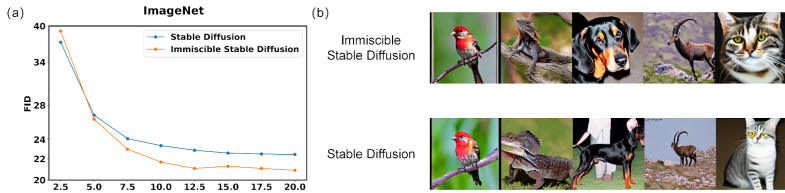Figure R1: Average of ImageNet-1k.

Figure R2: Evaluation of baseline and immiscible class-conditional Stable Diffusion on ImageNet dataset, using 20 inference steps. (a) FID of two models with different training steps (b) Qualitative comparison of two models trained 20k steps.

Figure R3: Comparison of the performances of vanilla, minibatch-OT and minibatch-flip-dimension-assignment diffusion.
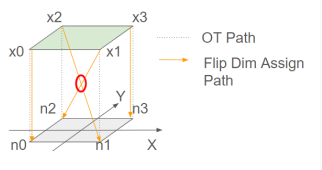

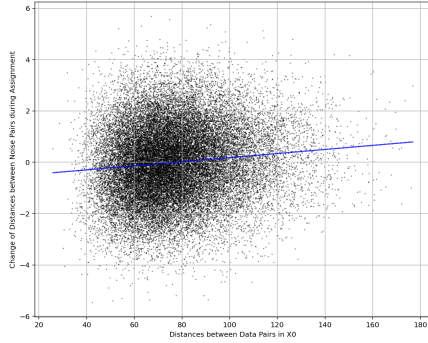Figure R4: Illustration of Diffusion Path Crossing in Flip Dimension Assignment.

Figure R5: Distances between image data points and change of distance between their corresponding noise points during assignment.

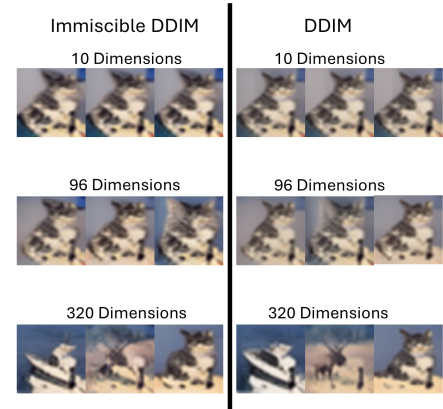Figure R6: Realizing immiscibility by projecting images to a larger standard deviation.

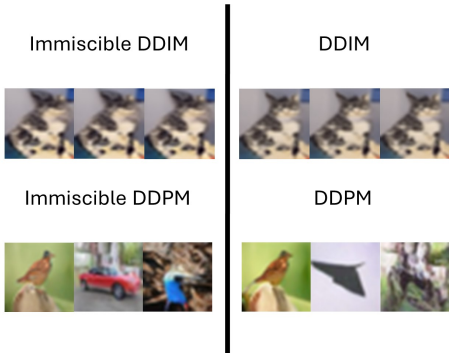Figure R7: Image generation on DDIM+CIFAR10 with noise perturbation on few dimensions.

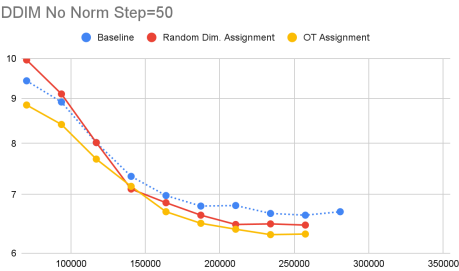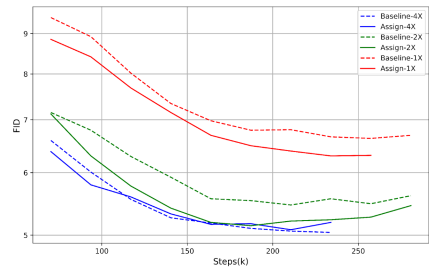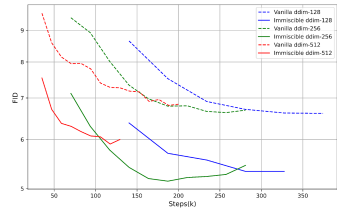Figure R8: Image generation on DDIM/DDPM+CIFAR10 with the same noise and different global seed.

Figure R9: FID of immiscible and vanilla DDIM with different batch sizes.