An APPsolute Beginner’s Guide for Action Research

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ABSTRACT

Without any doubt, rapid digital technology advancement has a significant impact on the work of researchers in all scientific disciplines. Against this background, the major objective of this article is to give a brief overview of mobile device applications that enable continuous and seamless learning and work in all research phases. It is the intention of the authors to equip teacher-researchers with a practical user guide that encourages them to try out various applications for searching, collecting, annotating, analyzing, visualizing, interpreting as well as publishing information. Especially in the context of education, these complex processes may well be linked to Bloom’s Digital Taxonomy, focusing on the actions and learning behavior of the 21st century. Owing to the dynamic nature of the issue under review, this contribution will undoubtedly only offer a snapshot.

KEYWORDS

Adequacy, Bloom’s Digital Taxonomy, Coherence, Data Analysis, Data Collection, Dissemination, Empirical Research, Planning, Practice Research, Project, Reflection, Reflective Practitioner, Teacher-Researcher, Transparency
INTRODUCTION

The primary reasons for engaging in action or practice research in the field of education are the improvement of teaching skills and the development of schools as learning organizations. Therefore, action research is deeply embedded in society and is carried out by a single educator or researcher or by a group of colleagues who share an interest in a common problem. Two important aspects required in action research are the integration of all participants (i.e. teachers as well as students in the field of education) and the creation of appropriate ways for participation. As action research is characterized by a constant change between theory and practice, there are a number of different approaches and methodologies that can be applied. For this purpose, academic research apps cannot only support the research process, but also significantly simplify as well as accelerate it and thus enable seamless learning.

Resulting mainly from profound and continual processes of reflection-in-action and reflection-on-action (cf. Schön, 1983; 1987) the process of continuous seamless learning is one of the defining characteristics of professional practice based on action research.

Thus, it can be taken for granted that the notion of “seamlessness” is essential for both, developmental processes in continuous action research as well as for learning processes associated with it. In most cases research and learning processes converge to a seamless whole. While the relational frame and how all these aspects tie together will be illustrated, this contribution mainly focuses on the aspect of research and on the benefits of using mobile device apps for seamless research in an educational context. Against this background its major objective is to give a brief overview of current state-of-the-art mobile device apps for action research. It is the intention of the authors to provide a beginner’s guide for orientation that invites all those involved, from teachers to students, in a specific research or development process, to gain an in-depth insight into the complex subject matter of digitalization in education. Furthermore, researchers shall be encouraged to try out various apps for various processes like searching, evaluating, visualizing, interpreting and publishing information against the background of Bloom’s Digital Taxonomy, adopted by Churches (2009) that could help teachers and students reach higher order thinking skills of analyzing, evaluating, and synthesizing to create their own understanding of a certain topic or issue.

Gasteiner and Haber (2010) point out that due to the development of digital media, the modus operandi of researchers of all scientific disciplines has rapidly changed. While in former times a well-equipped library, a card index and a typewriter were sufficient for carrying out excellent research, nowadays personal computers, notebooks or other mobile devices, the internet, and the use of digital research tools have become vital and are ubiquitous. Today, several years after the publication of their book, this technological development is progressing even more rapidly and the winged words “Tempi passati! [in English Bygone times!” (Gasteiner & Haber, 2010, p. 11) probably express less regret but rather relief that the days of analogue research are finally over.
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