

SOCIAL NETWORK IN HIGHER EDUCATION: A CASE STUDY INVESTIGATING CREATIVITY IN THE GREEK CONTEXT

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INTRODUCTION

Creativity is a very important element of the educational process and especially in higher education in which students gain the basic knowledge and skills for their professional lives

Web 2.0 tools can be used in a beneficial way in the teaching and learning process in order to promote creativity as there is a common area between them.

WEB 2.0 TOOLS

Social Networks Tools is one of the Web 2.0 tools that has a major impact in young people's lives because users have the opportunity to:

- Socialize
- Exchange information
- Participate in groups
- Meet new people and make friends

(Chui et al., 2009 McLoughlin & Lee, 2007)

Web 2.0 tools & Creativity

Research focuses in the examination of SNT in students' academic progress.

There are a lot of arguments that SNT can promote creativity but there are limited, if any, research with this focus.

(Leenders et al., 2003; Zhou et al., 2009; Sturgeon & Walker, 2009; Walker, 2010; Na-songkhla, 2011; Reid, 2011)



There is a need to investigate this aspect

Purpose & Research Questions

The <u>purpose</u> of this research is to examine the effects of a SNT in students' creativity in Higher Education.

Research question:

1. Can the usage of a SNT, which utilises de Bono's "6 thinking hats", promote creativity?

Research subquestions:

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4 factors: (fluency)
(flexibility)
(originality)
(elaborate ideas)
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COMPARISON OF WEB 2.0 TOOLS

According to Dewey(1916:167) students' active engagement is very important in their learning.

Comparing some of the Web 2.0, it is obvious that SNT offer more opportunities for interaction

Web 2.0 tools				
Characteristics	Social Network tools	Blogs	Wikis	
Forum	\checkmark	✓	✓	
Chat	✓			
Tagging	\checkmark	✓	✓	
Groups	✓			
Friends	\checkmark			
Profile pages	\checkmark	✓	✓	
File Sharing	\checkmark	✓	✓	
Real time activities	✓			
Post/Publish	✓	✓	✓	
Puild Virtual Communities of Practice	✓	/		

TERMS & DEFINITIONS

 <u>SNT</u> are tools that offer the electronic and online socialisation & interaction of people through the creation of their personal profiles.

(Watson et al., 2006; Boyd & Ellison, 2007; Bowers-Campbell, 2008; McVey, 2009)

 <u>Creativity</u> is the mental processes or activities which includes the generation of new concepts or theories, or association among them

(Sulaiman, 2011)



THE 6 THINKING HATS OF DE BONO



Hat	Thinking	
White hat	Known information, facts, data	
Red hat	Emotions, Hunches, Feelings	
Black hat	Difficulties, problems	
Yellow hat	Positive, values, benefits	
Green hat	Possibilities, ideas, solutions,	
	alternatives	
Blue hat	Overview, Decision, next steps	









COMMON ASPECTS

Social Network Tools and de Bono's 6 thinking hats have some common characteristics:

- Promote open discussion
- Promote cooperation
- Students' active involvement during the learning process

(Porcaro, 2010; Lapham, 2007)

METHODOLOGY

- It was a case study within the Greek context in a University of Attica
- The sample was convenient (non-probability) with 17 undergraduate students in the field of Early Years Education.
- There was a comparison among different SNT and we chose Buddypress as in this SNT there are more features and it is free of charge

COMPARISON & SELECTION OF SNT

Soc	cial Network tools	5		
Features	BuddyPress	Ning	Facebook	Diigo
Free	\checkmark		\checkmark	\checkmark
Safety concerns	✓	\checkmark		\checkmark
Server-free		\checkmark	\checkmark	\checkmark
Educational focus	✓	\checkmark		
Users create forum	\checkmark	\checkmark	\checkmark	\checkmark
Forum	✓	\checkmark	\checkmark	\checkmark
Chat	\checkmark	\checkmark	\checkmark	
Messages	\checkmark	\checkmark	✓	\checkmark
Group formation	\checkmark	\checkmark	\checkmark	\checkmark
Upload any kind of file	\checkmark	\checkmark		
Select the characteristics	\checkmark			

SNT DESIGN

- Buddypress was uploaded to the University's website and access was allowed only to the participants /users
- There was 3 types of users with different permissions (Creator, Manager/Teacher, Student)
- Only Creator & Manager/Teacher could invite member to the SNT



