### InterAct framework as help for students to learn about plagiarism

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### **ABSTRACT**

The Internet has opened and introduced numerous possibilities of easy access to material worldwide. This is old news to most students. However, such easy access to information and its extensive use can sometimes produce various kinds of accusations of plagiarism. Some students are simply not aware of the Copyright Act and that it is not legal to use someone else's work passing it off as ones own. Others simply do not care. A few studies have shown that students buy assignments both from other students and faculty staff. At Hedmark University College we have for several years offered students training in proper and critical use of sources. We also inform them of the possible consequences of detected plagiarism or other improper use of sources (they may for example be prohibited to complete exams.) However, one can never completely ensure that plagiarism will not occur.

We believe that the best way to reduce improper use of cyber info and to enhance legal and proper use is to inform, teach and cooperate with our students. Until now we have been giving seminars, as well as courses of 10 ECTS, in proper and legal use of material on the Internet and other resources. To take it a step further, we would like to include a *Role Play Game* in order to test a non-traditional new learning strategy, Our objective is to provide students with an understanding of ethical and legal issues surrounding plagiarism, to provide know how on how to retrieve relevant information and use sources and citations in a proper and ethical way. Our strategy uses a Learning Management System (LMS) and a plagiarism detection tool within a role-play framework.

Hedmark University College uses Fronter, a Norwegian developed LMS. Ephorus; a Dutch developed plagiarism control tool is closely integrated with Fronter, and all assignments submitted in Fronter can be sent through Ephorus for plagiarism control.

InterAct and Fablusi are frameworks for Role Play Games where students cooperate to play a role that itself interacts and cooperates with other roles similarly played by other student groups. This paper provides an overview and outline of the Role Play Game that was developed using the InterAct framework and the Fablusi Design Sheet. [1] It further ties relevant pedagogical theories to the different aspects of the Role Play Game we developed for the purpose of teaching attitudes towards plagiarism.

#### INTRODUCTION

With the increased accessibility of material via the Internet, students often use the Internet as a source of getting information and answers to assignments. Indeed they are encouraged to do so. However, how to use the information and material is not always clear to them. Some of the students use material in what one could define as an unauthorized way. They "cut" and "paste" and sometimes build their whole assignments of pieces or fragments from other peoples work displayed on the Internet. To "cut & paste" from texts on the Internet is not necessarily illegal, but it is customary to give credit to the person or persons that are the original writers. In fact there are several standards that explain how to cite and quote correctly from other texts, like the APA style (2007)[2].

Some of the students that make unauthorized use of Internet material know that what they do is not "proper" behaviour (Dey, 2006)[3]. But there are also students that do this without knowing they could be failed if their work is deemed to contain plagiarism. At Hedmark University College, the students are told and have access to the regulations regarding plagiarism. For some exams and assignments they also have to sign a document stating that this is their own work and that it is original. However, what they interpret to be their original work is not always what the regulations proclaim.

To combat the increasing number of cases of plagiarism, we are making an effort to teach students about how to use sources of any kind in a proper way and according to the Copyright Act. We have held seminars and we also offer courses that give students 10 ECTS.

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To make the lessons even more engaging we are in the process of evaluating a framework for Role Play called InterAct. We have also tested the Fablusi system for generating role-plays (Linser, Ree-Lindstad and Vold, 2007a)[4]. We believe that by using Role Plays we can engage the students and make them aware of the ethical and legal issues surrounding plagiarism. As Torgersen pointed out we remember 10 % of what we read, 20% of what we hear, 30 % of what we see, 50% of what we see and hear, 80 % of what we say and 90% of what we see and do at the same time" (Torgersen, 1998, in Kure, Svoen, Vold, 2003)[5]. As the old Chinese proverb asserts: "I hear and I forget. I see and I remember. I do and I understand." Confucius said these wise words in the year 450BC.[6]

### **INTER ACT**

InterAct is a conceptual framework or model for creating Role Plays that can be implemented on any Learning Management System or Course Management System (CMS). It has been previously used on Moodle - a freeware CMS [7]. InterAct has been developed through European cooperation within the frame of the Leonardo programme [8]. InterAct starts with an introductory scenario and a given task. Usually the players need to identify the task themselves. Two to five students will play each of the roles. They have then to agree on how to define their role. The definition of each role has to be presented to the other players in the LMS as a role-profile. Further tasks will then be presented for the participants to address. They will have to discuss amongst themselves and come to an agreement on how to respond and present it to the other players. And so it proceeds to the final concluding task. They not only have to agree amongst the players of each of the roles, but also amongst the roles.

