

ISAGA

International Simulation and Gaming Association

April 2005

www.isaga.info

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ISAGA Summer School 2005



International ISAGA Summer School in Gaming & Simulation

Theme *Facilitation and Debriefing of Simulation & Gaming*

Date **August 20 – 27, 2005**

Venue **Krakow (Poland)**

Uniwersytet Jagiellonski

Center of European Studies

Teaching Staff

Prof. Dr. Paola Rizzi (Italy); Dr. Willy Kriz (Germany) / directors

Anne Villems MSc. (Estonia)

Prof. Dr. Jan Klabbers (The Netherlands/Norway)

Prof. Dr. Elysebeth Leigh (Australia)

Prof. Dr. Dmitri Kavtaradze (Russia)

Participants

The minimum number of participants is 20. The maximum number of participants is 30.

The available places will be granted in the order of registration.

Program

The summer school will give participants the opportunity to learn about the effective use of different gaming simulation methods and to learn how to facilitate and debrief gaming simulation sessions.

Morning sessions: lectures and discussions about the various perspectives on gaming simulation, their facilitation, play and debriefing.

Afternoon and evening sessions: participants will form small project teams. Coached by the teachers, they will prepare simulation game sessions, including their facilitation and debriefing. The teams will facilitate and debrief the games with the remaining group of participants. Each game session is followed by a “meta-debriefing” with all teachers involved (debriefing of the facilitation and debriefing process).

Topics include: Role of facilitator in Gaming and Simulation learning environments, communication skills and pitfalls for facilitators, dealing with group dynamics and conflict management; effective briefing and warming up techniques; debriefing themes, structures and methods; facilitator skills for working with a mix of national and cultural differences.

The Summer School language is English.

Participation Fee

ISAGA members: 400,-- / non-members: 500,-- / student members: 200,-- / student non-members: 250,-- All prices are in Euro!

Members of affiliated organizations will be charged the ISAGA member-fee (ABSEL, JASAG, NASAGA, OzSAGA, SAGANET, SAGSAGA, SAGSET, SIGIS and DiGRA).

A number of limited places is available for participants from developing countries (100,-- Euro regular or 50,-- Euro for students). Please contact organizers directly. The fee includes Summer School documentation and certificate.

The fee does not include meals or accommodation. A full meal plan (breakfast, lunch and dinner) will cost 15,-- Euro per day and accommodation is available in the nearby university guesthouse (single room: 30,-- Euro per person per night; double room: 20,-- Euro per person per night).

Contact and Registration

Registration has already begun. Please send your registration and CV by email or fax to the organizer.

Participation is only effective against pre-payment of the fee. After receiving your registration we will inform you immediately about your admission into the summer school. The payment of the fee must then be made within three weeks in order to secure a place.

Contact Willy Kriz: wkriz@edupsy.uni-muenchen.de; www.sagsaga.org/isagaschool2005;

fax: +49-89-2180-5153

In Cooperation with

Jagiellonian University of Krakow (Poland)

University of Alghero (Italy)

Ludwig Maximilians University of Munich (Germany)

Swiss Austrian German Simulation and Gaming Association



Przegorzaly castle, where Summerschool 2005 takes place

ISAGA Conference 2005 Atlanta

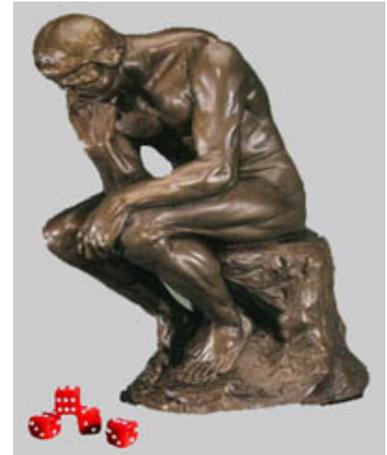


The ISAGA05 conference will begin on 27 June and end on 1 July, taking place earlier in the year than it has for several years. Get prepared on-time or even earlier!

All events will take place at the Georgia Institute of Technology, College of Management in Atlanta, Georgia USA.

The theme for the 36th annual conference will be "**Serious Play: Form, Function, and Fun.**"

For details on the International Simulation and Gaming Association, visit www.isaga.info.



Featured Tracks for ISAGA05

There will be nine primary tracks for the ISAGA05 meeting. Within each track will be numerous sessions with wide varieties of potential subject areas in simulations and games. An award for the outstanding paper has been extended to a potential outstanding award for each track.

In addition, ISAGA05 is expecting the conference in Atlanta to have many games and simulations "played" during the conference. We want the attendees to submit games to be played at ISAGA05. There will be a "best game" award among those games played during the 2005 conference.

This year's nine primary tracks are listed below

- **Theory Development in Gaming and Simulation** (including Game Theory and Economic Theory)
- **Research into Games and Simulations**
- **Games and Simulations for Learning Environments**
- **Games and Simulations to Enhance Communications Skills**
- **Games and Simulations for Solving Complex Problems**
- **Expressions of Creative Art**
- **Policy Exercises**
- **Games and Simulations in International Relations and Politics**
- **Games and Simulations to be played during ISAGA05**

Information about the Conference -- <http://www.isaga05.gatech.edu/>

Contact Information

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✉ISAGA05@mgt.gatech.edu

Make your reservation ISAGA 2005 today!

<http://www.isaga05.gatech.edu/register.html>

ISAGA 2004 Conference Reports

*Reports about ISAGA/SAGSAGA Conference 2004 Munich
Two different reports about the conference and the summer-school show different aspects of the Munich event.*

Thomas

ISAGA 2004: Bridging the gap through gaming and simulation

Vincent Peters

Marleen van de Westelaken

Cas Gerritsen

Radboud University Nijmegen



A short account is given of the 35th annual international conference of the International Simulation and Gaming Association, that was held in September 2004 in Munich, Germany.

The Ludwig Maximilian University in Munich, Germany, hosted the 35th annual international conference of the International Simulation and Gaming Association (ISAGA). The conference was jointly organized by ISAGA and SAGSAGA, the Swiss-Austrian-German simulation and gaming association.

The conference theme was "Bridging the gap: transforming knowledge into action through gaming and simulation". This theme refers to the fact that, as the organizers formulated it, "gaming simulation is an interactive learning environment that makes it possible to cope with complex authentic situations that are close to reality. At the same time, gaming simulation represents a form of cooperative learning through teamwork. A single simulation game allows for multiple contexts of use, and newly gained abstract knowledge can in turn be used to explore unfamiliar domains. This learning under multiple perspectives creates flexibility and is helpful in bridging the gap between knowledge and action." (Kriz & Eberle, 2004, p. 6). During the conference a wide range of gaming and simulation methods and tools were discussed, in the context of a broad variety of disciplines.

According to the conference handbook 320 people participated in this conference, either by having a contribution or by taking part in the activities or both; in addition, 50 teachers participated in a special workshop on the last conference day. The real international character of the conference is accentuated by the fact that these participants came from 29 different countries; with the exception of the African continent, all continents were represented during the conference.

This paper does not contain a systematic account and evaluation of the conference and its peripheral events. Instead it is based on the personal impressions of three of the participants of this conference. And since these three participants are from the same institute and share many common interests in relation to gaming simulation, one should not expect a precise account of what has happened during this conference, but it rather consists of miscellanea of what still is in our remembrance of this conference week.

Key Features Of The Conference

Looking back at the ISAGA 2004 conference, there are a few aspects that immediately pop up in our mind which were crucial for the atmosphere, the course and the content of this conference. We will mention these aspects shortly and elaborate them further on.

To start with: the conference was excellently organized. The organizing committee, led by Willy Kriz, Thomas Eberle and Matthias Puschert, had done a great job by presenting us with a well organized ("gründlich" as they say in German) conference, with a tight time schedule that was adhered to, with a very varied program consisting of keynote presentations, parallel sessions, keynote activities, and a comprehensive social program.

Secondly, the scale of this conference. The number of participants still seems to increase, and since there was also a rather large group of first time participants, we may conclude that the interest for gaming simulations continues to grow. This large number of participants also implied that there were many contributions. Generally speaking the quality of these contributions was of a high level. In addition to this, we also noticed that there was a large number of contributions dealing with the methodology of gaming simulations and with subjects relating to the disciplinary character of gaming simulation.

Thirdly, there was the fact that this conference was preceded by a summer school in which 35 (mainly) young people from 6 countries participated, who worked enthusiastically under the inspiring coaching of six renowned gaming experts on acquiring knowledge of gaming simulations and on applying this knowledge in practice in building a gaming simulation. Since most of these people also participated in the conference (either as a participant or as a 'huggy', i.e. supporting the organizing committee) the enthusiasm of the summer school was reflected on the whole conference.

And finally, there was Jan Klabbers. Jan has been the Secretary General of ISAGA for 28 years. Two years ago he announced he was going to retire from this function. Therefore, there were during this conference several moments in which we looked back at the history of ISAGA and the ISAGA conferences, and of course at the role Jan has played in this. But it was not just a matter of respectfully and thankfully glancing at Jan. He himself held a presentation at the end of the conference, in which he looked back at the history of ISAGA and particularly shed his light on the development of a scientific approach of gaming simulation. In the following we will look a little closer to some aspects of this conference.

The Program

Each conference day consisted of four very different activities, varying in intensity, subject, participants and form of participation (listening, discussing, acting): keynote sessions, keynote actions, parallel sessions and social activities. And in between there was ample time for meeting other participants and socializing during the lunch and coffee breaks.

Keynote Sessions

Each conference day started with several keynote lectures. The number of keynote lectures (eleven in total, spread over five days) was rather high compared to other ISAGA conferences, but they covered the broad range of topics of this conference, ranging from more theoretical and methodological reflections (Law-Yone, Klabbers, Leigh, Teach) to aspects of building and applying gaming simulations (Wenzler, Kato) to specific fields of application (Garcia Carbonell, Meadows, Högsdal, Oerter, Mandl).

Given the space for this review, it is not possible to examine the content of all of these lectures here, but we like to mention two of them in particular.

At first the keynote lecture of Dennis Meadows. After he had attended the ISAGA conference in Ann Arbor in 1994, it was good to see him back again at ISAGA ten years later. During his

keynote Dennis stressed that the way the world develops at this moment is still within the limits that are given by the scenarios of the Club of Rome. And, therefore, it is still very necessary to convince people of the negative impact of the way several systems work and influence each other. He showed how he has applied gaming simulation techniques to bring this message to the people, ranging from large computer-based games (like Strategem) to very small simulations that only take a few moments to make people experience that a system may behave completely different than expected (like the 1-2-3 Clap game).

Another keynote lecture was held by the winner of the Best Paper Award, Jan Hense. His paper and presentation dealt with the subject of the evaluation of gaming simulations. Jan promotes the use of theory-driven or theory-oriented evaluation approaches and in his presentation he explained the benefits of this approach for the evaluation of gaming simulations. In the context of the evaluation of Simgame, he showed how such an evaluation study can be set up and executed.

The last conference day was closed with a panel discussion under the title "Saga about ISAGA: a retrospect and a prospect". The panel was formed by several leading people in the world of gaming simulations and a few young professionals. Unfortunately, as is the case with many panel discussions, this session never became a real and lively discussion session between the members of the panel or between the panel and the audience. The panel discussion focused on the distinction between the science of design and the science of analysis in relation to gaming simulation (see Klabbers, 2004), and the need to establish links between these two perspectives and to combine the findings of the studies to gaming simulation from these two perspectives.

Keynote Actions

New in the program of the ISAGA conferences were the so called keynote actions. On each conference day there was an activity planned just after lunch break for all participants. These activities certainly helped the participants to overcome their after lunch dip and gave new energy for the remainder of the program and inspiration for gaming simulations.

Dmitri Kavtaradze organized a session in which human communication and social interaction were practiced.

Wilfried Reiter and Josef Birnkammer made us experience how active learning can be stimulated by play; they astonished us with some magic acts and they explained how the basics of magic may enhance active learning processes.

Sivasailam 'Thiagi' Thiagarajan showed a few techniques that can be applied in large groups, and he illustrated seven powerful principles for facilitating large groups.

And finally, Markus Ulrich and his group played the New Commons game with all participants, on the one hand demonstrating new technologies for group activities, on the other hand making us aware of how thin the line between collective and individual interests is.

Parallel Sessions

Each afternoon, after the keynote actions, there were parallel sessions in which participants could present their paper, have discussions about their work and ideas, participate in workshops on various subjects, or present their work in a poster session. In total there were over one hundred paper presentations and forty workshops.

These sessions were organized in 9 or 10 simultaneous sessions (of 90 or 120 minutes), in which two or three papers were presented and discussed. Given this large number of activities at the same moment it is very difficult for participants to select presentations they would like to join. In addition, unfortunately the organizers did not completely manage to organize

the presentations in such a way that the presentations in a single session always focused on the same subject. This resulted in a coming and going between the presentations in a session, and it hindered the possibility of having discussions that focused on several papers. We can appreciate the problems the organizers are confronted with: with these numbers of contributions and given the variety of subjects dealt with in the contributions, it is very difficult for the organizers to schedule all these sessions in such a way, that presentations on similar subjects are in the same session. As the ISAGA conference tends to become bigger and bigger, it is advisable to carefully reconsider the way we can deal with this problem.

As you may understand it is impossible to sum up all papers that were presented during the conference. But fortunately the organizers have succeeded to gather most of the contributions before the conference and put them in a book and on a CD-ROM (Kriz & Eberle, 2004). This book is a valuable collection of what people are doing at the moment in the field of gaming simulations.

The Social Program

As might be expected there was a very extensive social program. Even though the conference program was very full and time consuming, the organizers succeeded to create a lot of room for meeting each other and for socializing. In the evening there were several receptions in places that reflected the grandeur of the Bavarian history. The conference dinner was held at the famous Hofbräuhaus, where we enjoyed a typical Bavarian evening with "Bratwurst", music, yodeling and "Lederhosen", and not to forget: beer. During this event almost all presidents of the past 34 ISAGA conferences were present and in their attendance Jan Klabbers was honored and thanked in a very respectful way for all his work for ISAGA in the past. To express the gratitude Jan was given the honorary membership of ISAGA.

Another element of the social program traditionally is formed by the excursions. In this case the organizers had managed to have tours to the BMW factory and to Schloss Nymphenburg. For the people who did not like to travel so much there were guided tours through the city of Munich. And for those who still had energy left after long days of working, there was always the possibility to enjoy the famous German beer in one of the many cafés and bars of Munich. The sound of the yell "oans zwoa drei gsuffa" stills echoes in our heads.....

The Summer School in a Nutshell

As we mentioned before the ISAGA conference was preceded by a Summer School on gaming & simulation. This is a short account of how Cas Gerritsen, one of the participants, experienced the summer school:

"As probably most beginners in the field of simulation and gaming (or any other field for that matter) I felt my accumulated knowledge left me grossly inadequate to do what I saw and read about what other people did: building gaming simulations. As the saying goes, practice makes perfect. But where was I to find sparring partners and teachers to practice?"

When Paola Rizzi and Willy Kriz announced during the ISAGA 2003 conference in Kisarazu that the Munich conference would be preceded by a summer school I was instantly enthused. Now months after the event (and only months until the next conference in Atlanta) I was asked to condense this event into a single page of text. But I think that for this audience it would be sufficient to say that the group, students as well as teachers, experienced a lot of learning. The experience of building games as novices together with experts is a thing that cannot be emulated by reading everything on the subject. That's why I was happy to read that Willy Kriz and Paola Rizzi are currently working on a second edition of this school, to take place in Poland in 2005.

The summer school consisted of one week of plenary sessions and workshops with thirty-five international students (among others Japanese, Dutch, German, Russian, Swiss and Swed-

ish) and five tutors. The tutors were, in alphabetical order: Dick and Marie Duke, Jan Klabbbers, Elyssebeth Leigh, Mieko Nakamura and Paola Rizzi. On Sunday the summer school was opened with a dinner to give us time to get acquainted to one another and have (our first) try at the Bavarian cuisine. And from then on we were all lived by the timetable. Each morning started at nine o'clock with a plenary keynote, or game by one of the teachers. On Monday the week was opened by Jan Klabbbers who told us about his 'Gaming Landscape' as a taxonomy for classifying gaming simulations.

On Tuesday Mieko Nakamura lectured on game design and afterwards had the group play 'Silver Snail'. It was played in two simultaneous sessions which had a completely different dynamic which was fascinating in itself to experience.

On Wednesday Dick Duke taught about gaming simulations for strategic management and policy exercises. Afterwards the game Slogan was played.

Elyssebeth Leigh held the kick off on Thursday by having us experience the different roles a facilitator can have during the 'perpetual motion' game. After which we discussed them and got her views in a lecture on the designing of facilitators themselves.

On Friday Paola Rizzi discussed the use of software for gaming simulations. Introducing the concept of 'bricolage' as a way of working with materials at hand and 'Atomi Cellulari' as her computer frame game.

After these lectures we had lunch and next worked in five small groups for the afternoon. Each of these groups worked on the design of a small gaming simulation, coached by one of the tutors. Most evenings were filled voluntarily with gaming till as late as ten p.m. as well. After which the youngsters went out together for their (second?) dinner and drinks. The week ended with each group presenting its results on Friday afternoon and Saturday morning after which most of us were fortunate enough to enjoy our first taste of some well earned time off. During the 'actual' conference all groups had the opportunity to present shortly their procedures and product to all participants during a plenary sessions. Participants could take a closer look to the accomplishments of the groups and even play their gaming simulations during poster presentations in the afternoon.

All in all I think that this was a terrific learning opportunity for all the participants. The atmosphere was open and everyone, both teachers and students, was very approachable. The only side remarks that I remember from the evaluation session were ones concerning some free time in the program to give everyone a chance to let things sink in and have the chance to see something other than our 'pink building'.

For myself I can say that I had a great time and feel much more self assured about my knowledge and skills concerning gaming and simulation now I have had the chance to play and practice."

The ISAGA Steering Committee

In the margin of the conference there were several meetings of the Steering Committee of ISAGA. This Committee meets every year several times during the conference, dealing with matters concerning the association. This year it was a very special meeting, since a new Secretary General was to be selected, a novelty that had not occurred during the last 28 years. There were two candidates for this position, Elyssebeth Leigh and Pieter van der Hijden. After both candidates presented their plans for the future for ISAGA and after they were questioned by the other members of the Steering Committee, Elyssebeth Leigh was selected after two rounds of voting. She will be the Secretary General for the next four years, and all members of the Steering Committee have great confidence in her in leading ISAGA into the future.

In addition, two decisions were taken by the members of the Steering Committee in relation to the future of ISAGA. A committee had prepared a working paper with two scenarios on the future development of ISAGA's organization structure. The steering committee had a clear preference for the scenario in which ISAGA will develop as a 'virtual' organization (similar to the current situation), above the scenario in which ISAGA will become a 'real' organization (with its own staff, seat, etc). Further plans for the development of ISAGA will be elaborated. The second decision concerns the membership of ISAGA. Until now, you can not subscribe as a member, but joining the conference makes you a member for two years. There is no fee charged to the members directly. But in order to make the membership of ISAGA more clear and to create more commitment with ISAGA, members should from now on register themselves and they have to pay a (relatively small) fee. This will also be elaborated further.

Another important decision of the Steering Committee was, that there will be a general meeting of members during the ISAGA conference, starting at the 2005 conference.

References

Klabbers, J.H.G. (2004). Saga about ISAGA: a retrospect and a prospect. Keynote presented during the 35th annual conference of ISAGA in Munich.

Kriz, W.C., Eberle, T. (eds.) (2004). Bridging the gap: Transforming knowledge into action through Gaming simulation. Munich: SAGSAGA. ISBN 3-00-013988-5.

(A longer version of this report has been submitted for publication to *simulation & gaming* <http://saq.sagepub.com/>)

ISAGA 2004 Conference

Nina McGarry

Marymount University

Bridging the Gap: Transforming knowledge into action through gaming and simulation
35th Annual Conference of the International Simulation and Gaming Association (ISAGA)
and Joint Conference of SAGSAGA.

6.-10. September 2004.

Ludwig Maximilians University, Munich, Germany.

Two Weeks of Scholarly Engagement

The official 35th Annual ISAGA Conference began 6 September 2004. However, the conference was preceded by a week of scholarly engagement with students and professionals at Ludwig Maximilians University, Munich, Germany.

Ludwig Maximilians University and the City of Munich hosted the 35th Annual ISAGA Conference. More than 136 papers presentations mixed with numerous keynote speakers and panel events kept the conference week busy and engaging. Representatives from more than 30 countries attended.

Ludwig Maximilians University faculty and students expertly orchestrated a successful event that kept hundreds of conference attendees move about two floors of presentations. Paper presentations varied from policy simulations to enhancing personal interactions. Peppered throughout the conference were keynote actions, addresses and panel discussions.

The Conference opened with a presentation from Prof. Dr. Rudolf Tippelt, Dean of Faculty of Psychology and Educational Sciences, Ludwig Maximilians University. Prof. Dr. Tippelt reaf-

firmed the University's position of the importance of simulation and gaming in the knowledge creation community extending the boundaries of knowledge creation to incorporate many facets of life. Prof. Dr. Tippelt welcomed the ISAGA community to Munich and challenged those in attendance to extend the reach of gaming and simulation. Dr. Willy Kriz, Conference Chairman, extended Prof. Dr. Tippelt's recommendation as well as welcoming attendees. Additional keynote addresses through the week of conference events elaborated on the challenges of expanding and extending knowledge creation through simulation and gaming by focusing on specific in-country activities or proposing continuing development.

Each day a workshop exposed participants to developed games and useful simulations. Workshops held included environment impact simulation of depleting world resources as well as exposure to working with the unexpected and uncertainty with efficiency and effectiveness. The workshops were well attended and provided a breadth of new experiences and learning.

Poster sessions allowed conference participants to wonder the world of upcoming ideas in simulation and gaming. Representatives from business disciplines engaging simulation of possibility of events welcomed the expertise from participants regarding ideas for developing poster session concepts.

In addition to the week of ISAGA, participants were invited to join a week of simulation and gaming learning. Participants of ISAGA Summer School engaged in a week of learning and demonstration of simulations and gaming with students from Ludwig Maximilians University. The simulation and gaming event involved a combination of lecture from invited guests to demonstration of simulations involving students. Students designed a variety of simulations in the afternoons and presented them at the end of Summer School to other students. During the Conference the design process and the simulations and games were presented to the conference audience. This activity was one more exciting contribution rounding out the ISAGA Conference event.