Members Search

Evgenia Theodotou Log Out

Home

Activity

Forums

Groups

Members

ΣΧΟΛΗ ΟΙΚΟΝΟΜΙΚΩΝ ΕΠΙΣΤΗΜΩΝ & ΔΙΟΙΚΗΣΗΣ

ΣΧΟΛΗ ΔΟΜΗΜΕΝΟΥ & ΦΥΣΙΚΟΥ ΠΕΡΙΒΑΛΛΟΝΤΟΣ

ΣΧΟΛΗ ΠΛΗΡΟΦΟΡΙΚΗΣ

ΣΧΟΛΗ ΠΟΛΙΤΙΣΜΟΥ & ΕΠΙΚΟΙΝΩΝΙΑΣ

ΣΧΟΛΗ ΥΓΕΙΑΣ & ΑΝΘΡΩΠΙΣΤΙΚΩΝ ΕΠΙΣΤΗΜΩΝ











No Comments >



Permissions	Creator, Manager/Teacher	Students
Participation in chat	✓	✓
Participation in forum	✓	✓
Add a new topic in forum	✓	✓
Like	✓	✓
Comments	✓	✓
Private messages	✓	✓
Friendship request	✓	✓
Group invitation	✓	X
Assign users in groups	✓	X
Upload files	✓	✓
Delete users	✓	X
Delete forum	✓	X
Delete messages	✓	X
Delete files	✓	X
Download files	✓	✓
Publish in profiles	✓	✓
Upload photos	✓	✓



GROUPS

Students were divided into 4 groups in which they decided the name of the group & the logo

4 private groups

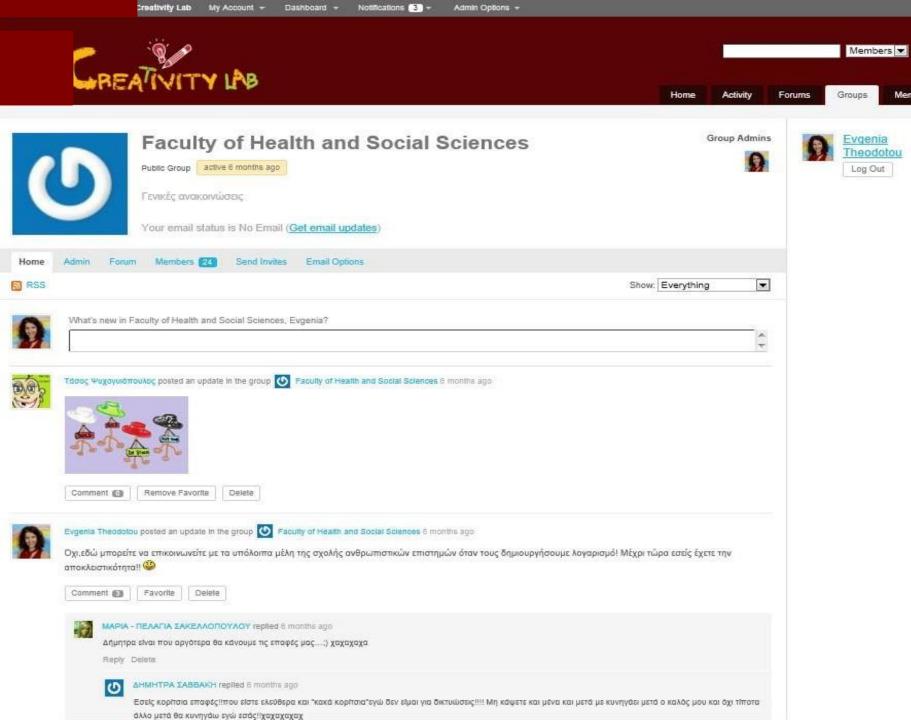
- Powerpuff girls
- Sailormoon
- Bad girls
- Little explorers
- 1 common group (teaching material)
- Creativity Group



