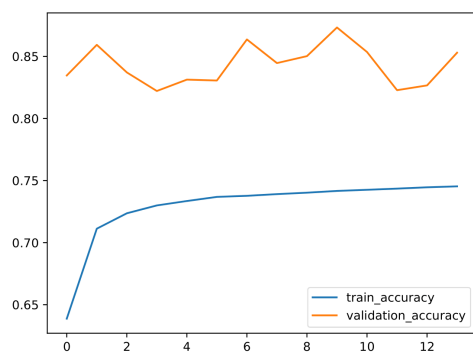


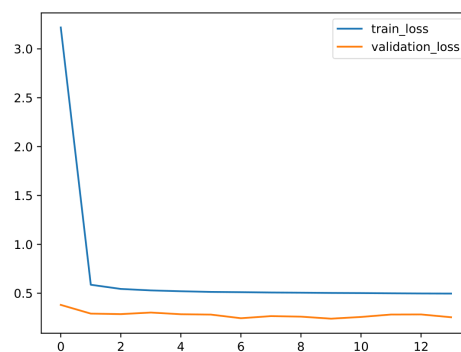
# 1 Predizione next topic dell'anno successivo

## 1.1 Tutti i topic

### 1.1.1 SAGE

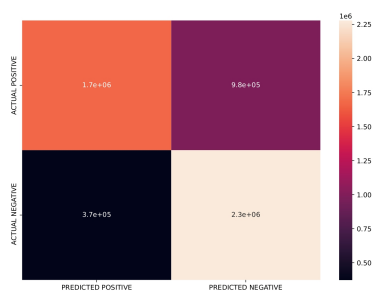


(a) Accuracy.

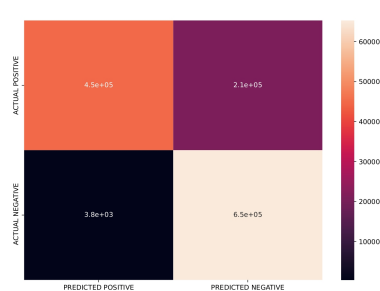


(b) Loss.

Figure 1



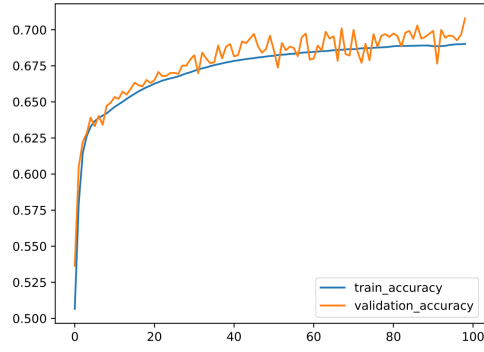
(a) Training



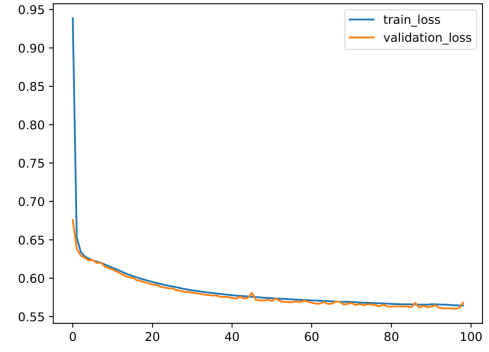
(b) Test

Figure 2

### 1.1.2 HGT

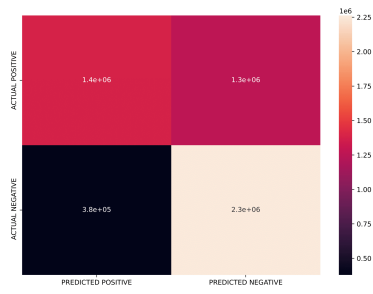


(a) Accuracy.

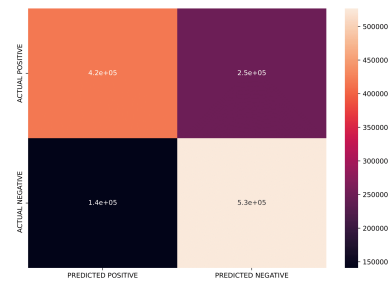


(b) Loss.

Figure 3



(a) Training confusion Matrix.

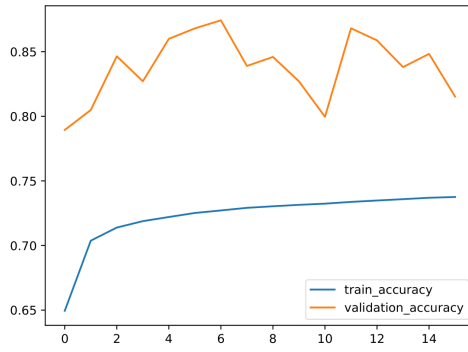


(b) Test confusion Matrix.