Margrethe Marstrøm Svensrud, Gabriela Sbertoli and Randi Husemoen, all from Vox[9], the Norwegian Institute for Adult Learning, introduced us to InterAct. Their framework seemed to generally share our basic epistemologically viewpoint and seemed consistent to some degree with the Fablusi system which we are already using. Having the opportunity to remotely monitor a role-play using the InterAct framework "in action", this seemed to be confirmed.

### **PEDAGOGY**

The pedagogy or rather pedagogies InterAct is based on are those of collaborative learning, constructivism and social constructivism. The developers of InterAct have thus had a rather conceptually eclectic approach. It is not hard to find supporting theories in the way the model is built and our understanding of Fablusi system supports this. The testing through several

European projects also supports the fact that this is very engaging, motivating and pedagogically well-built conceptual framework.

The online collaborative learning approach, Computer Supported Collaborative Learning (CSCL) strategy (Kaye in Heap, Thomas, Einon, Mason, Makay, 1995) [10] is very obvious as students have not only to cooperate and collaborate "inside" each role, but the roles also have to cooperate and collaborate amongst themselves in order to complete their tasks. The expected outcome of the Role Play is a common understanding of plagiarism and how to avoid plagiarising. This strategy is also known as peer learning where participants learn from each other. Students will of course have different views, different knowledge and different backgrounds when approaching the tasks. They will have to share and receive from their peers in order to complete their tasks and move the role-play forward. They should collaborate on tasks and discussions in order to achieve a common understanding (Duffy and Jonassen, 1992) [11].

Tasks that need to be completed are contextualized to provide the participants with an opportunity to discover and collaboratively construct meaning as the role-play unfolds. This is a social constructivist approach (Berger and Luckman, 1966) [12] in which the information we provide and students research is used by the participants to construct a reality and hopefully come to the conclusion that plagiarism cannot be condoled. In fact we want them to go through the cycles of retrieving information making it a part of their consciousness and awareness, making it the groups "reality" and then to make this "reality" institutionalized amongst all the participants. We also want our students to construct new knowledge by the experience of this Role Play. We want them to accommodate and assimilate the knowledge of how to cite and quote correctly and make proper use of the sources, and how not to plagiarise. We, like Jean Piaget (Piaget, 1950) [13] would like to have this knowledge internalized by the students participating. And our experiential approach to learning - i.e. "learning by doing" by what the late John Dewey is remembered – aims to achieve this. By playing a role and taking part in the role play, we want students to experience and "do" what they are allowed and encouraged to do when using sources.

The challenge to students is to improve their level of understanding. Our experiential, constructivist and collaborative approach is allied to what Lev Vygotsky described as the "zone of proximal development" (Vygotsky, 1978) [14]. It enables students to share, organize and learn from each other and we believe that the students will experience success on completing the tasks and gain confidence and

motivation and develop to be responsible students when using sources.

# "PLAGISTIC" - THE ROLE PLAY – AN OUTLINE

Using the InterAct framework and the Fablusi Design Sheet and applying game design principles to role-playing (Linser et.al, 2007b) [15] we created a role-play that aims to help students identify and understand the issues involved in plagiarism. The pedagogical objective of the game is to introduce the legal and ethical issues involved in inappropriate use of resources (i.e. plagiarism) and enable students to identify such cases as well as to identify appropriate use of resources. The game also aims at inducing reflection and cooperation among the students over the topic of ethics. Through playing the game and discussions it involves we hope to promote a general understanding of ethical issues with regard to using sources in general.

Given space limitations, we will only provide the outline of this role-play called "Plagistic".

Students will assume the following roles:

Ola Fredriks – Journalism Student

Christian Himmel – The Editor of the Star Newspaper Kari Olfjenson- Publisher of the Star Newspaper

Leif Erikson – Author of "Norwegian Rock – the complete story"

Thomas Brasko – Copyright Lawyer representing Leif Erikson

The scenario: An author, Leif Erikson, after many years of research, has written a book titled "Norwegian Rock – the complete story." This book is published 2 years previously and is widely available. In order to increase sales of her newspaper the Star, the Publisher, Kari Olfjenson, has decided to do a series of articles on Norwegian Rock history and both the Editor, Christian Himmel, and a student of Journalism working at the Star, Ola Fredriks, are told they need to quickly produce articles on Norwegian Rock. They turn to the most comprehensive book on the subject "Norwegian Rock – the complete story."

The object of the game for the publisher, editor and trainee journalist is to publish as many articles with information taken from the book, both in plagiarised form and with appropriate acknowledgments of sources. The object of the game for author and the lawyer, on the other hand, is to make sure that what gets published is properly acknowledged as the author's work. It is in the interest of the publisher, editor and journalist to produce as many articles as possible and therefore cutting corners would be acceptable if they can get away with it. On the other hand it is in the interest of the author and his lawyer to locate any plagiarised material in the newspaper.

Scoring:

For publisher, editor and journalist: each article published and passes as free of plagiarism players receive a point and each one that does not pass deducts a point.

For Author and lawyer: each article that they can show that it contains plagiarised material they receive a point and each article that passes and contains plagiarised material they get a point deducted.

All: each player receives 2 points if all agree that an article is free of plagiarism or to the contrary contains plagiarised material.

The moderators will use the tool "Ephorus" to help detect plagiarism and allocate scores. [16] [17]

Interaction Space: all players will interact in the publishing house that contains two subspaces – the news and the publishers' office where all debate will take place. The different actors can debate the merits of each article published and can come to agreement about the status of each article – whether it contains plagiarised material or not.

#### Tasks:

- 1. Role-profile
- Aims to begin the collaborative process and to introduce all the roles to one another.
- 2. Articles from the media people (plagiarised and not plagiarised)
- 3. Letters of complaint from the author and lawyer team (re-plagiarised)

These aim to have students research and think about what is and what is not plagiarism

4. Each group (media, author/lawyer team) will have to make a list of 10 points describing how to use resources (resources from the Internet, books, articles and all other sources). Describe and explain what the APA style is and how to make a reference in the APA style.

This aims to create a collaborative understanding.

5. Reflective Role-summary (see Appendix A) In order to make the students reflect on their own work and learning process, we have constructed a questionnaire to be completed at the end of the game. This will also provide us with feedback for improvement.

Resources: The book "Norwegian Rock – the complete story"; Copyright Act, web references regarding plagiarism.

# THE DIDACTICAL RELATIONAL MODEL AND ROLE PLAY – FIRST

# DRAFT OF A NEW/IMPROVED MODEL

The didactical relational model (Bjørndalen and Lieberg, 1978) [18] is very useful when designing elearning courses. We will use this model in our evaluation phase in testing the role-play. As the figure below shows; we need to know what the curriculum demands. As the curriculum is about The Copy Right Act, the learning objective for the role-play is to learn about how to make proper use of sources from the Internet, from books, and other kinds of sources. Our target group is students at Hedmark University College. We organize the teaching for this part in the framework of InterAct. The Learning aids and media are Fronter, the LMS used at Hedmark University College, Ephorus; the plagiarism control tool integrated with Fronter, the Internet and all other available sources. The learning strategy is experiential using a role-play, making the students search for the answer, collaborating and coming to agreements with fellow students (peers). The evaluation of the roleplay will address the question to what extent students managed to come to agreements regarding plagiarised or non-plagiarised material. Finally, and perhaps most importantly: the final agreement of the 10 guidelines - whether they are formulated according to the general regulations and the Copyright Act. The pedagogical foundation is of collaborative learning, experiential learning, social constructivism and constructivism. Admittedly this is a very eclectic approach to this type of learning (also see above) but one that has great potential.