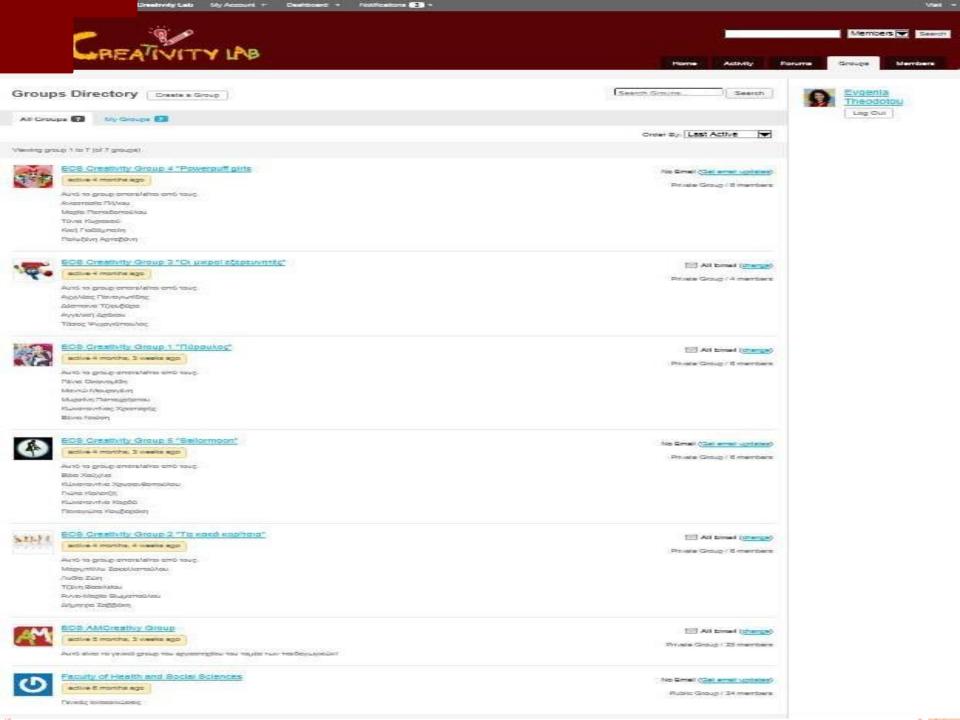








Members





δια δικα σία επίλυσης του

προβλήματος)

προβλήματος παρά στη λύση του

Οδηγίες 6 σκεπτόμενα καπέλα



Εδώ μπορείτε να βρείτε χρήσιμες πληροφορίες που θα σας βοηθήσουν να εφαρμόζετε τη στρατηγική τα «6 σκεπτόμενα καπέλα»!!

Καπέλα	Ερωτήσεις			
Άσπρο καπέλο (Θυμάμαι ότι σε αυτό το καπέλο απαντάμε αντικεψενικά με δάση τις αποδείξεις που υπάρχουν)	 Ποια είναι τα γεγονότα & οι πληροφορίες που μας δίνει το πρόβλημα; Ποιες είναι οι πληροφορίες που χρειάζομαστε; Ποια είναι τα χαρακτηριστικά αυτής της θεωρίας; 			
Πράσινο κατέλο (Θυμαμαι ότι σε αυτό το καπέλο γινόμαστε δημιουργικοί και σκεφτόμαστε "outside of the box")	 Ποιες είναι οι ιδέες μας για την εφαρμογή της θεωρίας στην τάξη της προσχολικής αγωγής: Ποιες είναι οι εναλλακτικές προτάσεις μου; 			
Κόκκινο καπέλο (Θυμάμαι ότι εδώ καταγράφουμε τα συναισθήματά μας για τις ιδεές που προτείναμε στο πράσινο καπέλο) Μαύρο καπέλο (Θυμάμαι ότι σε αυτό το καπέλο είμαστε απαισιόδοξοι και ψάχνουμε να βρούμε μόνο ελαττώματα και όχι καλά τεκμηριωμένες ιδέες)	 Τι συναισθήματα μας προκαλούν οι ιδέες που προτάθηκαν στο πράσινο κ απέλο; Ποια είναι τα προαισθήματα που μας προκαλούν οι ιδεές που προτάθηκαν στο πράσινο καπέλο; Ποια είναι τα μειονεκτήματα, ρίσκο, κίνδυνοι των ιδεών που προτάθηκαν στο πράσινο καπέλο; 			
Κίτρινο καιτέλο (Θυμαμαι ότι σε αυτό το καπέλο είμαστε αισιόδοξοι και ψάχνουμε να δρούμε οφέλη & πλεονεκτήματα)	 Ποια είναι τα πλεονεκτήματα, οφέλη, αξία των ιδεών που προτάθηκαν στο πράσινο καπέλο; Υπάρχουν θετικά στοιχεία ακόμα και στις «κακές» ιδέες που προτάθηκαν στο πράσινο καπέλο; 			
Μπλε καπέλο (Θυμάμαι ότι σε αυτό το καπέλο κάνουμε έναν έλεγχο της διαδικασίας και είμαστε περισσότερο επικεντρωμένοι στην	 Τι έχουμε κάνει έως τώρα (κοιτάμε όλα τα καπέλα); Ποιες είναι οι αποφάσεις μας & ποια είναι η καλύτερη ιδέα μας; Έχουμε αρκετές ιδέες απ'όλα τα κάπελα; Τι χρειάζεται να κάνουμε για να υλοποιήσουμε 			