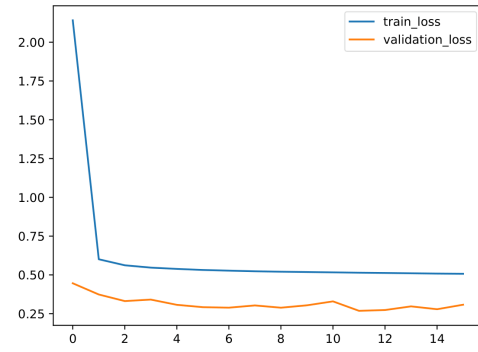
Figure 4

## 1.2 Solo nuovi topic

### 1.2.1 SAGE

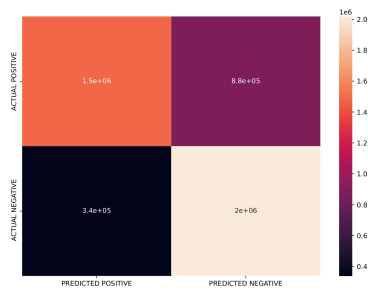


(a) Accuracy.

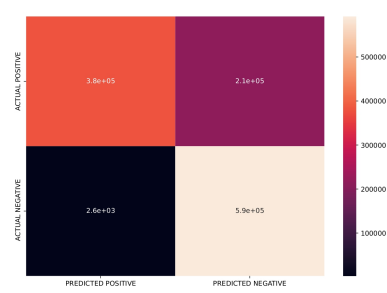


(b) Loss.

Figure 5



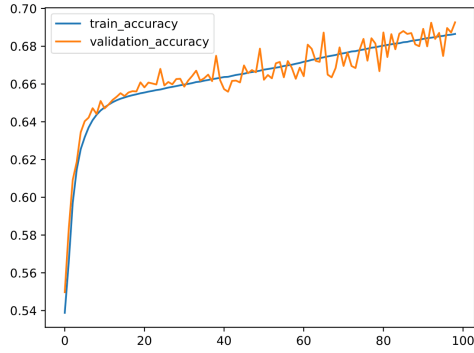
(a) Training confusion Matrix.



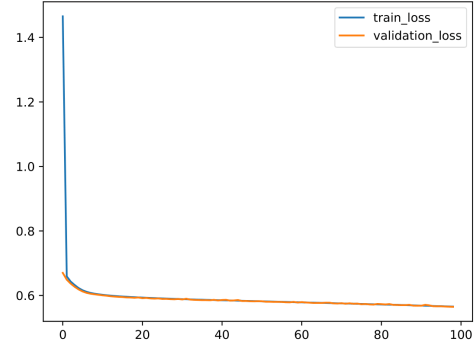
(b) Test confusion Matrix.

Figure 6

### 1.2.2 HGT

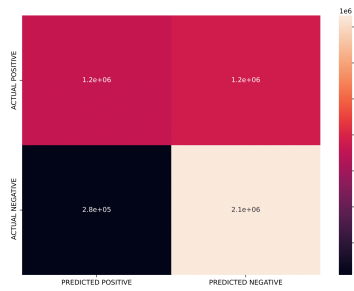


(a) Accuracy.

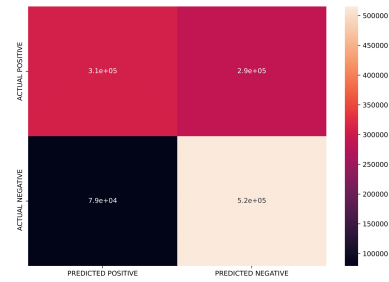


(b) Loss.

Figure 7



(a) Training confusion Matrix.



(b) Test confusion Matrix.

Figure 8

## 1.3 Analisi finale

Task	Layer	Train	Val
All topics	SAGE	0.74	0.87
All topics	HGT	0.69	0.71
New topics	SAGE	0.74	0.87
New topics	HGT	0.68	0.69