Best Paper

Always a most welcome event is awarding of Best Paper to a Scholar in simulation and gaming. Continuing the practice of reviewing, comments, and recommending Best Paper, Dr. Joseph Wolfe congratulated Dr. Jan Hense from Ludwig Maximilians University, on his outstanding work in "theory-oriented evaluation of gaming simulations – the case of Simgame". Dr. Jan Hense was recognized by Dr. Wolfe at the Conference dinner and received a resounding round of applause as well as a plaque recognizing his work.

Numerous Social Engagements

The week of scholarly events include fun activities as well. The 35th Annual ISAGA Conference Organizing Committee provided conference participants with a plethora of events. Dr. Cathy Greenblat presented her recent photo expose on "Living with Alzheimer". Additionally, the Bavarian Motor Company, known less formerly as BMW, hosted a group tour of their Munich facility. The tour gave attendees an insider's view of operations at BMW. Other tours included trips a brewery and to Nymphenburg Castle, where the last King of Bavaria was born.

Blue Shirts

With expertly marked room locations and a comprehensive map of the facility, the Conference was made all the more enjoyable by the addition of Ludwig Maximilians University students identified as The Blue Shirts. Students wore blue shirts to easily identify their participation of Conference events. Blue Shirts helped with registering participants, escorting participants to University facilities, ensuring accommodating presentation rooms, and being available for whatever might need to be resolved. The Blue Shirts were a delightful addition to the entire Conference event.

Transition: General Secretary, new members and president

Sadly, the 35th ISAGA Conference saw Prof. Dr. Jan Klabbers transition out of Executive Secretary position. ISAGA's success is generally attributed to Dr. Klabbers involvement. Throughout the week, ISAGA events recognized Dr. Klabbers' contributions. Events included special recognition at the Munich Beer House, Opening Comments with special recognition to Dr. Klabbers, as well as a special Keynote Lecture whereupon Dr. Klabbers reflected on the change and growth of simulation and gaming. Dr. Klabbers will remain involved with ISAGA.

Election of Executive Secretary

With the transitioning of Dr. Jan Klabbers from the Executive Secretary Position, an election was held by ISAGA Executive Committee Members to elect a new Executive Secretary. Two candidates were nominated for the position. After a very close ballot, Dr. Elizabeth Leigh was elected as the Executive Secretary for a four-year term.

In her role as Executive Secretary, Dr. Leigh conducted the closing Executive Committee meeting.

President of ISAGA and New Members of Steering Committee

Dr. Willy Kriz follows Prof. Rei Shiratori as President of ISAGA. New members of Steering Committee are Eugenius Bagdonas – Lithuania, Vinod Dumblekar – India, Matthias Fischer – Germany, Arata Ichikawa – Japan and Slava Shoptenko – Russia as Young Professional.

ISAGA in Moscow

Elysebeth Leigh

The University of Technology, Sydney
General Secretary of ISAGA

Background

ISAGA is 35 years old in 2004. It has provided an introduction to the field of simulations and games for many people in over 20 countries during that time. In 2004 a team of ISAGA members introduced the concepts and practices of simulations and games to a new generation of educators at the Moscow State University (MSU) during the International conference on modern public administration management. Our host was Dmitri Kavtaradze – also an ISAGA member (since 1984) for many years – who made possible this showcase for ISAGA and learning through play.

Markus Ulrich from Switzerland, Paola Rizzi from Italy and Elysebeth Leigh from Australia were guests of MSU during the week of 2-days session. We brought our different skills and interests together to design and present a day of action and theory. This report summarises our experiences and observations and suggests how such events might become part of the future of ISAGA.

Moscow State University (MSU)

MSU is one of Russia's largest and most famous universities and has been part of Moscow's intellectual life for 250 years. The impressive main building of the university (photo 1) was begun in the late 1940's and completed in 1953 immediately after the Second World War. It has over 40,000 students and around 35,000 staff.

The occasion of this conference was search and comparison of problems that Russia meet those decades in the process of changing so many things in so short time. School of public administration is comparatively new in MSU and make significant progress in supporting new

style and theory of management in country. Two days workshop was organized to meet managerial specialists, university professors, natural resource experts and simulation models and design groups from East, West and Australia.

Members

The experience of presenting topics familiar to ISAGA members to a new audience in such a city was an adventure in itself. While creating a shared understanding of concepts was sometimes delayed by the need to ensure shared meaning of words the workshop was a great success. Elysebeth travelled the furthest to be part of this event.

This was Elysebeth's third visit to Moscow and the first time she felt confident about travelling around Moscow on her own! The Russian alphabet has finally sunk in! Her session introduced basic design principles for simulations for learning contexts and participants had fun using simple items to design activities they could use for learning in a variety of their contexts. Working with an audience that is totally absorbed in what you are saying, but have difficulty understanding it word by word is a challenge! This audience was wholly attentive and worked across the two languages with a total attentiveness that won her admiration.

It is clear that simulations and games are an important to Russian managerial system because of the holistic experiences they provide. Although the ISAGA speakers gave their presentations in English, all the materials are now published in Russian so are likely to reach a wide audience beyond the participants on the day. Participants were readers of the Simulation & Gaming journal and so had some familiarity with the work of ISAGA.

As the 2006 ISAGA conference is scheduled for St Petersburg Dmitri is now beginning plans for a pre-conference workshop in Moscow, so there is likely to be a repeat of this fascinating experience.

The city was energetic, sunny and overcast by turns. During the evening we visited Red Square (more than once) but were not able to stand in its centre, as this was reserved for a pop concert! It was amazing to be in a city that was providing its largest, most public space for a performance of music that its leaders once resisted!

Dmitri hosted an evening at the Bolshoi ballet – a most memorable experience. Both the ballet and the building were amazingly beautiful and intermission in the foyer was a moment out of time. We also visited a pop music cellar café, all night bookshops and had a Moscow taxi ride! There are three stages to this. First - you trust that all drivers in Moscow are honest. Second – you step out to the roadside and flag down a passing car going in your direction. Third you barter for a fixed price for the journey and then away you go! Amazing as it may seem, it works perfectly. Like all other Moscow 'taxi' drivers, ours was honest, fair and direct, and we crowded into his small car for the trip back through the midnight streets to our hotel.

Both the workshop and the social events were terrific ways to gain an understanding of another culture and its social educational and political concerns.

ISAGA 2005 – 2008

Elysebeth Leigh

*The University of Technology, Sydney
General Secretary of ISAGA*

The Audience, Purpose and Goals of this Paper

I want to make a declaration of how I 'am' in the role of ISAGA General Secretary. It has taken some time to conceptualise and create this article, and now I want to set the scene for the next three to four years.

How The Next Four Years Can Evolve

2004-5 – setting the scene, getting our collective wisdom around the changes wrought, thinking about possible agendas and time limits, defining [some of] the problems and opportunities ahead for ISAGA;

2005-6 – a new era; the committee taking action on agreed tasks with a shared commitment for common purposes and outcomes; the 2005 will have committee set this up, and all present took on tasks relevant to either/both their own and ISAGA's needs, goals and interests;

2006-7 - implement the strategies agreed as most likely to achieve identified goals and changes. My own include - but are not limited to - making income a priority; planning the next ten years; enjoying the results of the first full year of change; making adjustments; networking and growth. Those agreed and worked on will be initially identified in 2005 and adjusted as progress is made;

2007-8 – perhaps my last year in office; seeing the results; possible revisions to ISAGA's structure; ISAGA taking on new roles and tasks in the simulations and games field; ISAGA products are established and earning income.

How Will / Be In The Role?

I regard *leadership* as a process of "getting things done with and through people".

This involves --

- Not 'doing it all'
- Doing specific clearly described tasks
- Supporting those who take action
- Networking in my own region - Australia
- Supporting each committee member to do the same in their own contexts
- can we do this by using a form of title to supports such actions more clearly?
- Quick to respond to ideas
- Slow to 'take over' responsibility
- Encouraging and demanding – helping to develop 'benefit' statements that lead people to do more
- Setting up ways to make sure ISAGA has an shared vision and
- Helping to describe the 'mental models' of how ISAGA acts and gets things done

How Will I Not Be In The Role?

I do not intend to be an arbiter or final decision maker.

I will not step in to 'motivate' or prompt, once members are committed to action.

My approach to the work of the 'science committee' reflects this.

Inattentive to expressed needs and new ideas.

Unresponsive to requests and criticism.

Progress

Since the ISAGA '04 committee meetings several tasks have been achieved.

The ISAGA members who accepted responsibility for forming what we called the 'scientific committee' have been active and are working towards finalisation of some exciting statements of purpose and definition.

The 2005 Summer School has been announced and is already half subscribed.

This newsletter is becoming a regular feature of our communication.

The web site is established and active.

Next Steps

The 2005 committee has the task of reviewing our productivity and planning the way ahead. The first ISAGA Summer School was a great success – after years of effort – particularly on the part of Paola and Willy

It now seems likely that we have the strength to make it an annual event in conjunction with the conference, Willy and Paola's drive and others who are willing and able to take on the task.

Dmitri has suggested Moscow State University as a venue for 2006, in conjunction with the St Petersburg conference.

Where in 2007? What chance of holding the 2007 Summer School in Vilnius or somewhere in the EU with pre-planned transfer arrangements to Kaunas?

I do not wish to be a 'finger pointer' about the past or possible future failings. However – I accept with hesitation that the role may find me doing things that may have this effect. I will always try to be clear about both the rationale and the intent of my words. I will also strive to understand how others may perceive my actions, and respond appropriately to feedback of all kinds.

Matters Of Ambiguity For Me

These items are not resolved and offer the kind of challenge that I believe we will relish.

- The past (despite my election I am not clear about many aspects of ISAGA even now)
- Roles of committee members, conference organisers, the Secretary General
- Events – what are the strengths of our current ones? Do we need to do more? Less? Different ones?
- Continuity – is this our goal? What will we need to do to achieve it?
- Structure – we have a good one. Do we use it well enough? What are its actual strengths and weaknesses in changing times?
- People – who are we as ISAGA and as individual professionals and experts? Do we make the best possible use of our networks and achievements?
- Other contemporary organizations – what might be their impact on ISAGA's plans for survival and growth?

- Conferences (the flagship of ISAGA for more than 30 years)
 - Strengths and gaps – in our present approach
 - Geography and locations – gaps and repetitions. How do we extend our 'coverage' and networking possibilities?

- Themes – do we all know what they have been? How have they reflected the life and growth of ISAGA?
- Style – what are the strengths of how ISAGA ‘does’ conferences?
- Products – can we extend the benefits and increase the impact of ISAGA and our contributions to the wider simulations/games community?
- Current Context (what are its pertinent features? How can we adapt and benefit from them?)
 - Technology and people
 - Other contemporary organizations
 - Globalisation
 - Complexity
 - Health and Defence as large scale users
- Committee (What are its strengths? How can we use these better? What are the weaknesses? What do we all/each need to do to reduce the impact of weaknesses and increase the strengths?)
 - Structure
 - Origins
 - Constitution
 - Present membership
 - Roles and functions
 - Strengths and weaknesses
 - Potential
- Secretary General (Is there a succession plan? Not really – but I do want to begin one now! What will the committee and individuals need to do to sustain ISAGA beyond the next 10 years?)
 - Who are all the previous holders?
 - What has been the impact of Jan’s longevity in the role?
 - What exactly have been its responsibilities and expectations in the past?
 - What do they need to be in future?

