # the label locations
width = 0.12  # the width of the bars

fig, ax = plt.subplots(figsize=(15,10))
rects1 = ax.bar(x - width/2, one, width, label = 'students who enrolled and n
rects2 = ax.bar(x + width/2, zero, width, label = 'students who enrolled and
rects3 = ax.bar(x - width*1.5, onep, width, label = 'students who stopped enr
rects4 = ax.bar(x + width*1.5, zerop, width, label ='students who continue en
rects5 = ax.bar(x - width*2.5, ones, width, label = 'students who stopped enr
rects6 = ax.bar(x + width*2.5, zeros, width, label = 'students who continue i
# Add some text for labels, title and custom x-axis tick labels, etc.
ax.set_ylabel("Students enrollation", fontsize = 16)
ax.set_title("Bar Graph depicting student who stopped or continued school", f
ax.set_xticks(x)
ax.set_xticklabels(geography)
ax.legend()


def autolabel(rects):
    """Attach a text label above each bar in *rects*, displaying its height."
    for rect in rects:
        height = rect.get_height()
        ax.annotate('{}'.format(height),
                    xy=(rect.get_x() + rect.get_width() / 2, height),
                    xytext=(0, 3),  # 3 points vertical offset
                    textcoords="offset points",
                    ha='center', va='bottom')


autolabel(rects1)
autolabel(rects2)
autolabel(rects3)
autolabel(rects4)
autolabel(rects5)
autolabel(rects6)
fig.tight_layout()

plt.show()
```


Bar Graph depicting student who stopped or continued school
students who enrolled and never return(3-17)yrs
students who enrolled and return(3-17)yrs
students who stopped enrolling in primary education
students who continue enrolling in primary education
students who stopped enrolling in secondary education
students who continue in secondary education
Students enrollation
0
20
40
60
80
100
120
31
19
41
38
60
66
18
16
74
50
108
106
14
16
75
71
130
132
Rural
Suburban
Urban

In [ ]: