# Making Construals as a New Literacy?

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## The CONSTRUIT! project: EU Erasmus+ 2014-2017

construit.org
jseden.dcs.warwick.ac.uk/construit.c3

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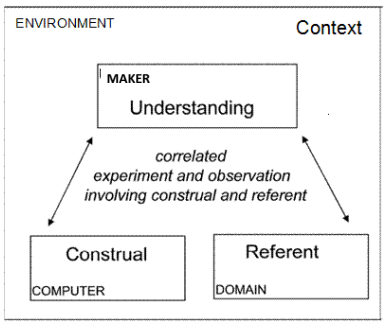
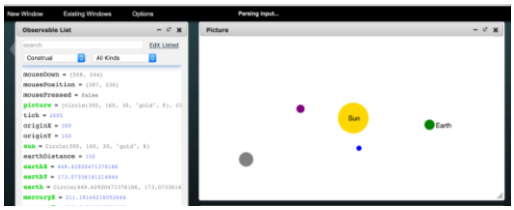
## Making construals as making connections ...





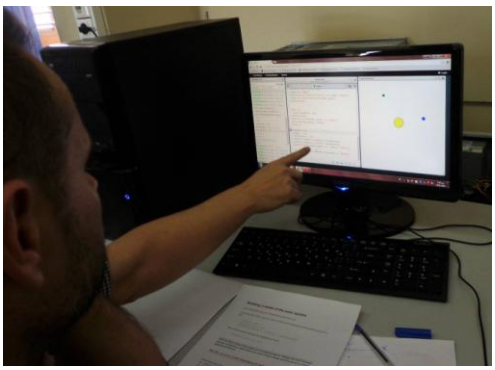

## A solar system construal



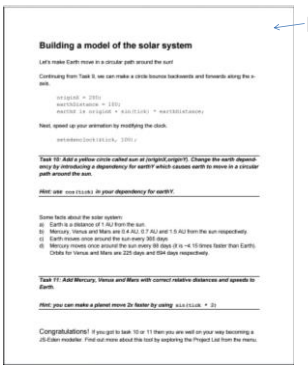

The basic form of the solar system construal

**c2/solar** in the project repository at **jseden.dcs.warwick.ac.uk/construit.c15**










Printed worksheet

Input window

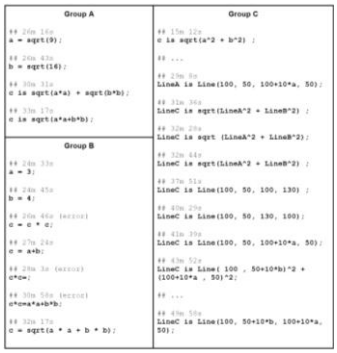



Figure 6. Three interaction extracts that demonstrate the difficulty faced by the students in applying Pythagoras' theorem.

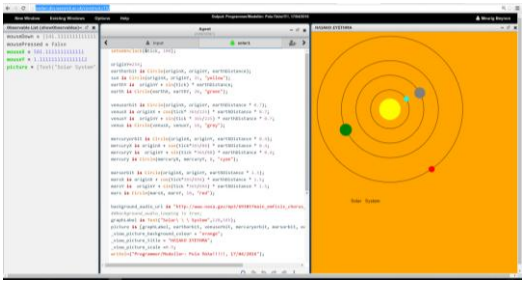
Retracing pupil interactions as-if live

A: misunderstanding Pythagoras's theorem

B: misrepresenting Pythagoras's theorem in JS-Eden

C: a misconception about how Pythagoras's theorem relates to drawing triangles in JS-Eden

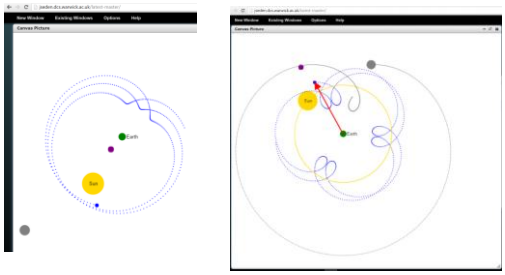




As adapted by a teacher at the workshop



## A solar system construal



As elaborated to address matters arising



**Emma King ( a learning technologist)'s summary**

*Rigid programming does not allow you to see how a learner got to their finished program, however construals are designed to let you see the learning journey that students took to reach that final stage. Using technology based on making construals offers a unique opportunity to support the dialogue around assessment and learning.*



## Teacher Feedback April 2016

Please let me put in words my impression based on my 2-days contact with construals and talks with teachers who took part in that workshop. It seems that the term construals is not clear enough to our "preinstalled" brains with old software. We - as teachers - need a toolkit to start with a new project, a good practice experience. We have to be convinced that it deserves the effort and feel familiar with the new "product". The way a teacher will build "his own construals" requires high skills in programming and an alternative perception of showing/explain a phenomenon. It's too much work for an hour of lesson. We are not used to unlearn, to give a chance to different, to experiment ... In my opinion, you need teachers-scientists in STEAM to act as creators, makers and storytellers to lead construals to teachers. ... [The way you consider to redirect construals seems to me closer to reality. ...]

Stavroula Misthou, July 2016