την ιδέα μας;

EXPERIMENTAL PROCESS

There were 4 periods:

- Period 1:
 - Induction, groups, presentation of SNT & 6 thinking hats strategy, face to face application, presentation of the lab's case study

To case study του Creativity Lab

Οι γονείς της τάξης σου έχουν απορίες για το πώς μπορούν να απασχολήσουν τα παιδιά τους δημιουργικά και εποικοδομητικά στο σπίτι. Ανησυχούν ακόμα διότι θέλουν η απασχόληση αυτή να έχει σαφή εκπαιδευτικά αποτελέσματα.

You are a teacher in an Early Years center and the parents of your students are wondering how they can occupy their children in a beneficial and creative way. They are also wondering how this interaction could have an educational focus.

Your goal is to suggest playful activities that have educational outcomes and parents could apply in everyday practice. For this reason you should link these activities with at least one learning theory.

Comics strip creator: http://www.comicstripcreator.org/

Οδηγίες

Για την εφαρμογή της 1° & 2° Φάσης θα πρέπει να αξιοποιήσετε τη στρατηγική τα «6 σκεπτόμενα καπέλα» του de Bono και να συζητήσετε τις ιδέες σας μέσω του Forum της ομάδας σας στο Buddypress.

Επιπλέον πληροφορίες για την εφαρμογή της στρατηγικής μπορείτε να βρείτε στο «Οδηγίες 6 σκεπτόμενα καπέλα»













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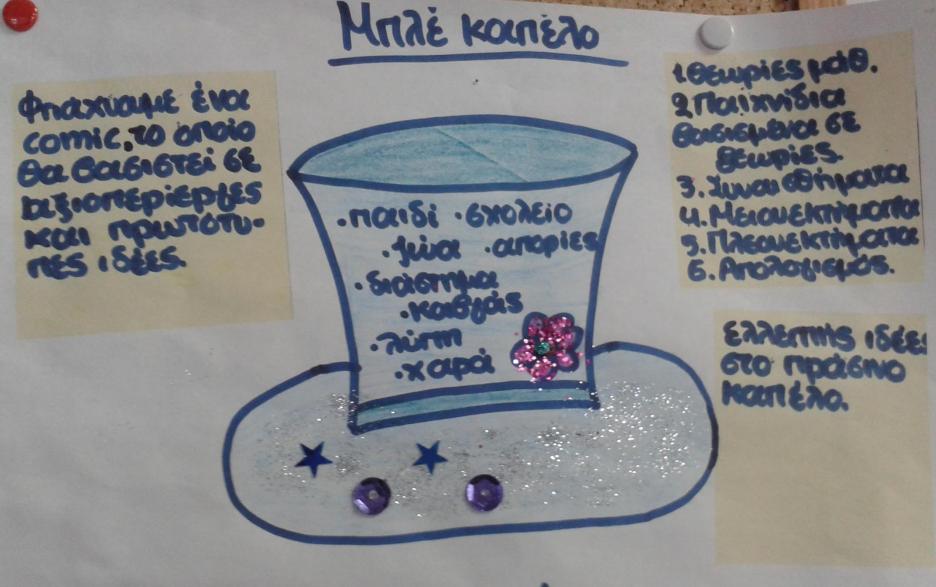
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EXPERIMENTAL PROCESS