Table 1: Risultati predizione next-topic senza utilizzo infosphere

## 1.4 Tutti i topic

### 1.4.1 SAGE

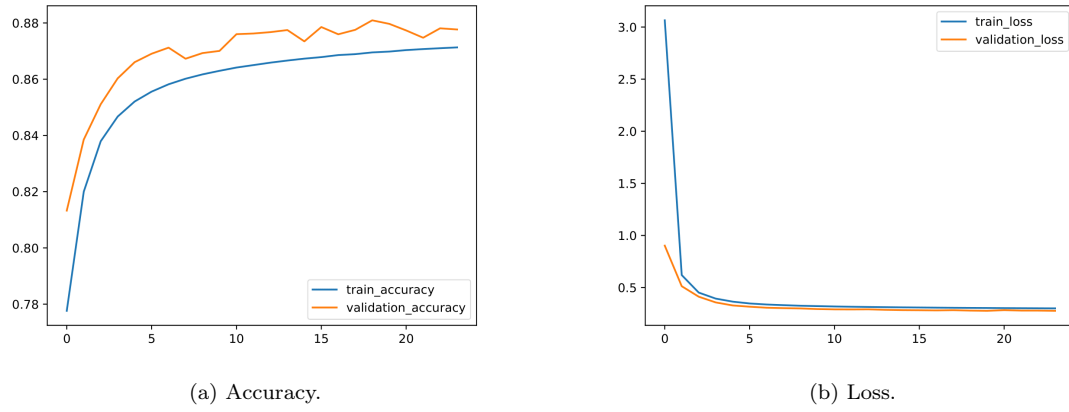


Figure 9

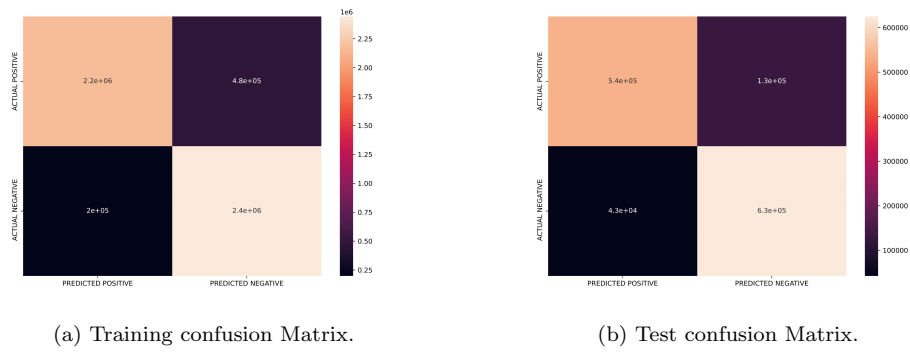
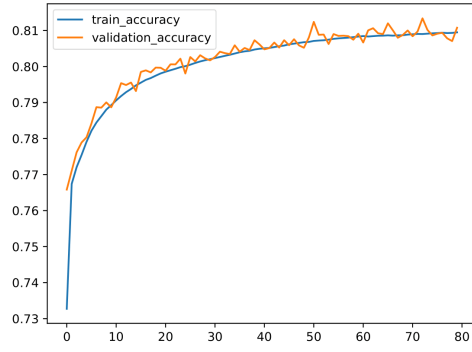
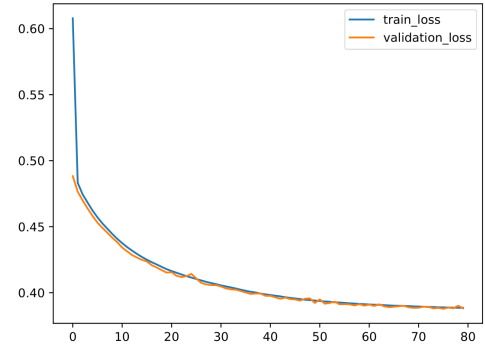


Figure 10

### 1.4.2 HGT

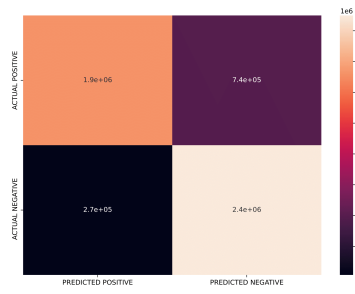


(a) Accuracy.

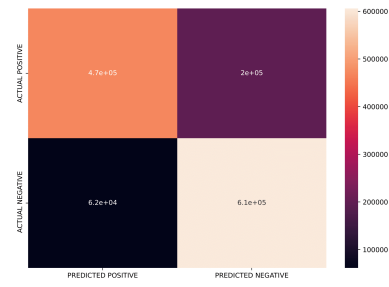


(b) Loss.

Figure 11



(a) Training confusion Matrix.

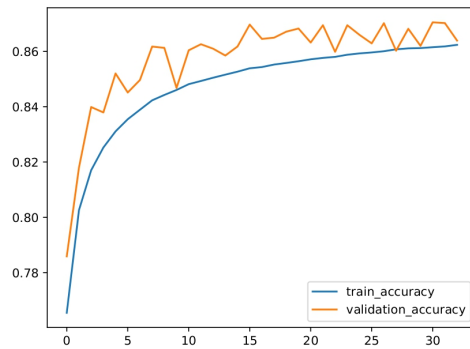


(b) Test confusion Matrix.

