The COVID-19 pandemic forced the educational systems to remote lecturing, sparking a debate about the credibility of evaluations, as they became more susceptible to fraud. This motivated the implementation of student-monitoring systems, such as TrustID, an image-based deep learning solution with a standard face recognition stages (face detection, alignment, and representation). Deep learning methods' performance is extremely data dependent, and due to the context where the model is applied, depending on the device used, there are challenges regarding the quality of the acquired data and the device's available processing power. If the student uses a webcam or a smartphone's front facing camera, the resulting images will be highly different in terms of resolution, color, pose, etc. To this extent, the face representation stage is where there is more room for improvement, and an approach capable of handling the previous challenges with better accuracy/computational cost trade-off is explored. This work studied four pre-trained Deep Convolutional Neural Networks (DCNN) methods: iResnet-SE-50, iResnet-18, FaceNet and MobileFaceNet. After being subjected to different benchmarks that mimic real world scenarios, the results and accuracy/resource utilization metrics were analyzed, where MobileFaceNet proved to have the overall superior performance. Then, in an attempt to further improve the model, it was fine-tuned with ArcFace using different layer freezing strategies, and for that, two datasets were selected: DigiFace-1M and QMUL-SurvFace. DigiFace-1M is chosen with the intention of surveying how the model reacts to fully synthetic, ethically collected data and increase the model's performance in pose benchmarks, although, there were no positive results. Whereas QMUL-SurvFace, picked to enhance the model's competence on low quality images, actually increased its results in a quality evaluating benchmark when the whole network is trained, however, the performance on the others decreased. As an answer to the initial problem, the pre-trained version of MobileFaceNet was selected as the best accuracy/computational power trade-off.