This model has points referring to each other. This means that for example who the target group is will also decide on how to organize the curriculum and the learning objective. It will to some extent also provide some hints about the learning aids and media that will be used, as well as the didactics to be used. The pedagogical foundation will also have to be exploited to meet the target group. How to evaluate also depends on the other points. In order to make all the points refer to each other in this way, it is necessary to be aware of these connections when planning and designing the learning strategy. Using role play was "fixed" and thereby also most of the pedagogical foundations. The learning objective was also clear to us. The model has provided us with a useful list of what to take into consideration. However, we have been previously challenged on developing this model in the direction of including the game aspect. The figure below (figure 2) is a first draft of the attempt of such a development and expansion of the model.

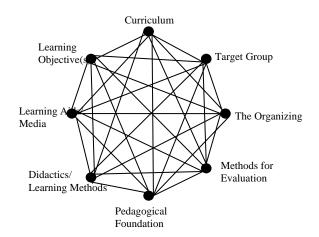


Figure 1 The Didactical Relational Model (Bjørndalen and Lieberg, 1978)

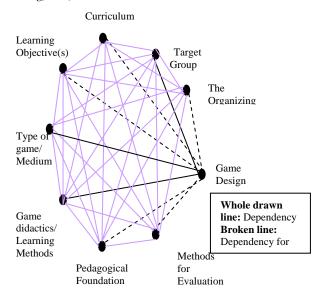


Figure 2 Draft: the extended Game and Media pedagogical model  $\,$ 

Our preliminary "working title" for the model is "The extended Game and Media Pedagogical Model" and it will probably change name and be developed further during the process of developing and implementing the role play. We find it however useful to experiment with this model in order to make sure that we both assimilate the learning objective with the objective of the role play. We find it important to differ between the two objectives as they have different impacts on the result. To mix the two we believe can prove fatal regarding maintaining the "good gameplay". Good gameplay is defined in Salen and Zimmerman (2004) [19] describes a game as:

"an activity with some rules engaged in for an outcome" and they further define a game as a "system in which players engage in an artificial conflict, defined by rules, that result in a quantifiable outcome".

To mix or confuse pedagogical objectives with game objectives can or will affect the gameplay at the risk of making it boring resulting in students lack of engagement in the role play. This will dramatically reduce our possibility of imposing our learning objectives on our students.

The model implies that Game Design must have a major role when creating a game and role plays. We previously stated the importance of the distinction of the learning objective and the game objective, and would like to point out that we define the game objective as a part of the "bullet" we have called "Game Design" in this draft of the model. The interlinking between the other points in the extended model has both broken and continuous lines. As the figure explains the broken lines represent a dependency when making what is defined as "Serious Games" and the continuous lines represents a dependency regarding all games. "Serious Games" is defined by Wikipedia as

"...computer and video games used as persuasion technology or educational technology. They can be similar to educational games, but are often intended for an audience outside of primary or secondary education." (Wikipedia.org) [20]

An evaluation of the model and using this model will take place after testing it on a group of students to see if we still meet what we anticipated in the first evaluation. We hope to have a test plan ready shortly after finishing writing out the full role play as it will be used for the test. We also hope to be able to test the preliminary role play on students by the end of August 2007.

### **CONCLUSION**

We believe that it is pedagogically useful to use a role-play and more specifically the model InterAct for students to learn not to plagiarise and to use sources in a correct way. We are in the process of making the role-play using the InterAct conceptual framework and the Fablusi design sheet and hope to test it out in August of 2007. We believe this to be an engaging and motivating way of learning. To use role-play to enhance the learning process is a different way of teaching the students this particular curriculum subject at our University College. It will be very interesting to test out and to draw some conclusions from this test regarding developing this type of role play also for other topics. The development of the Game and Media Pedagogical Model will hopefully contribute to future design of serious games and educational role-plays.

