1. Actually the best is if the training set is balanced, otherwise it is possible that the model will be biased towards the most frequent classes. So make the distribution as uniform as possible. For this you can use the idea from your second question.

2. Actually the idea you described is an often used technique in ML, and it is called Augmentation. There are many different methods how you can add new artificially made images. Just a few of them:

* Slight random rotations
* Slight random translations
* Slight affine transformations
* Flipping the image (if the flipped image trivially belong to the same class)
* Adding noise (salt-and-pepper, Gauss, etc...)
* Adding random shadows
* Making the image brighter/darker
* Changing the contrast in the image
* ...

I think this article can be interesting and relevant for you:

Dealing with unbalanced data

<https://medium.com/@vivek.yadav/dealing-with-unbalanced-data-generating-additional-data-by-jittering-the-original-image-7497fe2119c3>