Indorsing constructivist use of ICT among teacher trainees using a programing language

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Abstract

In the frame of a training course for future edifiers, an ICT-enhanced project, predicated on a Logo learning environment and inspired from a constructivist inculcation philosophy, was undertaken aiming at familiarizing students with the utilization of computer as an implement that can trigger constructivist learning and availing them to adopt an exploratory and constructivist edifying practice.

The training practice used in the training course fixated on the trainees' self-activity and vigorous commitment in lab experimental activities. The mundane feature of the training activities was not the programming language but a constructivist essence of exploit and learning. Through such a process, it was expected that Teacher Trainees would gain individual experiences of investigative and constructivist erudition and would be able to inspire into their future students the same edifying spirit. Trainees were asked to give ordinant dictations to their turtle to draw customary polygons and a circle utilizing kineticism commands. They were emboldened, afore they give injunctive authorizations to the Logo turtle to draw a geometrical figure, to analyses the quandary and to cerebrate about the injunctive authorizations. Very often student work resulted in unexpected erroneous figures on the screen. So students had the opportunity to agnize their errors and to endeavor again. This process was reiterated an abundance of times until students reached the expected result. They were enheartened to endeavor several solutions and keep endeavoring until they prosper, to work with self-action and autonomy and determinately to be queried about the edifying value of those activities.

The evaluation of the project was based on

Teacher Trainees' achievement on the tasks as it was

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documented.

- A 5-point Likert scale quantifying the degree to which students concurred or dissented with verbal expressions regarding the interest and the edifying usefulness of the cognition experience they had working on the tasks.
- Answers and explications on open questions given in the form asking them to detect and mention any positive edifying issues they had discovered in that technique and to cerebrate of and report kindred methods for edifying their school subjects
- Two case-studies: two edifier-students were enheartened to implement the same activities in their college lecture with their pupils and record consequences and understandings.

The evaluation results denoted a positive impact on the students in terms of familiarization with the essence of the projected methodology and of understanding the prospective of ICT for constructivist erudition. The evidence emanating from the two course members, who used and assessed the methodology in a school class, provided inspiriting denotements that the students developed proficient of smearing the methodology they had learnt in authentic classroom settings.

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