### REFERENCES

- [1] Fablusi design sheet (2007) Accessed 04.03.2007 from
- http://www.fablusi.com/corporate/requestDesignDoc.asp
- [2] *APA style* (2007). Washington DC, American Psychological Association. Accessed 4.7.2007 from http://apastyle.apa.org/
- [3] Dey, Subrata Kumar (2006), Impact of Unethical Practices of Plagiarism on Learning, Teaching and Research in Higher Education: Some Combating Strategies, Conference paper on ITHET 2006, Sydney Australia
- [4] Linser, R, Ree-Lindstad, N, and Vold, T (2007a) Black Blizzard – Designing Role-play Simulations for Education, Paper presented at 7th International Educational Technology Conference, 3-5 May 2007, Near East University - North Cyprus
- [5] Kure, B, Svoen, B and Vold, T (2003): 3IS602 IKT og Læring Kompendium, Høgskolen i Hedmark
- [6] Confucius (BC 450) *I hear and I forget. I see and I remember. I do and I understand* Accessed 4.7.2007 from www. QuoteDB.com
- [7]Moodle(2007): Accessed 04.04.2007 from http://moodle.org/
- [8] Ursache, Ioana and Crowe, Simon (2006): Interact: The Development of a Successful Adult Learning Model and International Collaboration Using an Online Learning Platform, Eden 2006 Annual Conference, Vienna, Austria
- [9] Vox (2007) Accessed 10.02.2007 from http://www.vox.no/templates/CommonPage.aspx?id= 2598
- [10] Heap, Nick, Ray Thomas, Geoff Einon, Robin Masin and Hughie Mackay (1995):Information Technology and Society, Sage Publications Ltd, London
- [11] Duffy, T. M., and Jonassen, D. H. (Eds.) (1992). Constructivism and the Technology of Instruction: A Conversation, Hillsdale, NJ: Lawrence Erlbaum Associates
- [12] Berger, P. L. and T. Luckmann (1966), *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*, Garden City, NY: Anchor Books.

- [13] Piaget, Jean. (1950). *The Psychology of Intelligence*. New York: Routledge.
- [14] Vygotsky, Lev S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press
- [15] Linser, R, Ree-Lindstad, N, Røijen, K and Vold, T (2007b). *Role Play for Increasing Digital Literacy*, Conference paper to IAT 2007, Lillehammer, Norway
- [16] Ree-Lindstad,N, Røijen,K. and Vold,T. (2006) *Experiences with a plagiarism control module*, Conference paper to ITHET 2006, Sydney, Australia
- [17] Ree-Lindstad,N., Røijen,K. and Vold,T. (2006) Different ways of using a plagiarism control module, Conference presentation to Online Educa, Berlin, Germany
- [18] Bjørndal, B., Lieberg, S. (1978)Nye veier i didaktikken?: En innføring i didaktiske emner og begreper Aschoug, Oslo
- [19] Salen, K. and E. Zimmermann (2004), *Rules of Play: Game Design Fundamentals*: Cambridge, Mass., MIT Press.
- [20] Serious Games (2007) Accessed 05.06.2007 from http://en.wikipedia.org/wiki/Serious\_game

### Appendix A

### **Reflective role-summary:**

Individual work: The role-play is now officially over. I would like you to answer the following questions in your own words (you may use keywords and bullet points):

What do you feel about this role-play? (Did you find it engaging? – Why? Or not engaging? – Why not?)

How did the cooperation work in your group/for your role? Did you feel that your opinion was heard and included in the joint answer as your role?

What is your conception of the cooperation between the roles? Did you feel that your role's input was included in a satisfactory way as the role group's answer to each task? Why/why not? Explain!

What is your learning outcome (if any) of this role play? Did you learn anything during the role-play? If you learned something: please give some keywords on what you learned.

If you did not learn anything; can you explain why you think you did not learn anything?

What do you believe was the original and planned learning outcome of this role-play?

To what extent do you feel this is relevant to the other student work you do? (Will you use/or are you using what you have made a presentation on (task 4) in your current/ongoing student assignment?)

Would you recommend this way of learning to other students?

Comments for improving the role-play (to make it more relevant, more engaging, more fun, etc.?)

Post answer in Fronter in the Plagiarism room. Thank you!