

Audience



GameCraft

Students who are highly able / gifted from grades 5-8

Related Programs



Ad Astra Junior
Ad Astra Senior



CELO ArtyFacts Junior
CELO ArtyFacts Senior



Infinity Squared



Pegasus Project



Rockin' with Lil' Elvis



SmartBots



Socrates Café Book
Socrates Café Topical



So Far So Good!

Selection of students

The selection of students should be based on the following criteria:


- students who regularly complete set work early and are looking for further challenge
- students with demonstrated advanced ability in specific curriculum areas (e.g. numeracy, literacy, science...)
- students with a 'passion' for an area of learning which is not readily covered by the regular curriculum
- students for whom under-achievement is considered to be a real or potential issue.


GameCraft specifically suits students with demonstrated advanced ability in Mathematics and ICT.

Although formal identification as a gifted student is not an essential criteria for selection, schools are encouraged to nominate identified students where appropriate and use available resources such as the Identification Package to support nominations.


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GAMECRAFT



Guidelines

General guidelines

CELO online extension programs have high quality content and standards of delivery. Places in programs are usually limited to a maximum of 5 students per school, with each student accessing a maximum of one program at a time. Video/DVD based programs will give priority to schools with 5 enrolments.

These programs are managed by an **online teacher**, who develops the work, maintains the site and works with the students online.

Support person

Each student or group on the program needs a **support person** in their/his/her school who may be a teacher, parent or teacher aide. The role of the support person is crucial to ensure that students fully engage with the program.

Students may need:

- guidance in using their time effectively
- reassurance that they are 'on the right track' e.g. with a problem solving task
- help / permission to print in order to work away from the computer
- help locating materials that are needed for activities
- help digitally recording work or organising postage
- technical support if their machine won't function correctly.

There is also the expectation that the support person will keep up with the changing materials in the program, and maintain a dialogue with the delivery teacher and classroom teacher if using the withdrawal model.

GameCraft Guidelines

GameCraft is an online extension program for mathematically gifted grade 5 to 8 students. Students will develop their own computer games and games items, while forming deeper understandings of mathematical and computing concepts.

Students participating in the GameCraft program will need a minimum of one to two hours per week, spending all of this allocated time on a computer, both to access the program and develop their games. Most students will want to spend significantly more time than this working on their games, so students without computer access at home would benefit from increased access at school, for example at lunch time.

Students could successfully work in pairs on a computer.

The GameCraft program will run in two stages throughout 2008. The first stage will involve students using free software called 'Scratch' to create and share multimedia creations. During this stage students will be introduced to mathematical concepts such as coordinate systems, variables, incrementing and decrementing, and negative numbers through their game making.

During mid July, students who have participated successfully in the first stage of the program will be invited to continue to a more advanced stage for the remainder of the year using Game Maker software.

Student activity requirements

Each week there will be a guided tutorial introducing mathematical and information and communication technology (ICT) concepts. Mathematical ideas will be introduced, with students having the opportunity for extension using their own ideas. Students will have the opportunity to discuss ideas and showcase their work with others in the program.

Students are able to use the site from home or wherever internet access is available.

Regular Contact

There is the expectation that students will communicate regularly through the tools provided. All students are expected to maintain a blog which provides evidence of their learning throughout the program. They should also be given the opportunity to read and comment on other students' blogs.

GameCraft uses a delivery application that tracks student activity. If a student does not log on, the delivery teacher will try to find out why. If there is a reason why the student is not accessing the site (e.g. going on extended holiday) the delivery teacher should be contacted. Student logon is with their VKEY username and password.

Work

Students are required to access GameCraft regularly, work within the set timelines and regularly submit required activities /assignments to the expectations of the delivery teacher and support person. The specific requirements and expectations will be communicated by the delivery teacher to all participants and support persons.

Acceptable use

Students must have signed the Acceptable Use Agreement in their school, outlining appropriate behaviour when using ICT. Repeated or high level incidents of inappropriate behaviour will result in the student's removal from GameCraft.

Software/Hardware requirements

Scratch is free software that can be downloaded from <http://scratch.mit.edu/>

Game Maker version 7 LITE Edition needs to be installed on student computers. It is free and can be downloaded from: <http://www.yoyogames.com>

Scratch should run on most DoE systems

The main system requirements for Game Maker are:

- a 3D graphics card with preferably at least 16 MB of video memory.
- DirectX version 8.0 or later
- to access the tutorials the Flash player will need to be installed
- access to sound and headphones

Program Elements



Activities that lead students through the creation process by tutorials.



Assignments giving students information and timeframes for their games.



A blog where students can record their progress.



Discussions where students converse with the delivery teacher and the other participants.



Email which operates only within the GameCraft online classroom.