In [3]:

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
```

In [4]:

```
df= pd.read_csv("dm_office_sales.csv")
```

In [5]:

```
df
```

Out[5]:

	division	level of education	training level	work experience	salary	sales
0	printers	some college	2	6	91684	372302
1	printers	associate's degree	2	10	119679	495660
2	peripherals	high school	0	9	82045	320453
3	office supplies	associate's degree	2	5	92949	377148
4	office supplies	high school	1	5	71280	312802
...	...	...	...	...	...	...
995	computer hardware	associate's degree	1	1	70083	177953
996	computer software	associate's degree	1	0	68648	103703
997	peripherals	associate's degree	2	8	108354	450011
998	peripherals	associate's degree	2	3	79035	330354
999	computer hardware	some college	0	9	108444	364436

1000 rows × 6 columns

In [6]:

```
df.head()
```

Out[6]:

	division	level of education	training level	work experience	salary	sales
0	printers	some college	2	6	91684	372302
1	printers	associate's degree	2	10	119679	495660
2	peripherals	high school	0	9	82045	320453
3	office supplies	associate's degree	2	5	92949	377148
4	office supplies	high school	1	5	71280	312802

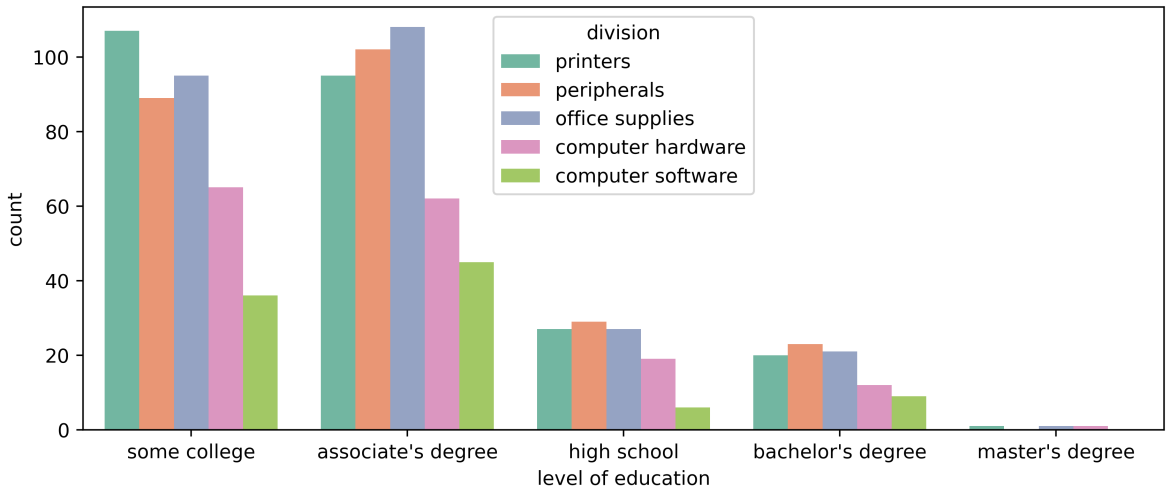
countplot

In [19]:

```
plt.figure(figsize=(10,4),dpi=400)
sns.countplot(data=df,x="level of education",
              hue="division",palette="Set2")
#plt.ylim=(0,1000)
```

Out[19]:

```
<AxesSubplot:xlabel='level of education', ylabel='count'>
```



In [13]:

```
df["level of education"].value_counts()
```

Out[13]:

```
associate's degree    412
some college          392
high school           108
bachelor's degree      85
master's degree         3
Name: level of education, dtype: int64
```

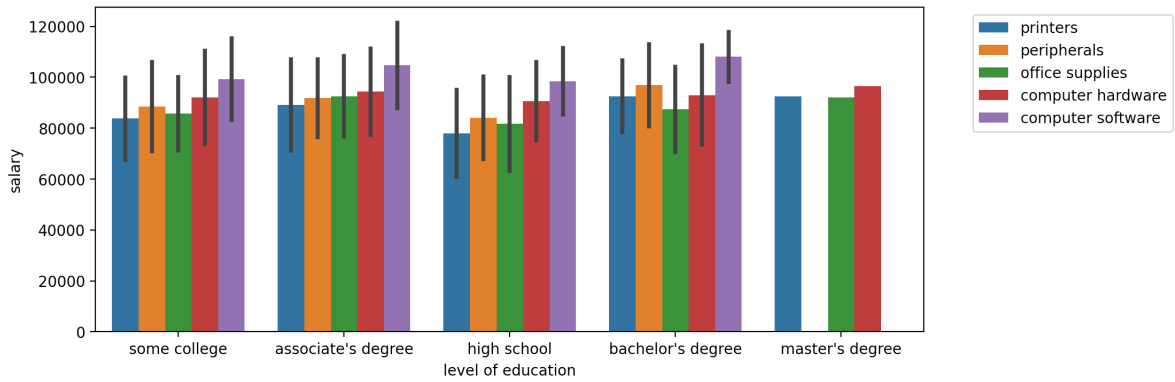
barplot

In [24]:

```
plt.figure(figsize=(10,4),dpi=200)
sns.barplot(data=df,x="level of education",y="salary",
            estimator=np.mean,ci="sd",hue="division")
plt.legend(bbox_to_anchor=(1.05,1))
```

Out[24]:

```
<matplotlib.legend.Legend at 0x1349770cf70>
```



In [25]:

```
df= pd.read_csv("dm_office_sales.csv")
df
```

Out[25]:

	division	level of education	training level	work experience	salary	sales
0	printers	some college	2	6	91684	372302
1	printers	associate's degree	2	10	119679	495660
2	peripherals	high school	0	9	82045	320453
3	office supplies	associate's degree	2	5	92949	377148
4	office supplies	high school	1	5	71280	312802
...	...	...	...	...	...	...
995	computer hardware	associate's degree	1	1	70083	177953
996	computer software	associate's degree	1	0	68648	103703
997	peripherals	associate's degree	2	8	108354	450011
998	peripherals	associate's degree	2	3	79035	330354
999	computer hardware	some college	0	9	108444	364436

1000 rows × 6 columns

In [26]:

```
df.head()
```

Out[26]:

	division	level of education	training level	work experience	salary	sales
0	printers	some college	2	6	91684	372302
1	printers	associate's degree	2	10	119679	495660
2	peripherals	high school	0	9	82045	320453
3	office supplies	associate's degree	2	5	92949	377148
4	office supplies	high school	1	5	71280	312802

In [ ]:

```

```