

Perceptions of Research

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Context

The term research is rarely questioned. It is a term whose meaning seems to be implicitly understood. Certainly there is an institutional bureaucracy which supports research, and academic staff are rewarded for their strength in research. But what is this research? It is likely that there are multiple understandings of research, but unless this diversity of understanding is recognised, it is difficult to have a meaningful dialogue about it.

This discussion will seek to unpack the term 'research', acknowledging that there are many contexts in which research takes place and many different ways in which research is conducted. I have decided to structure the discussion a little differently to previous ITForum discussions. Instead of presenting a relatively finished paper for 'discussion', I am attempting a more organic approach, where there is more interaction, and the direction of the discussion will influence the nature of the outcomes. Partly I chose to do this because it seems an appropriate use of this medium. My second reason is that I don't understand everything about this topic and I want to tap into the collective knowledge (even wisdom!) of the ITForum community. While I have had experience with many disciplines in my work as an educational designer, I can't claim to be an expert in the research paradigms and methodologies used by each. Also, there is no one 'right' answer to this issue.

My intention is to focus discussion about how one might conduct research into educational technology. Educational technology is an emerging discipline combining aspects of education, computer science, graphic design, media and text analysis, among others. In an emerging discipline, it is important to reflect carefully about the most appropriate approach to address the issue under investigation, rather than blindly using an approach appropriate for another discipline.

Aside: I am Australian, and this colours my perception of the world (and leads me to use different spelling conventions!). I prefer to use the term Educational Technology instead of Instructional Technology, because of perception that the word 'instruction' implies an outdated pedagogical philosophy. Feel free to use any term you like, and let's not go down this track in the discussion!

My Background

My original degree was in Physical Chemistry, many years ago. My first taste of research was during my Honours year, when I investigated the photoelectric effect of heavy metal solutions in early renewable energy research. Basically, I shone light onto various solutions and measured how much electricity was produced, if any. It wasn't very successful.

A year later I started Ph D in Theoretical Chemistry. This was basically computational work, calculating the results of mathematical models of the nature of molecules based on various assumptions. The equations in the mathematical models were impossible to solve exactly, so more assumptions had to be made to calculate a solution. My work involved varying parameters to achieve the best approximation to experimental observations.

Aside: When I completed this PhD 25 years ago I would not have been able to summarise it in one paragraph!

In 1992, I moved into Educational Technology after getting a qualification in Computer Science. I was an executive member of ascilite (www.ascilite.org.au) from 1993-2000 (President from 1997-2000) and I am currently an executive member of the Australasian Council on Open, Distance and E-Learning (ACODE) (www.acode.edu.au), a peak body representing most universities in Australia and New Zealand on policy issues relating to open, distance and e-learning.

I was one of the initial members of ITForum, and I contributed regularly for several years. I left the list in about 2000, because I was getting too busy to read it, and I thought I could get more professional mileage out of publishing my work more traditionally. A third reason was that I felt the list was getting too US focused. Just recently Bev Ferrell contacted me and invited me to contribute again, so I said yes and here we are. I have been lurking for most of the year, but I just don't have time to read everything posted. ☺

In my early years in Educational Technology my research was in designing innovative technology to help people learn, and evaluating whether people can use it and how they learn through its use. More recently, I have been focusing on institutional issues surrounding widespread use of technology, and how people learn at universities.

We'll come back to this later, but now, let's set out the structure for the first part of the week.

Why I chose this topic

I had been reflecting on the topic for a while, thinking about the notion of 'research strength', and how educational technology isn't recognized as a mainstream research area in Australia. I also do quite a lot of reviewing of journal and conference papers, and I am often disappointed at the quality of research which is submitted for publication. I suspected that many researchers were working from paradigms which weren't necessarily appropriate, and it would be helpful to start a discussion about the assumptions associated with those paradigms.

A further trigger was the article Mike Keppell published in the ascilite newsletter called "Education Technology and Research: Perspectives for the Future." (<http://www.ascilite.org.au/newsletter/5.02/index.html#lead>). Go and read it for your homework... While not disagreeing with Mike's views, my thinking was a little broader than what Mike published, and I wanted to write a rejoinder. When Bev Ferrell contacted me about the ITForum discussion, I thought it would be a great opportunity to get more feedback on my thoughts.

Structure of the Discussion

After this scene setting post, I intend to post two messages containing questions to start the interaction. Please respond as quickly as you can, because I will synthesise the responses a day later and post my response, together with some more of my ideas. I'll try to keep this structure up throughout the week.

Remember that my time zone is 12 hours away from the East coast of the US, so I won't be able to respond immediately, but I will check the forum during the day and into the evening.

I appreciate that some of you in the US (and elsewhere?) are busy with the end of your academic year at the moment, but I do hope that some of you find the time to engage with this topic. I am looking forward to an open, frank and controversial discussion.