I am reminded – at this point of an acute observation from a famous Australian Military Leader - Field Marshal, Sir William Slim

“In almost any battle a general is forced to fight uphill and at the junction of two maps.”

I see this as relevant to our present position. And being good at games – as we are! - the challenge we are offered provides a wonderful opportunity for creativity, originality and adventure.

Articles – Drafts – Papers for Discussion

Papers in this chapter are intended to think about the roots, the present and the future of simulation and gaming. Feel free to send your comments either to the authors or to the newsletter editor.

Is Unification Possible? Towards a Reconstruction of Simulation Gaming.

Hubert Law-Yone

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Science committee had some fundamental discussion about field of simulation & gaming, its recognition within the scientific community, its future and upcoming tasks of ISAGA. Hubert Law-Yon has written a draft version of a paper he will present at the Atlanta conference. As editor I made the proposal to give a wider audience the chance of reading it before the conference. Hubert still regards it as a draft version, not for citation.

Thomas

Prolog: A methodology without theory?

Having its antecedents in the attempts to master the fields of war and business, modern simulation gaming (SG for short) has spread into diverse areas of human endeavor and is often touted as a novel, practical, universal and enlightening technique of coming to grips with an elusive and complex reality. In spite of its often overblown qualities as a methodology in education, training and research¹, simulation gaming has not as yet become an established scientific profession in the sense that its practitioners can point to a body of officially recognized and specialized knowledge that is a criterion of belonging and expertise. It should be noted that in the rather sudden maturing of simulation gaming as a popular technique, the practical has always been its driving force rather than theoretical. Its instant attractiveness has come from its apparent ease of use and versatility in application. It appears that the very cultural universality of the game format made it seem that no special expertise or knowledge was required to devise a game-like arrangement that reflected in some fashion a real-life situation. Not only that, but playing the game was also so obviously instinctive that no instructions were needed. Simulation gaming in its primitive form was so accessible to all. As the diverse permutations of the game format and its almost limitless applications proliferated, it has been unfortunately obvious that its chaotic theoretical underpinnings have been playing catching up. It is a curious fact that until today we still do not have a definitive and coherent account of the essential relationships between simulation and gaming. We are thus still unsure if the linguistic sign between the two should properly be a hyphen, a slash or an ampersand, or if there really is a theoretical justification for dispensing with any at all.

As for the gaming community, the pure exuberance of inventing new applicable games has been the basis of scientific meetings and publications, and technical prowess has been the key criterion of progress and acclaim. Undoubtedly there have been serious attempts to strengthen the theoretical inputs into our discourse along the way (Crookall et al.1987, Klabbers,2001: Myers,1999) and proposals for re-conceptualizing and reframing the field have been made. However it is my contention that these calls have not had proper responses by the practitioners. It is time to do some stock taking and analytical reassessment if the field of simulation gaming is to reach maturity and be accepted as an integral part of the larger community of reasoned discourse with a shared language of enquiry and exchange. As a contribution towards this enterprise the following reexamination of the two key concepts of simulation and gaming is proffered. Consequent to the analysis, it will be shown that the

theoretical reviews can lead to important reforms in both practical evaluations of current practice as well as in the setting of basic research agendas of the field.

The Alchemic Bond: Simulation and Gaming

Essentially, the two concepts are quite disparate. Not only does each term permit a multitude of definitions to start with, it seems that over the years each has acquired new meanings and both appear to be in a rather fuzzy state of flux. Even though a posited relationship between these two key ideas seems to constitute the very basis of the profession, it is remarkable that this magic bond, the nexus that gives the field of SG its special quality and *raison d'être* has not been thoroughly investigated. It is a commonly held belief that the fusion of simulation with an activity known as gaming gives rise to a unique methodological paradigm, but what makes this a special technique, a scientifically sound basis for expertise has never been made clear. As a first step therefore, it may be perhaps helpful to review some of these taken for granted assumptions concerning each of these terms and perhaps more important, the rationale behind their juxtaposition.

Simulation, it seems, has expanded from its original meaning of a rather mundane human activity of creating something similar to another, to include other diverse activities such as linguistic metaphor, mathematical modeling, digital edu-tainment, and cultural phenomenon. Furthermore, it is now not only used both as a noun as well as a verb, and neologisms such as simulators and simulacra have added to the multiplicity of meanings. Can the essential definition for the term still be discerned in this wealth of meanings? One path that can be retraced is to follow its semiotic roots in which simulation is defined as *the invention of a symbolic representation of a referent*. Now, in taking a wide retrospective view of the contributions of SG, it seems that two major problematic areas have arisen in the basic paradigm: the *ontological* and the *methodological*. The first problem is reflected in the movements that have taken place in the essential prioritizing between the referent and its representation. The former has traditionally been posited to be "real" while the latter is a replica, an imitation. Crookall et al. (1987), terming this view "rational" and "positivist" have suggested another perspective, the reality perspective, in which the simulation, the representation itself, takes on its own reality. In their ground breaking paper they propose a system of definitions (system, model, rule, simulator, simulation, role-play, game) which they claim can reconcile the two approaches. In retrospect, one is struck by the essentially conservative tone of the paper for it still attempts to retain the integrity of the referent. Simulations, it is claimed, are able to represent *most* aspects of systems (my italics). Hence, whether the simulation "comes-alive" or not, the underlying reality of the referent is not negated. The implication is that BOTH the referent as well as the simulation can be real, (if one accepts that a situation is defined real if it has real consequences, according to the authors). What is one to make of instances of simulations then, when the referent becomes irrelevant and disappears from the scene? When the reality of the simulation is the *only* reality? The representation then becomes the one and only reality, a hyper-reality (Baudrillard, 1988). This cultural phenomenon presents us with an unsettling awareness of the arbitrary assumptions concerning what is real, what is true and what is important that we have taken for granted.

The ontological question is compounded for we can now turn to from *what* reality, to *whose* reality we are speaking about. The arbitrary definition of reality based on the "reality of consequences", apart from its circularity, leads to a rather arbitrary view of reality. We must therefore consider the adoption of a more open view which sees reality as being a contested subject and open to negotiation. What is real then is dependent on whose stance prevails in this contest of wills or on a tenuous consensus. This view of reality is then in the final analysis surely more realistic! Simulations in which realities themselves are created, in which auto-poiesis is built-in, are claimed to present interesting avenues of research (Klabbers, 1996). In

sum, simulation appears to be capable of adapting to a rather flexible schedule of realities which is perhaps its versatility and its power.

Next we shall consider the *methodological* problem of passing from referent to representation and back. The first direction in which the symbolic representation is derived from the referent is well known. This process or semiosis (Myers, 1999) has been traditionally been assumed to be non-problematic. The normal scientific method has posited the proposing of hypotheses and empirically based testing and verification as the accepted methodology. But the representation is more than a hypothesis. It claims verisimilitude to the original. If not isomorphism, it claims at least homomorphism.² Yet, this passing from referent to representation is both implicit and opaque and is seldom challenged in practice. It is only recently that a challenge to this basic paradigm has been posed by the concept of a *design* science in which invention, innovation and non-linear thinking play more important roles.³ But what of the other direction? How do we go from representation to the referent? Do we have what is known in logic as transduction (from deduction to induction and back) here also? So that we are talking about trans-semiosis – going from reality to symbol, and from signifier back to the signified? We must recognize that we are dealing here with a necessary hermeneutics. The *interpretation* of the simulated reality in light of the referent reality is after all a critical component of the process whereby knowledge is produced. This path of testing and validating the derived outcomes in light of real data is the heart of simulation. And yet this key area has been left to a rather technical procedure called de-briefing. This rather free form discussion is usually carried out as a sort of catharsis when the simulation stops and there is perhaps a need to defuse the anti-climax. Often, befitting its military origins, the formal report of de-briefing is composed of nothing but an accounting of steps taken, goals achieved and losses incurred. If on the other hand we opt for a deeper analysis of the whole process of going first from referent to the invention of the representation, and then referring back to the referent with the aim of determining what *really* happened, are we not then presented with the ultimate criterion of scientific justification of the technology? If this is so, perhaps we should be looking at simulations less in terms of the validity of the models but rather the insights that the carrying out of the simulation itself provide. Or, in other words, if simulations are games, should we not be looking at the *play* of the game? Rather than the promotion of “verisimilitude as the value of these simulations”, we might find that their true value lies in their uncovering of “the otherwise hidden reality of the semiotic process” (Myers, 1999).

Gaming and Games: Setting the Scene.

This brings us to the second part of our equation: gaming. This term has become popular perhaps for two reasons. The first is the unfortunate separation in the English language between game and play, with the latter implying frivolous, un-directed and informal behavior. The second reason may be due to the practical turn of the profession, leading to a separation between process and artifact, with the prioritizing of the latter. Gaming has therefore come to include: The invention of games, their playing, their dissemination, their packaging and their sales. While games have a clear format and more or less agreed upon structural characteristics, gaming remains an amorphous catchall concept. Whatever the reference is however, one must turn to the object, the game, for an understanding of the implications of gaming for simulation. As any short browse on the internet will show, there are a myriad of definitions for what a game is supposed to be. We shall not add to the fray by suggesting yet another definition. For our purposes let us look at a recent proposal:

“A game is a rule-based formal system with variable and quantifiable outcomes, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels attached to the outcome, and the consequences of the activity are optional and negotiable.” (Juul,2003)

This perspective allows us to look at games and simulations as formal systems and hence provide us with a scheme to reconcile these seemingly different entities. Like simulations, games have a fundamental relation to the real world. In Juul's schema,

"...that games carry a degree of separation from the rest of the world follows from their consequences being negotiable. ...the same game (set of rules) can be played with or without real-life consequences" (ibid)

Here then is the key. Games can be simulations (i.e. with real-life consequences) and simulations can be played as games (with sets of rules etc.). We then have an explanation for the existence of a logical subset or more accurately an intersect of simulation games. While this convention may be sufficient for many as a rationale for the existence of SG, may I suggest that something fundamental is missing? It still does not hint at the added benefit to be achieved, the catalytic value arising from when either the simulation is played as a game or when games are used for simulations. The fact that it is feasible does not prove its added worth. We must search for a more robust explanation of what happens at the junction that makes the returns so valuable and worthwhile.