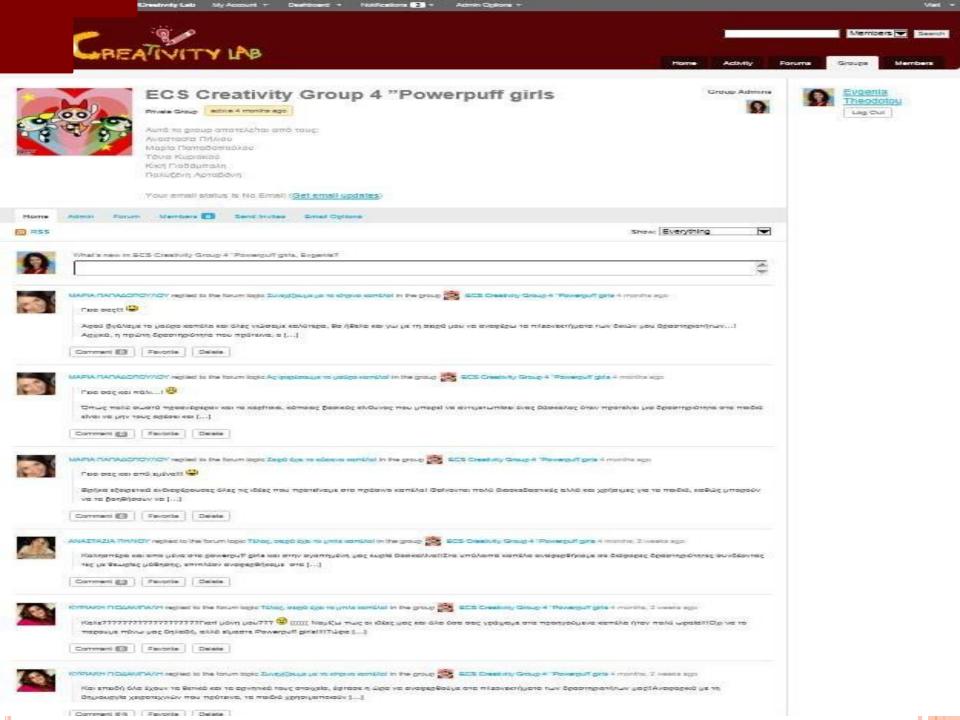
There were 4 periods:

Period 1:

 Induction, groups, presentation of SNT & 6 thinking hat strategy, face to face application, presentation of the case study

o Period 2:

 Teacher announced the beginning of each hat thinking, students discuss in the SNT to find a solution



EXPERIMENTAL PROCESS

There were 4 periods:

Period 1:

 Induction, groups, presentation of SNT & 6 thinking hat strategy, face to face application, presentation of the case study

Period 2:

 Teacher announced the beginning of each hat thinking, students discussing in the SNT to find a solution

Period 3:

Prepare and present their ideas in a comic book

Ομάδα: Sailormoon



Ομάδα: Powerpuff girl



πραζευόμαστε όλοι σε ένα κύκλο και αποφασίζουμε ποιός από εμάς θα κυνυγάει τους υπολοίπους.



Μετά αρχίζουμε το κυνηγητό... Όταν αυτός που κυνυγάει πλησιάσει κάποιον, εκείνος λέει ένα φρούτο εκτός από "μπανάνα" και μένει ακίνητος για να σωθεί...

Μετά όμως κάποιος πρέπει να τον ελευθερώσει λέγοντας του "ξεμπανάνα", έτσι δεν είναι? Ναι...και δεν πρέπει να πει "μπανάνα" γιατί χάνει και ύστερα θα κυνηγάει αυτός..



Αυτό είναι το παιχνίδι μας!Ελπίζουμε να σας άρεσε πολύ και να το παίζεται και εσείς!!!



www.ComicStripCreator.org

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Ικότ ...

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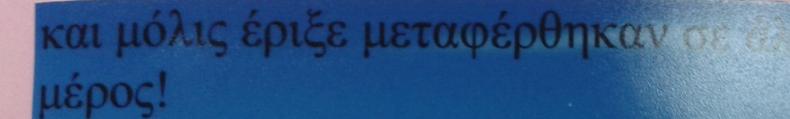












ποιο παιχνίδι θα μου μάθεις τώρα Σκοτ??



το κυνήγι του κρυμμάνου θησαυρού!



EXPERIMENTAL PROCESS

There were 4 periods:

Period 1:

 Induction, groups, presentation of SNT & 6 thinking hat strategy, face to face application, presentation of the case study

Period 2:

 Teacher announced the beginning of each hat thinking, students discussing in the SNT to find a solution

Period 3:

Present their ideas in a comic book

o Period 4:

Assessment & evaluation

ASSESSMENT

- To measure the outcomes of the procedure we used <u>authentic assessment</u> and <u>questionnaire</u>
- Authentic assessment: is the measurement of real abilities, capabilities and knowledge in procedures that can be applied in real situations (Woolfolk, 2007).

