1. **Impact of Batch Size on the Model**: We conducted experiments with different batch sizes (32, 64, 128, 256) on the MSRVTT-xu dataset. As shown in Table X, the model demonstrated better performance when the batch size was set to 128. Given the memory requirements of the MSRVTT-xu dataset, larger batch sizes tend to cause memory overflow, while smaller batch sizes increase gradient noise, making the feature matching process less stable. Based on experimental validation and a comprehensive consideration of these factors, we selected 128 as the optimal batch size.
2. **Impact of Learning Rate on the Model:** Based on your suggestion, we conducted experiments with different learning rates on the MSRVTT-xu dataset to analyze the effect of the learning rate on model performance. In these experiments, other parameters were kept constant, including a batch size of 128 and the Adam optimizer. As shown in Table X, the model achieved better performance when the learning rate was set to 1e-4. As the learning rate decreased, the model performance gradually declined. When the learning rate was set to 1e-3, the model performance significantly deteriorated, which was due to the instability caused by a high learning rate. Based on experimental validation and a comprehensive consideration of these factors, we chose 1e-4 as the final learning rate.
3. We have made updates on page 6 of the paper. Due to space limitations, we have made the core code and experimental data publicly available on GitHub at [*https://github.com/MoliviaM/CVR-SDGM*](https://github.com/MoliviaM/CVR-SDGM), allowing readers to gain a better understanding of the detailed experiment content and parameter settings. The corresponding revisions have been incorporated into the manuscript as follows:

Table X: Experimental Results under Different Metric Settings

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Params | Index | R@1 | R@5 | R@10 | Medr | mAP | SumR |
| Batch Size | **128** | **18.3** | **43.1** | **55.9** | **8** | **30.33** | **117.3** |
| 256 | 15.4 | 38.3 | 47.2 | 8 | 28.36 | 100.9 |
| 64 | 15.7 | 38.6 | 48.1 | 8 | 28.69 | 102.4 |
| 32 | 12.4 | 33.2 | 42.3 | 11 | 23.55 | 87.9 |
| Learning Rate | **1e-4** | **18.3** | **43.1** | **55.9** | **8** | **30.33** | **117.3** |
| 1e-5 | 16.2 | 36.3 | 41.3 | 9 | 27.65 | 93.8 |
| 1e-6 | 11.2 | 28.6 | 33.5 | 11 | 22.69 | 73.3 |
| 1e-3 | 10.5 | 26.7 | 30.2 | 13 | 20.78 | 67.4 |