Play: The Hidden Ingredient

Rereading Huizinga (1950), one is struck by how little justice has been done to this original thinker. The Anglophonic world looking down from a position with the benefit of hindsight, has tended to belittle the "quaint" character of the translation. Huizinga blames himself for acquiescing to the translators insistence on changing "The Play Element of Culture..." to "The Play Element *in* Culture...", perhaps realizing only too late how this "small" change has distorted his original insights. In spite of the fact that many in the gaming community have nodded to him in the promotion of "ludology" besides making use of selective quotations, we tend to forget that Huizinga in his magisterial work only devoted one or two pages to Games. His was a more comprehensive philosophy of Play. It is an absorbing, cross-cultural and well researched account of one of humanities common yet mysterious activities. It is to his credit that he turns our attention more to the dynamics, the ebb-and-flow of the interaction between the participants and their perceptions and their meaning systems, rather than the invariant, formal characteristics of the game. In fact, if one had to choose a definitive motif of play, it would appear that it is in this statement: *Play is the realization of the possibility of the actor to act freely within a framework of rules.* Whether the game has strict rules or not, there is always the option of the actor to improvise, to choose to be serious or not, to question the rules and to create the unexpected. We have tended to forget this fundamental issue, first propounded by Huizinga. Following him, other writers have tended to drift away from the contemplation of play to the pragmatic focus on games. Too often we have looked at play (our interaction in and with an imagined world) in terms of gaming (the carrying out of assigned roles in a structured game). Play is in the final instance a far more fertile ground for analysis than gaming if theory is what we are aiming for.

Another writer often quoted in classifying games is Callois (1961). His four categories of games based on principles of *agon*(competition), *alea* (chance) ,*mimicry* (simulation) and *ilinx* (the inducement of vertigo) also provide us with a category particularly appropriate to simulation. Simulation can therefore be a particular kind of game. However let us also remember that he also introduced another axis for game classification ranging from *paidia* (the chaotic) to *ludus* (the structured), and therefore play, in its more complete meaning, must include the unstructured and spontaneous. It should be noted that research in other fields have pointed to this more general aspect of play (cf. Bateson, 1972; McLuhan,2000; Vygotsky, 1981) while retaining its traditional connection to games (Abrahams, 1982; Avedon,1981).

We come now to the crux of the matter. If the fusion of the agendas of simulation and gaming is to produce something more than the mere sum of its parts, the answer must be found in the play rather than the formal similarities between certain simulations and games. Play, which comprises the meaning-loaded, open ended and creative flow of social intercourse, is ultimately the criterion of knowledge in its deepest sense. The proof of the SG pudding is in the playing. By pointing to the importance of the play element in the nexus between simulation and gaming we do not mean to imply that there is a consensual understanding of the term. As Sutton-Smith (1997) has pointed out, there can be several "rhetorics" of play involved. He identifies seven: play as progress, fate, power, communal identity, imagination, frivolity, and the self. For Sutton-Smith "the word rhetoric is used here in its modern sense, as being a persuasive discourse, or an implicit narrative, wittingly or unwittingly adopted by members of a particular affiliation to persuade others of the veracity and worthwhileness of their beliefs". Bearing in mind this inherent persuasive power of play, we should be very attentive to the discourses underlying the plays of our simulation games. Nevertheless, it seems that if our contention is accepted, that the most significant event in the fusion of simulation with gaming lies in the play, the theoretical foundations for the methodology must address this crucial issue. The practical implications of this is the following:

If we are to build a sound theoretical base for the simulation gaming field, we must go beyond the formal, technical and methodological tricks of the trade. We must refocus on the elusive quality of play for an answer to the perennial search for meaning and knowledge in action. If the nature of play is no different, no richer, no meaningful in simulation gaming than in other social game-like performances, then perhaps the search for theory may be futile. On the other hand, it is entirely possible that the renewed and vigorous research into play will provide significant insights that go beyond the efficiencies of the technique but also impinge on our understanding of the real world situations to which we apply it.

Towards the Study of Play in SG

How can we learn from play? The revitalization of theory based on the examination of play entails several reorientations in practice and research.

1. Designing the Play Environment:

Obviously it is of primary importance that the simulation game be conceived of as a framework whose essential purpose is to be conducive to play. One implication of this is to negate the permanence of the referent. Whether the game relates to an educational institution, a political establishment or a economic system, the possibility that we not only derive rules from the existing situation but also incorporate the changing of the existing situation by appropriate rules should be considered.⁴ This will allow for not only playing the game but also playing *with* the game. Remember that as free human beings we all tend to play not only *by* rules but also *with* the rules. Games that allow playing with rules and boundaries, or infinite games (Carse, 1989)⁵ are not only more rich and satisfying but in the final analysis more realistic. Secondly, players should be made aware of the theoretical antecedents of the game's design. If the intention is for learning, the principles of learning should be incorporated into the design of the game⁶. Games with other ends in mind (training, control skills, management etc.) in various disciplines, should have the theoretically derived principles from these disciplines applied in devising the game. This theoretical portion of the simulation preparation should be accorded a proper forum for discussion and summary in the literature and in conferences. In this way simulation gamers, in a field that is notoriously trans-disciplinary, will be acquainted with the debates and approaches in the parent disciplines in which the games find their applications. Such intra-disciplinary scientific discourse is sadly lacking in SG.

2. Presenting the Game:

The rationales for the rules and scenarios need to be made explicit. The underlying assumptions, approaches and manipulations involved in and preceding the representation of the referent should be made explicit to the prospective players by the game's inventor or presenter. In certain areas of simulations such as business games the basic structure of the model in terms of its analytical algorithms is relatively transparent, and this can give rise to a fruitful debate on the validity of the game. This practice of making explicit the game's structuring should be encouraged. Furthermore, if these underlying rationales were not only alluded to but by themselves made into elements of play, we could then have plays as explorations of alternatives leading to a much richer simulation world.

3. The Role of the Facilitator

The traditional role of facilitator has always been problematic. The "support" function as a source for rules and resources for the players can be seen to add an unrealistic component to the simulation of the "real" world. Such a readily available source of advice, conflict management and arbitration is not usually present in the real world. Secondly, the neutral observer stance is also quite artificial. The facilitator stands in a clear power relation with the participants and pretense as to otherwise detracts from the authenticity of the play. I suggest minimizing the first role (support) and replacing the second (observer) with an unseen "recorder" of events. The accurate recording of the play by all available means is essential for the subsequent analysis of the play(s). The ideal role of the facilitator is to become part of the play, and as just another player he or she becomes part of the exploratory process.

4. The Role of Debriefing.

Debriefing should be retrospection of play. Debriefing should not be just a short post-play review of events. It deserves to be an entire session devoted to a joint review and analysis of previous plays. This session should be accorded a scientific framework equal in importance to the playing of a game. This is in fact a game about a game. Here there will be events, moments and confrontations picked out of the flow of the play, meanings accorded to these and interpretations offered. It is a multilogue of enquiry. The "debriefing" may then uncover other realities besides the ones to which the simulation ostensibly relates. Debriefings could then even become presentations for scientific discussion at conferences in addition to games.

Epilog: From Communal to Community

The vitality of the field of SG holds out the promise that notwithstanding the apparent chaos, unification is possible. This paper suggests that one promising avenue for building a sound theoretical base could be the turning of our collective attention to the fascinating but elusive concept of play. For herein lies the uniqueness which is the prerequisite for unity. The play of SG has the potential of not only transcending those inherent qualities from the parent fields of simulation and gaming, but also illuminating the search for truth and the making of a better world. The challenge is to play this analysis of play. For interpretation itself is play:

"(it is) grounded in the Nietzschean affirmation, that is the joyous affirmation of the play of the world and of the innocence of becoming, the affirmation of a world of signs without fault, without truth, and without origin which is offered to an active interpretation." (Derrida, 1978)

End Notes

¹ In education, for example, a recent document list 12 items of added value which are attributed to simulation games. They are claimed to:

1. Encourage cooperation, in spite of a strong element of competition
2. Develop empathy for persons whose roles one assumes
3. Help develop ability to analyze the essential elements in a situation

4. Give direct experience of the situation not merely hearsay.
5. Promote awareness of casual relationship between behavior and outcomes.
6. Allow expression of feelings, even hostile ones
7. Help explore possibilities of affecting the environment
8. Promote critical and creative thinking
9. Provide high motivation for learning
10. Give insights into own behavior and relations with others
11. Permit immediate observation of consequences of decisions
12. Let players take responsibility for own decisions and actions.

(www.globaleducation.edna.edu.au/globaled/go/cache/offonce/pid/1315)

² Models or representations are constructed from the original in two basic ways. The first involves extracting only certain relevant attributes, leaving out others considered unessential to the purpose of the simulation. However, often the model may include new attributes not present in the original, making even the homomorphism questionable. Which should be called simulation and which dissimulation, is a moot point.

³ See Klabbers (2003)

⁴ For an interesting approach to developing alternative pedagogy using simulations, see D.Silverman Keller. web.beitberl.ac.il/~dianas

⁵ I thank Elyssbeth Leigh for referring me to this delightful book

⁶ For example the constructivist approach to learning could have important implications for how the simulation game could be designed as an appropriate learning environment. For a convenient checklist see: www.cdli.ca/~elmurphy/emurphy . I thank Timo Lainema for his insights into the implications for simulation gaming of the constructivist approach to learning.

Bibliography:

- Abrahams R D (1982): Play and Games. Motif: International Review of Research in Folklore & Literature.3 (june) 4-7
- Avedon E and Sutton-Smith B (1981): The Study of Games. J Wiley & Sons.New York.
- Baudrillard J (1988): Simulacra and Simulations. In Selected Writings. M Poster (ed.). Stanford University Press, Stanford.
- Bateson G (1972): A Theory of Play and Fantasy. In Steps to an Ecology of Mind. Northvale,New Jersey:Jason Aronson Inc.
- Callois R (1961): Man, Play and Games.Trans.Meyer Barash. Schocken Books, New York.
- Carse J P (1986):Finite and Infinite Games-a Vision of Life as Play and Possibility. Ballantine Books New York.
- Crookall D Oxford R and Saunders D (1987): Towards a Reconceptualization of Simulation: From Representation to Reality. In Simulation/Games for Learning. Vol 17 No.4 pp 147-170
- Derrida J (1978): Writing and Difference. Routledge and Kegan Paul London
- Huizinga J (1950): Homo Ludens: A Study of the Play Element in Culture. Beacon Press,Boston.
- Juul, J (2003): The Game, the Player, the World: Looking for a Heart of Gameness. Published in Marinka Copier & Joost Raessens (eds.): Level Up: Digital Games Research Conference Proceedings. Utrecht: Universiteit Utrecht, 2003.(Pages 30-45.)
- Klabbers Jan H G (1996): Problem Framing through Gaming: Learning to manage Complexity, Uncertainty and Value Judgement. Simulation and Gaming:An International Journal.Vol 27, No.1
- Klabbers Jan H.G. (2001): The Emerging Field of Simulation and Gaming:Meanings of a Respect .Journal of Simulation and Gaming. Vol 32,No.4.
- Klabbers Jan H.G.(2003): Gaming and Simulation: The Principles of a Science of Design. Simulation and Gaming. Vol 34,No 4. pp-569-591
- McLuhan M (2000): Games:Extensions of Man. In Understanding Media. MIT Press. Cambridge,Ma.
- Myers D (1999): Simulation as Play:A Semiotic Analysis. Simulation and Games 30/2, pp 147-162
- Sutton-Smith B (1997): The Ambiguity of Play. J.Wiley & Sons. New York.p-8.

Vygotsky L S (1981): *The Role of Play in Mind in Society*. M Cole, V John-Steiner, S Scribner and E Souberman eds. Harvard University Press, Cambridge MA.