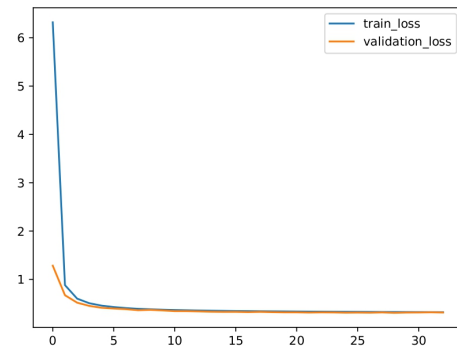
Figure 12

## 1.5 Solo nuovi topic

### 1.5.1 SAGE

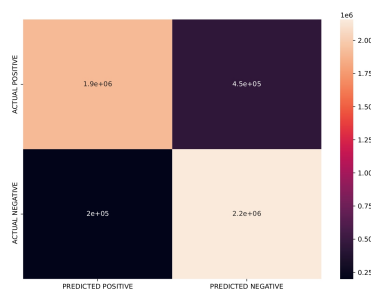


(a) Accuracy.

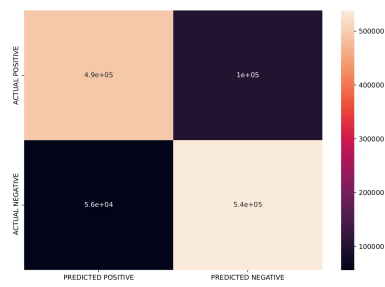


(b) Loss.

Figure 13



(a) Training confusion Matrix.



(b) Test confusion Matrix.

Figure 14

### 1.5.2 HGT

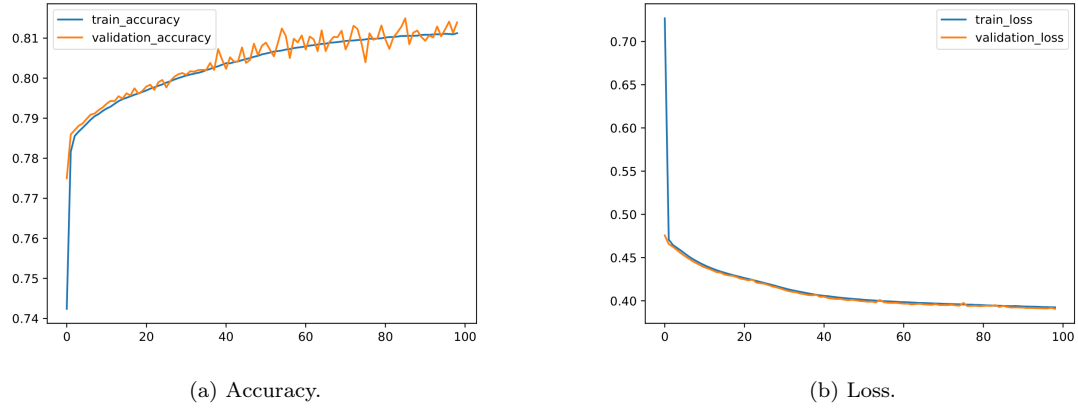


Figure 15

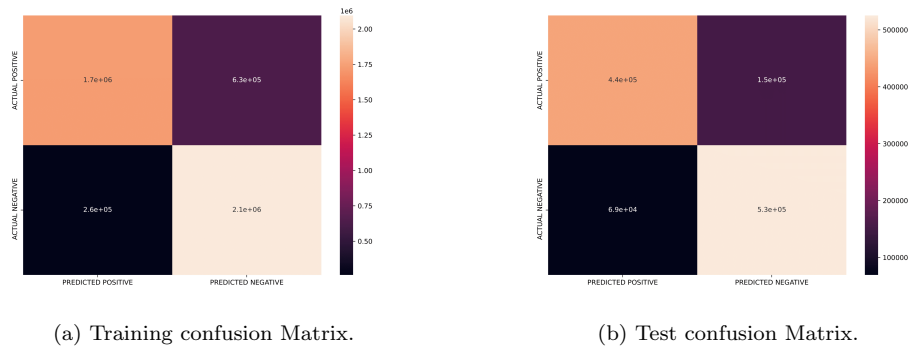


Figure 16

## 1.6 Analisi finale

All topics	SAGE	0.87	0.88
All topics	HGT	0.81	0.81
New topics	SAGE	0.86	0.87
New topics	HGT	0.81	0.81

Table 2: Risultati predizione next-topic con infosphere