

The Role of Computers, IT and the Internet in the Classroom

Josh Wainwright

King Edward VI Five Ways School
Bartley Green

April 25th, 2013

Introduction

- ① Practical Uses
- ② Research
- ③ Interactivity
- ④ Implementation

Practical Uses

- Whiteboard vs blackboard vs Smartboard
 - useful, convenient, conducive to learning?
 - clarity of information presented to pupils.
 - PowerPoint, OHP etc.
- Projector
- Computer Suite
- Internet

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Must resist the temptation to use the facilities "because they're there" and instead use them to aid learning for the students and, where applicable, ease the work of the teacher.

Research

- The internet is now commonplace in schools.
- Allows use of huge pools of knowledge, but the principles of the web must be taught before it can serve as a useful tool.

Many benefits

- individual/group research
- further study of interesting topics

Must be treated with caution

- learn how to search
- supervision
- locating reliable sources.

Research

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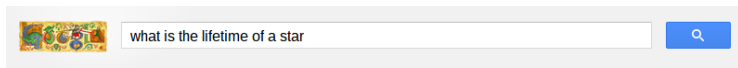
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- Often not taught because the teachers are not taught.

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Quasi-stars and the Schönberg-Chandrasekhar limit

[Warrick H. Ball](#)

Comments: PhD dissertation, University of Cambridge. 145 pages. Dissertation submitted 19/4, examined 17/5, corrections approved 6/6, degree approved 3/7, awarded 21/7

Subjects: **Solar and Stellar Astrophysics (astro-ph.SR)**; High Energy Astrophysical Phenomena (astro-ph.HE)

2. [arXiv:1201.5560](#) [[pdf](#), [ps](#), [other](#)]

Quasi-stars, giants and the Schönberg-Chandrasekhar limit

[Warrick H. Ball](#), [Christopher A. Tout](#), [Anna N. Żytkow](#)

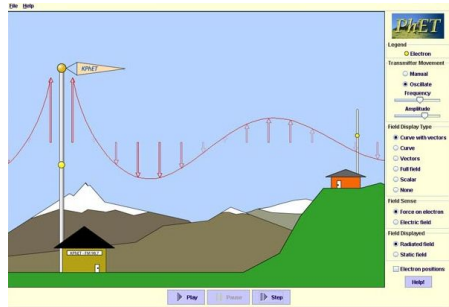
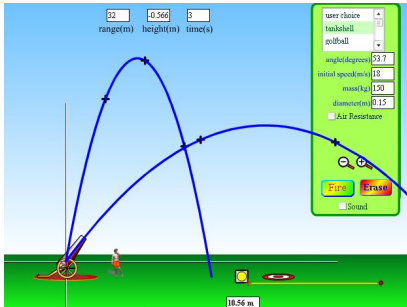
Comments: 9 pages, 7 figures, published in MNRAS. Updated to (more closely) match published version

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[Back to Search form](#)

Interactivity

- Brilliant tools available for teaching
 - Videos - Youtube, Ted
 - Animations - PhET



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- Why?
 - Essential skills
 - Advance beyond simple maths