Education and Simulation/Gaming and Computers: An Educator's Encounter

by Jared Seay
Robert Scott Small Library
www.cofc.edu/~seay/

An Interesting Article for Consumption

Every now and again it is good to return to previous readings to see changes in the field. The following article by Jared Seay is well worth a revisit. Dr. Seay is President of Association of Applied Interactive Multimedia and teaches at the College of Charleston in South Carolina. Many ISAGA and affiliate members are referenced in Dr. Seay's article.

Nina

Education and Simulation/Gaming and Computers

On my way home from the College of Charleston I had wandered into the local mall video arcade, attracted no doubt by the whirring beeps, flashing lights, the throbbing of competing, repeating musical themes, and by the fact that I am fascinated by games. In this particular instance I was attracted by a video cabinet that featured two brightly colored dinosaurs duking it out "Bruce Lee style" while tiny humans in caveman outfits scrambled underfoot trying to avoid becoming dino toe jam. The name of this gaming wonder was *Primal Rage!* and it was quite interesting to observe the demo screen sorting through a series of different dinosaur combatants with different backgrounds and weather phenomenon (the battle on ice was particularly exciting).



As I was enjoying this primal slugfest, a small boy of about 8 years of age, stepped abruptly in front of me, obscured my view of the screen, said, "excuse me, sir," and gripped the control knobs.

Feeling as if I was suddenly the intruder, I muttered, "sure," and stepped back while the kid dropped two quarters into the machine, chose a dino avatar from a selection of gruesome beasts on the screen and proceeded to beat the stuffing out of another dinosaur.

The kid was a master. His hands jerked knobs and pushed buttons on that game panel faster than a good typist on a key board. He was deep into it too as evidenced by his moans and unabashed shouts of "oooooo" and "ahhhh" and "way cool" every few seconds. Every now and then, without taking his eyes from the screen, he would shout, "hey, Mom, come watch this!"

Of course I'm sure his mom, who was nowhere in sight, would have just been proud to see her little darling's virtual Jurassic beast bashing the stew out of everything in site. But, the boy was clearly enjoying himself. In fact he was enthralled.

Watching the excitement and pure joy emanating from this child, of course, could bring only one thought to my educator's mind: "Boy, I sure wish I could get my Library 101 class only half this excited about what I was teaching them."

Of course, I then could hear my students saying back, "yea, if you could make it half as exciting as this, we would be."

To which I would, wittily reply, "yea, if I had a machine like that thing that could help me teach Library 101, it would be exciting." Of course, dinosaurs would not necessarily be involved. (Though I certainly would not rule them out.)

But, hey, we actually do have such tools. And we have had them for a long time. They have not always been in the form of computers, and some still are not. They are the oldest form of experiential learning and have been used in education, business, and training. They are called simulations, simulation games, educational games, or for want of a better term, just "games."

Games and Media

When one thinks of computer games, the mind usually reels to images of exploding targets, flashy graphics, sometimes violent mayhem, pulsing repetitive music and sound effects, In short, everything that makes preschoolers to teenagers (and many times adults) spend long hours losing themselves in an exciting, mesmerizing, pleasurable virtual world. The thought of using such a game as an educational tool, however, is enough to make some educators go ga-ga. Indeed, many teachers balk at the very thought of taking up valuable class time playing a "game." But, is using a computer game, or any game, as a learning tool so implausible?



The learning style of the average student these days is vastly different than students of the past by virtue of the environment and the culture in which they have been raised. J.C. Herz writes in *Joystick Nation*:

If your memories have pop soundtracks or big-screen kisses, if you've ever told an anecdote with instant replays or a coda of stadium applause, it's because you've been brought up with media that furnish those conventions. Videogames provide a new set of conventions, which are being rapidly assimilated, as you read this, by a legion of six-year-olds. Their mental grammar is going to reflect that, just as the baby boomers' worldview echoes the impact of television. But whereas TV turned kids of the fifties and sixties into a nation of screen watchers, videogames have created a cadre of screen manipulators (p.1-2).

The word edutainment, that nefarious combination of entertainment with education, has already become a cliché. The MTV generation of students these days, so goes the prevailing wisdom, can not just learn. They must be entertained while they learn. If they are not entertained while they learn, then you've lost them. John F. Affisco of Hofstra University said as much in an article in *Simulation and Gaming*. "It is already apparent that contemporary students have limited attention spans, have a more visual learning style than their predecessors, and need to be entertained in the classroom (Affisco, 1994, p.171)."

Perhaps it is not so much that students need to be entertained as much as it is that their culture has conditioned them to interact - *interface* (if you will allow a computer term)- in a certain way with information. Students are not necessarily lazier than their predecessors of yore; they have been raised in a completely different environment that seems to call for a new way of learning: a more interactive learning style. It is no wonder then that Affisco continues, "Simulation and gaming offers our best chance of reaching these students (p. 171)."

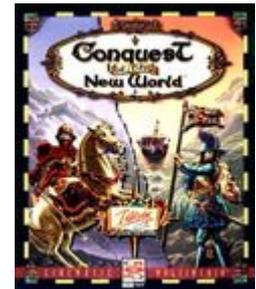
A recent article in *American Scientist* notes that IQ scores internationally are rising (Neisser, 1997). One theory is that our increased exposure to visually rich mass media---television, computers, video games -- has enabled us to perform better on spatial-visual tests. The theory states that the ability to interpret different forms of information from different media and make some kind of sense of it is what these IQ tests actually test for. The human population

has been subjected to an increasingly fast and changing type and amount of media information over the past 50 years. This change in their media environment, so goes the claim, has actually trained human beings to do better on IQ tests. Increasingly, technology, then, is not just changing what we think and know, but it is affecting *how* we think and come to know. Types of education that utilize simulation and gaming approaches could, therefore, be more effective now than they have been at any other time in history.

Simulations and Games

The use of games and simulations in education is well documented in history and in the recent literature. They have been used in preschool, K-12, the university, the military, business, and by older adults (Dempsey et al., 1997).

But, what exactly do we mean when we say simulation and gaming? First, though computers have certainly allowed the evolution of simulation gaming a quantum leap forward, they are by no means the first use of simulation gaming nor are they the only type of simulation gaming done today. Historically, the word *games* has been used to connote a pastime of a trivial, if fun, endeavor. It is this connotation that today seems to cause some educators to flinch when they hear the word *games* and imagine frivolous time wasted play that serves only to entertain and certainly not educate to any significant degree. D.R. Cruickshank, a researcher in this area, defines them this way:



Simulations are the products that result when one creates the appearance or effect of something else. Games are contests in which both players and opponents operate under rules to gain a specified objective. A further distinction can be made between academic and non-academic games (such as table tennis or checkers) that are primarily for fun. Academic games, such as anagrams or war games, are primarily for or based upon learning (Cruickshank, 1980, p. 75).

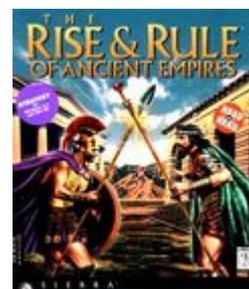
Cruickshank further distinguished between two types of academic games.

There are two types of academic games: simulation games and non-simulation games. Non-simulation games are those in which a player solves problems in a school subject such as spelling or mathematics by making use of principles of that subject or discipline. The other type of academic game is the simulation game in which participants are provided with a simulated environment in which to play. These games are intended to provide students with insight into the process or event from the real world which is being simulated (p. 76).

It is the use of simulation games which holds the most promise as a truly dynamic educational tool.

A Little Bit of Sim-Game History

Though simulation gaming has been used for a long time, notably by the 19th century Prussians in their war games prior to their successful stomping of France in the Franco-Prussian war, it was the 1960's and 1970's that saw the heyday of educational simulations and games. It was in the social sciences that simulation and gaming first took root and took off. In 1974 Richard D. Duke, a guru of the early days of education simulation-gaming, saw gaming as a developing, and in many instances superior, form of understanding: a new language. He wrote, "As the true character of gaming as a unique communication form becomes clear, its use as a *Future's Language* will become pervasive (Duke, 1974, p. xi). Gaming, then, was thought of as a new language with which to educate. It was *the* new way to educate. Simulations and games were developed that taught social systems, communication, politics, ecology, health, history, relationships, marketing, business, language skills, economics, geogra-



phy, and mathematics. Games were used to help make decisions on marriage, career exploration, hiring decisions, or deciding admission into college (Ifill, 1994). Some even thought that gaming would eventually replace the lecture as the main way of teaching (Dukes, 1994).

Though gaming did not replace the lecture as the main form of knowledge dispersal in the classroom, and the heady simulation gaming days of the 60's and 70's have died down considerably, "the future's language" as an educational and training tool is still used today to great effect. Business, especially, leads the way in simulation/gaming and has expanded the use of simulation and games for training, now made even more flexible with the use of personal computers.

Business Use of Games

Sivasailam Thiagarajan, president of Workshops by Thiagi, an organization that works with corporate managers and employees to improve their organization's performance, productivity, and profits, writes that "the instructional techniques [of simulation gaming] are based on two important premises: (1) People learn better through active experience than passive listening; and (2) people learn better through interacting with one another than working alone (Thiagarajan, 1996). He attributes the rapid increase in the use of interactive, experiential training such as simulation gaming to several factors, including teaming of employees, diversification of the workforce, emphasis on continuous learning, increasing intolerance of employees to passive approaches to learning, and the computer revolution, which makes it "easier to design and to deliver interactive training (p. 518-519)." "Most trainees," he says, "who have enjoyed interactive instruction are unwilling to return to the traditional data-dump approaches (p. 519)." It is this increasing use of technology in education, specifically personal computers, that has the greatest potential to increase the use of simulation and gaming in education.



Simulation Gaming at the C of C

I sent an informal e-mail message to all C of C faculty asking if any of them use or have ever used computer games in their teaching. In a later follow up question, I asked if any of them had ever used non-computer games in their teaching. A total of 34 faculty responded. Of those, 9 used or have used computer games, 8 used or have used non-computer games, and the other 17 had never used any games in teaching. Though certainly not a controlled study by any means, it was interesting that there was an exact 50% split between game users and non-game users, at least for those who read and respond to their e-mail. Interestingly, three of the faculty that said they did not use games in the classroom said that their small children learn on educational computer games at home.

The responses were interesting and reflected an uneven use of games and simulations by faculty at the College. Simulations and/or games were only a small part of any class for faculty members that used them. However, those that did use them seemed to be satisfied with their simulation's/game's effect on their students. One professor was actually in the process of developing a computer simulation for student use. Some professors, however, saw computer games as a waste of time. One professor noted that in her experience computers and technology have been greatly mismanaged in education. Others, while observing that some computer simulations may have some "rub off" benefit, stated that games and simulations were not something they thought very useful in a class. Many faculty members said that they had never thought about using computer simulations or games as an instruction tool.

Some C of C Specific Examples

The following faculty members are a sample of those who use or have used simulations and games as an educational tool. The games consist of both computer and non-computer types.

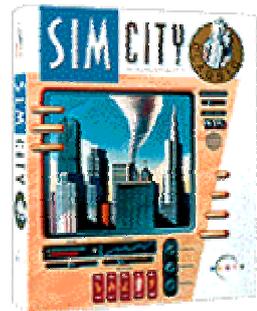
Bill Kubinic in dept of Physics and Astronomy has used the computer game *SimEarth* for several years in his astronomy labs to allow his students to simulate both geological and biological evolution. "In particular, we do a comparison of planetary evolution and try to terraform Mars," says Kubinic. "Terraforming Mars is a challenge. After the lab, many want to play more."