Students had to find a solution to the presented case study and submit their proposal as a comic book

- The comic book and the discussion in the SNT were evaluated towards the 4 creativity factors using Choon-Keong et al's (2010) methodology
- o Questionnaire: Ziogkou & Dimitriadi (2010)

AUTHENTIC ASSESSMENT

It takes qualitative data and caterogise it

Creativity	Scoring criteria	Score awarded	Score team
factors			
Fluency	The number of different ideas that one can	1 point for each	XXX
	produce. Emphasis on quantity	idea	
Flexibility The number of categories of ideas that one		1 point for each	XXX
	produces. Emphasis on quality	category	
Elaboration Richness of detail in the ideas that one		1 point for each	XXX
	produces. Emphasis on details	creative	
		collaboration	
Originality	The uniqueness of ideas that one produces as	Between 1% &	XXX
	compared to the whole sample. Emphasis on	5%= 1 Point	
	uniqueness	If 1%=2 points	

Measure the ideas of each group and divide them with the total number of all ideas



DATA FROM DISCUSSION IN SNT

Total scores of each team					
Team	Fluency	Flexibility	Elaboration	Originality	Total score
Powerpuff girls	48	24	39	83	194
Sailormoon	61	18	40	104	223
Bad girls	78	45	155	290	568
Little explorers	192	46	86	322	646

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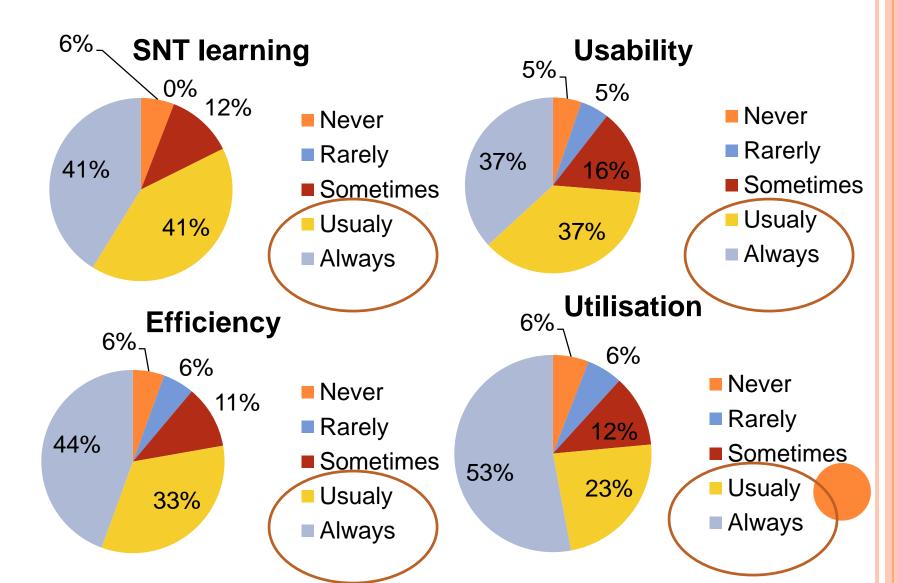
Creative	Moderate creative	Less creative		
431-646	216-430	0-215		
Bad girls (568)	Sailormoon (223)	Powerpuff girls (194)		
Little explorers (646)				

DATA FROM COMIC BOOK

Total scores of each team					
Team	Fluency	Flexibility	Elaboration	Originality	Total score
Powerpuff girls	4	4	1	8	17
Sailormoon	7	7	7	14	35
Bad girls	11	10	11	22	54
Little explorers	14	12	13	22	63

Categories of creativity groups				
Creative	Moderate creative	Less creative		
42-63	21-42	0-21		
Bad girls (55)	Sailormoon (35)	Powerpuff girls (17)		
Little explorers (63)				

DATA FROM QUESTIONNAIRE



DISCUSSION & CONCLUSIONS (1/2)

Can the usage of a SNT, which utilises de Bono's "6 thinking hats", promote creativity?

- Ideas that covered all creativity factors
- Ideas that could be implemented in everyday practice to meet the challenges of the early years settings
- Teams had the same progress with no decrease in the categories of creativity groups
 - Probably these are attributed
- SNT=enhance communication (Sturgeon & Walker, 2009; Bowers-Campbell, 2008)
- SNT = make learning more attractice (Na-songkhla, 2011)

DISCUSSION & CONCLUSIONS(2/2)

 This study supports the argument that SNT have the opportunity to promote creativity

(Reid, 2011 · Walker, 2010)

Further research

- Bigger sample
- More SNT (like Facebook, twitter etc)
- Comparison with other Web 2.0 tools (like blogs, wikis etc)

THANK YOU FOR YOUR ATTENTION



Any questions???



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