Richard Nunan in the Philosophy department uses a computer simulation called *Tarksi's World*. According to Nunan, "it's a bit more than a game, I suppose. It involves a 2-dimensional grid on which one can place 3-dimensional regular polygons, and then say things about them in the formal language of predicate logic, and use the layout on the grid to check the accuracy of the sentences."

Rena Sternberg in the Languages department teaches Spanish using several computer programs. "These are interactive "games" available at the Language lab," says Sternberg. "My students do a program called *Oscar Lake* a murder mystery type of CD-ROM. Then they do an in class composition with me in class."

Walter Pharr of the Computer Science department teaches introductory programming using an object-oriented graphical approach. Says Pharr, "the students create things like jumping stick figures and sharks that chase fish and eat them. It would really be a stretch to call these "games," but maybe it is more fun than the old approach."

Barbara Borg in the Department of Sociology/Anthropology has used *Adventures in Fugawiland: A Computer Simulation in Archaeology*. More of a true simulation than a game, Borg says that it "certainly has a place in educational computing." Borg writes, "We used *Fugawiland* in a 400-level Anthropology Methods course for majors, to illustrate the thinking processes that go into the analysis of archaeological materials. Basically, the results of 10 excavated sites are presented (the students choose 10 out of a pool of 30 sites to "excavate") and students are asked to correlate the different types of information--patterns of settlement, house types, burial types, ceremonial areas, food resources utilized, etc., --and reconstruct the lifeway of this past fictitious group of people. They then have to write up their "archaeological report." Although the students in this class were mainly juniors and seniors (we used it about three years in a row), the program is not too difficult for freshmen and sophomores, or even some high school students. The workbook that accompanies the computer disc is full of cartoons and other "user friendly" features, to assist people who have not previously used computers. It could equally well be used in an introductory archaeology course such as the one I teach at the 200-level."



Idee Winfield in the Department of Sociology & Anthropology uses a classic simulation game called *Starpower*. Though the title might sound like a shoot-em-up computer space game, it is actually a non-computer, social-economic simulation developed in the 1960's. Winfield writes, " I regularly use simulations/games in class and for out of class assignments that give students a feeling for what it is like to be in a different social class. One is called *Starpower* and it simulates the process of distributing valuable resources and the consequences for power and decision making. Another is a week-long activity that delimits the amount of money a student has to spend on some activity (lunch, entertainment, transportation etc.). On Monday they are in the upper class, by Friday they are in the poverty class. Their acute sense of relative deprivation sets the stage for discussing the consequences of stratification for life chances and lifestyle."

Anna Krauth in the Languages Department says that she occasionally uses games in her language classes. "It's usually when we have some time left," she writes. "They are games that make students work on particular vocabulary or sentence structures. Students seem to

enjoy them for the most part, maybe just because they provide a nice escape from the traditional classroom subject. I think a language class should be fun, so we do many other things that provide a nice escape from the books."

Ed Parent in Computer Science writes, "I have used simulation games in teaching psychology and a few other counseling subjects I have taught and I found them very enjoyable. Both teacher and students learned a lot."

Using Simulation Gaming

Simulation and gaming, computer or otherwise, is certainly not the panacea for all educational settings or for all people. To begin with, using simulation/gaming to teach something is not easy. In fact, using them is usually much harder than lecture methods, which at least partially explains why they did not replace the lecture. Massive preparation and planning must be undertaken, especially with non-computer simulations.

Computers have greatly helped in this area by either having the entire game on the computer or handling all (or most all) of the paper work for a non-computer run simulation. "Using a computer in a game eliminates lengthy computations and board updating, and it allows a game with very complex rules to be started quickly and played by people who do not have to know the intricacies of the rules. They may have to learn the application of the rules to play the game well, but nobody actually has to know the administration of the rules (Campion, 1995 p.175)."

Limited class time can also constrain and limit the effectiveness of the simulation. Some simulations require several consecutive class sessions to run. Post game debriefing, something all simulation gaming experts agree is crucial to a successful class simulation, takes additional time and effort as well.



Another problem is that some students may not readily take to this way of learning. University of Southern Indiana professor Charles Petranek found that "an adverse side of simulations was that not all students relished this exciting method of discovery. Some students preferred a lecture. They wanted to take notes and to study for a multiple-choice test. I found it difficult to fathom someone not liking simulations or games, but it was true (Petranek, 1994 p.515)."

Another factor to keep in mind when thinking about simulation gaming is that they should be used to teach a specific problem or situation. Though, some educators have used this method to teach an entire class for an entire semester (Wheatley, 1994), experience has shown that using a simulation or game to explain or discover a particular problem or system is usually the best use of this method of learning (Randel et al., 1992). The more specific the game or simulation, the more successful it will be. The extra work put into running or using a simulation/game usually pays off in the form of the student's better grasp of the material (Petranek, 1994). Students not only prefer simulations and games over other methods of teaching, but tend to retain the information longer than if taught in conventional ways (Randel et al., 1992).

An Adapted Computer Game

Commercial games have been successfully used in the classroom for a long time. At least one commercial computer game has even been reprogrammed and adopted to a specific educational use. In the summer of 1996 Major Curtis A. Carver Jr. who teaches in the Department of Electrical Engineering and Computer Science at West Point delivered a paper at the annual convention of The Association for Applied Interactive Multimedia. Major Carver, working in EECS's Hypermedia Research Group has developed a quiz generator adapted from the game *Doom*. For those of you over the age of 18 who have never heard of it, *Doom*

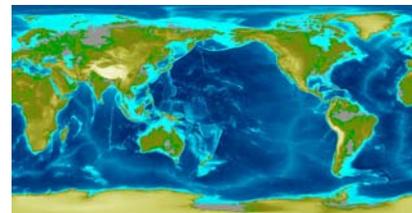
is a rather violent game which involves the player maneuvering his way through a series of hallways and caverns encountering and "blowing away" monsters with an assortment of small arms and other heavier gauge weapons. Major Carver actually sought and received permission and assistance from the creators of *Doom* to reconfigure the code of the game. What Carver developed was a game in which his students could generate multiple choice questions as they maneuvered through the game, which now graphically placed the player in the familiar hallways of the campus at West Point. If they answered correctly, then they proceeded to the next door or level, or received some extra bonus. If they answered incorrectly, then the question would change into a monster and hunt them down. The more incorrect answers, the more creatures coming after you (Carver noted that this was the ultimate in having your mistakes haunt you.). As the questions became harder, the monsters became tougher and harder to kill. Of course the player did have the option of blasting the creatures attacking him, provided he had already answered enough correct questions to become properly armed.

Carver noted that students who used this "game" performed much better on tests than students who were taught without the game. Carter also observed that students spent many hours after class trying to "beat" the game and were therefore much more exposed to the material than the other non-game playing students. Though many educators may be put off by the violence inherent in *Doom* (Carver responded to such criticism by saying only partially tough-in-cheek that "after all, we are training our people to do a job that involves killing people."), the game does point up a powerfully aspect of games and simulations: they involve the student in the action like no other classroom educational experience can.

A completely different, perhaps even more radical, approach is defined by Yasmin B. Kafai in her book *Minds in Play: Computer game design as a context for children's learning* in which she describes use of "games as a context for learning by placing children in the role of producers rather than consumers of games (Kafai, 1995, p. *xiii*)." Kafai followed a group of inner-city fourth grade students as they were programming games to teach fractions to third graders. "The children transformed their classroom into a game design studio for six months, learning programming, writing stories and dialogues, and advertisements, considering interface design issues, and devising teaching strategies (p. *xiii*)." Kafai concluded that the student's "engaged their fantasies and built relationships with other pockets of reality that went beyond traditional school approaches (p. *xiii*)." Learning to play or behave in a pre-programmed simulation is one thing, but trying to construct a simulation or game for a specific problem or system brings to bear other problem solving skills altogether. The design phase of games and simulations, then, seems to offer a whole new avenue for educational exploitation.

Computerized Simulation

Computer games and simulations are increasingly being used in all areas of education. Mathematics and physics has particularly benefited from the computer revolution by being able to simulate and show complex equations in graphical form. The languages have become benefactors as well, especially with the ability of students to hear digital words and sounds in other languages from their computers. But it was in the social sciences that simulation gaming first came into its own with such (non-computer) classics as *Starpower*, *CLUG (Community Land Use Game)*, and *Sim-soc* which are still played today. It is in the social sciences: history, psychology, sociology, politics, anthropology also where the computer created potential lies for simulating vast complex systems for study and learning. The vast majority of commercial computer games/simulations being developed today could easily be adapted for educational use in the social sciences.



Contrary to popular belief, not all computer games are shoot-em-up *Doom* clones, and it is not necessary to reconfigure the computer code to adapt it to classroom use. Many are thoughtful games of strategy and exploration. *Colonization*, *Civilization*, and *Simcity* among many other computer game titles offer the joy of mystery, exploration, and dealing with the problems (albeit computer generated) of exploring a strange new world (and exploiting it), building your own civilization from the ground up (stone age to space age in three short hours), or building and then managing your own city (complete with traffic congestion and urban blight). David Garson of North Carolina State University writes, "simplifying the overwhelming complexity of human interaction to enable mere human minds to begin to understand it is, in fact, the whole challenge to social science, and computerized simulation is a highly useful tool with which to begin an attack on this challenge(Garson, 1994, p. 478)."

The Joy of Learning

Simulation and gaming, whether computer based or not, can be a powerful tool when used properly and in the right setting. They help students actually experience a system or problem and not just read or hear about it. Computer simulations are especially able to allow students to create and manipulate systems and problems within certain parameters and without the normal constraints of time and space. And besides all that, they are interesting, attract students to learn, and are usually down right fun. Kafai quotes Sara Lawrence Lightfoot on learning and teaching,

A lot of learning has lost its play and has become very concrete and literal, very exacting. It moves towards an end or a conclusion rather than turning ideas on their sides and considering them and laughing about them and being whimsical about them. Some of the best teachers are humorous teachers who see the playfulness of the language and are quick and intuitive. Learning is at its best when it is deadly serious and very playful at the same time. When I say deadly serious, I mean that learning should be disciplined and that people should find ways of learning how to ask questions, how to think about evidence, and how to find out the truths that are out there. That's a very serious pursuit. On the other hand, in every serious thought there's a line of laughter. In my own teaching, I am at my best when I have something that I feel passionate about and talk seriously about but at the same time, that I can find a way of presenting the play in (p. 310).

The tool of simulation/games allows teachers to present "the play in" a topic while engaging students in the process of "turning ideas on their sides." It all comes together as serious learning that can push the boundaries of normal teaching practice. It is not easy, but it is well worth the rewards it brings. Richard B. Powers, a long time user of simulation games at Utah State University says it succinctly. "Games bring together the rarely associated elements of play, laughter, and learning which bring joy to learning. Why not make learning in our schools joyful (Powers, 1994, p. 235)?"

References

- Affisco, J.F. (1994). My experiences with simulation/gaming. *Simulation and Gaming*, 25,166-171.
- Campion, M. C. (1995). A historian and his games. *Simulation and Gaming*. 26, 168-178.
- Cruickshank, D. R. (1980). Classroom Games and Simulations. *Theory into practice*, 19(1), 75-80.
- Dempsey, J.V., Lucassen, B.A., Haynes, L.L, & Casey, M. S. (1997). An exploratory study of forty computer games (COE Technical Report No. 97-2). Mobile, AL: University of South Alabama.
- Duke, R.D. (1974). *Gaming: The future's language*. New York: Sage Publications.
- Dukes, R.L. (1994). An appraisal of simulation and gaming on the 25th anniversary of S&G. *Simulation and Gaming*, 25, 193-197.

Garson, D. (1994). Computerized simulation in social science: A personal retrospective. *Simulation and Gaming*, 25, 477-487.

Herz, J.C. (1997). *Joystick nation: How videogames ate our quarters, won our hearts, and rewired our minds*. Boston: Little, Brown and Company.

Ifill, D. (1994). Taking gaming seriously: Not anymore. *Simulation and Gaming*, 25, 211-214.

Kafai, Y. B. ((1995). *Minds in Play: Computer game design as a context for children's learning*. Hillsdale: Lawrence Erlbaum Associates Publishers.

Neisser, U. (1997). Rising scores on Intelligence tests. *American Scientist*, 85(5), 440-447.

Petranek, C. (1994). A maturation in experiential learning: Principles of simulation and gaming. *Simulation and Gaming*, 25, 513-523.

Powers, R. B. (1994). How should I spend my \$25 million lottery winnings?.5. *Simulation and Gaming*, 25, 226-235.

Randel, J. M., Morris, B. A., Wetzel, C. D., & Whitehill, B. V. (1992). The effectiveness of games for educational purposes: a review of the research. *Simulation and Gaming*, 25, 261-276.

Thiagarajan, S. (1996). Instructional games, simulations, and role plays. In Craig, R. L. (Eds), *ASTD Training and development handbook: A guide to human resource development*. New York: McGraw-Hill.

Wheatley, W. J. (1994). Personal reflections on my Experiences with simulations. *Simulation and Gaming*, 25, 269-274.

Affiliate News

JASAG

Fumitoshi Kato
Keio University

(1) JASAG Annual Conferences, 2005

JASAG Annual Conference (Spring) is scheduled to be held in May 28-29, 2005 at Kogakuin University (Shinjuku Campus), Tokyo, Japan. In an attempt to link our research interests to ISAGA 2005, the main theme of the Symposium is closely related to the notion of "serious play." Professor Toshiko Kikkawa (Keio University) will serve as the Organizer, and Professor Arata Ichikawa (Ryutsu Keizai University) as the Program Coordinator.

JASAG Annual Conference (Fall) is planned to be held at Kumamoto Gakuen University, Kumamoto, Japan. As of this writing, dates are in arrangement. Professor Keizo Oyama (Kumamoto Gakuin University) will serve as the Organizer of the Conference. Details of the Conference are to be announced.

(2) ISAGA2003 post-conference publication:

As noted in the previous issue, ISAGA2003 post-conference publication, "Gaming, Simulations, and Society: Research Scope and Perspective" has been published (Springer-Verlag; ISBN: 4-431-22308-8). Edited by Dr. Rei Shiratori, Dr. Kiyoshi Arai, and Dr. Fumitoshi Kato, the book consists of 30 selected papers from ISAGA2003, together with ISAGA2003 Program.

Please contact secretary@jasag.org for other JASAG activities and upcoming events.

NASAGA

Nina Mc Garry

Marymount University

NASAGA Conference 2005

NASAGA Conference 2005 titled Play Learn Perform -- Innovative ways to improve performance by making learning fun!

“Play Learn Perform” is the theme for next year’s conference – a blend of interactive activities and fun designed to help everyone be more productive on the job, in teams, and within their community. Come to Manchester, NH and experience 36 workshops, a pre-conference, foliage tour, and banquet, as well as informal networking and professional development! Plans are in the works for three tracks for the various sessions. The e-learning track will feature e-mail games, e-conferencing, and ways to increase the interactivity of distance learning. The games track will focus on traditional learning games, participatory strategies, and simulations. Finally, an edutainment track will highlight the use of magic, improvisation, and storytelling techniques to enhance learning. All tracks are designed to offer you the maximum opportunity to expand your horizons and develop your professional capabilities.

Conference date and location: October 5 to 8, 2005

[Radisson Hotel Manchester](#) - Manchester, New Hampshire.

Streaming media presentation

Another interesting note from our NASAGA affiliates is a streaming media presentation made at the University of Wisconsin-Madison, January 20, 2005. The presentation, “How Games are Reshaping Business and Learning” features discussants Constance Steinkuehler, a UW-Madison cognitive researcher and fellow UW professors James Gee and Kurt Squire, work with the Academic Advanced Distributed Learning Co-Laboratory at UW-Madison. The Academic Advanced Distributed Learning Co-Laboratory at UW-Madison is a testing ground for learning games. This particular presentation discusses demographics of gamers, how businesses can benefit from gaming, and how businesses can learn from gaming. The session is more than 90 minutes in length. However, you do have the ability to stop and restart. It is well worth hearing. Go to NASAGA site, www.nasaga.org, look in the right-hand section for Community News, the bulleted item “How Games and Reshaping Business and Learning” will access the presentation.

SAGANET

Pieter van der Hijden

Sofos Consultancy, Amsterdam

Seminars

SAGANET is very active and will have seminars with the following topics:

May 19: gaming/simulation in consulting

September 15: gaming/simulation facilitating and de-briefing

November 17: gaming/simulation and crisis management

The Meetings are open to the public. For those who do not speak Dutch please, start early learning the language ☺.

Further information www.saganet.nl

contact: info@saganet.nl

SAGSAGA

Thomas Eberle

University of Passau

Proceedings of ISAGA 2004 Conference

Proceedings of the 35th ISAGA Conference, September 2004, Munich are still available.

Title: "Bridging the Gap: Transforming Knowledge into Action through Gaming and Simulation"

Reduced prices for SAGSAGA, ISAGA and members of associated SAGAs: Book 20 € (regular 30 €), CD 15 € (regular 20 €) excl. shipping.

Contact: info@sagsaga.org

BIBB Simulation & Gaming Catalogue

The 4th edition of the Simulation & Gaming Catalogue edited by the Federal Institute of Occupational Education (Bundesinstitut für Berufsbildung) contains a list of simulations and publishes articles about simulation & gaming. The catalogue shows whether the authors of simulations are members of SAGSAGA or not. Further information: http://www.vernetz-denken.de/BIBB_Planspielforum/BIBB_Planspielforum.htm (in German)

SAGSAGA –Cooperation: Simulation and Gaming Platform at Learntec 2005

LEARNTEC, the 13th European Conference and Specialist Trade Fair for Education and Information Technology had the motto "Business integration: Learning in business processes". Approximately 300 exhibitors from Europe and overseas showed their products. SAGSAGA held a platform for Simulation and Gaming on 16. February. SAGSAGA Members paid a reduced entrance fee of 60 Euro instead of 370 Euro. <http://www.learntec.de>

SAGSAGA Networking Meeting

took place in Vienna, Austria, 1-2 April 2005.

Monika Helmreich has organized a meeting with a variety of simulations of political education, environmental and business negotiations. Icebreakers, an impressing game about making decisions and delegating responsibility, and a tool about modelling simulations were shown and tried in practice. Lectures dealt with the economic relevance of games theory and the design of the economical/ecological simulation. The meeting was an excellent mixture of theory, presenting/playing simulations and games, and informal meetings in the beautiful city of Vienna. Next Meeting, which will also be in Vienna deals with computer simulations. The proposal of a conjointly SAGSAGA-SAGANET meeting in 2006 was supported.

For more Information please refer to SAGSAGA website www.sagsaga.org.

SAGSET

Helen Godfrey
Napier University

SAGSET 2005 Conference – Call for Papers

Portsmouth University
13-15th July 2005

Conference Theme:

Simulations and Games for Risk, Crisis and Security Management

Risk, crisis and security represents one of the most topical themes facing the contemporary world. The capacity for decision-makers to respond social, technical and environmental crises is an issue of increasing international concern. Despite advancements in technology, communications and improved regulatory structures, the world appears to have become a very dangerous place. Simulating crisis events for training purposes may not be a new discovery, however, the importance of getting value from the training experience is clearly going to have an increased social and political significance.

Papers and interactive exercises are welcome on any theme.
The conference sessions will run in parallel themes as follows:

- **Workshops:** *40 or 90 minute sessions*
Workshops should be activity-based, involving the playing of a part or full game/simulation or an interactive exercise
- **Papers:** *40 minutes of presentation*
Papers should be based on research or experience of simulations and games with an opportunity for questions and discussion
- **Poster:** Posters can be displayed in public areas such as coffee rooms throughout the conference for general perusal and discussion
- **Seminar/discussion sessions:** *40 or 90 minutes of presentation*
These sessions should promote a structured discussion on a topic that the author wishes to explore in an interactive way with the audience.

All accepted papers are published in the SAGSET Yearbook. Paper templates are the same for all presentation formats; however, paper and workshop presentations are limited to 10 pages, and poster and seminar presentations are limited to 6 pages.

Five of the papers on simulating Risk, Crisis and Security will be included in a second special issue of the SAGE publication '*Simulation and Gaming: An International Journal of Theory, Practice and Research*'.

Timetable for submissions:

Full Paper Submission: 31st March 2005
Author Notification: from the 1st April 2005
Early Registration: until 15th May 2005
Final Camera Ready: 30th September 2005

Authors can send by email (recommended) to the SAGSET'2005 address:



Edward.Borodzicz@port.ac.uk

or slow mail to:

SAGSET 2005
 C/o Edward Borodzicz
 University of Portsmouth
 ICJS
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 141 High Street
 Portsmouth
 Hants. PO1 2HY

All submissions should include: the name(s) of the author(s), the title of the presentation, and full address of the contact author.

SAGSET Website: www.sagset.org

Calendar of Events:

Month	Event	Contact/Website
May	May 19: gaming/simulation in consulting	www.saganet.nl
May	May 28-29, 2005 at Kogakuin University (Shinjuku Campus), Tokyo	www.jasag.org
June	ISAGA Conference 27 June - 1 July Theme: Serious Play: Form, Function, and Fun. Atlanta	http://www.isaga05.gatech.edu/
	ESSA 2005 conference June 1 – 4, 2005, Theme: Simulation in Wider Europe Riga, Latvia.	http://essa.eu.org/ (on this website many other meetings, seminars and conferences are mentioned)
	DiGRA 2005 conference June 16 - 20 Theme: Changing views, Worlds in play Vancouver, Canada.	www.digra.org/ (DiGRA is an organisation focussing on digital simulations.)
July	SAGSET 2005 Conference Portsmouth University 13-15th July 2005	www.sagset.org
August	ISAGA Summerschool Krakow (Poland) August 20 – 27, 2005	www.sagsaga.org/isagaschool2005
September	September 15: gaming/simulation facilitating and de-briefing	www.saganet.nl

October	NASAGA Conference Theme: Play Learn Perform October 5 - 8, 2005	www.nasaga.org/ (see affiliate news above)
November	November 17: gaming/simulation and crisis management	www.saganet.nl

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Please feel free to send comments and information /content for further volumes to the editors. Especially information about affiliates is warmly welcome.

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