13th International Association for Sport Information World Congress
11-13 March, 2009 - Canberra, Australia

Why coaches are utilizing web based technologies to aggregate and personalize knowledge.

John Bales
President, International Council for Coach Education
Canada

Australian Government
Australian Sports Commission

AUSTRALIAN INSTITUTE OF SPORT

13th IASI World Congress

11-13 March, 2009 Canberra, Australia

Building and sustaining sport information communities - through connectivity, collaboration and sharing

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Australian Sports Commission

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Building and sustaining sport information communities - through connectivity, collaboration and sharing

Mr. John Bales

President of the International Council for Coach Education

International Association for Sport Information

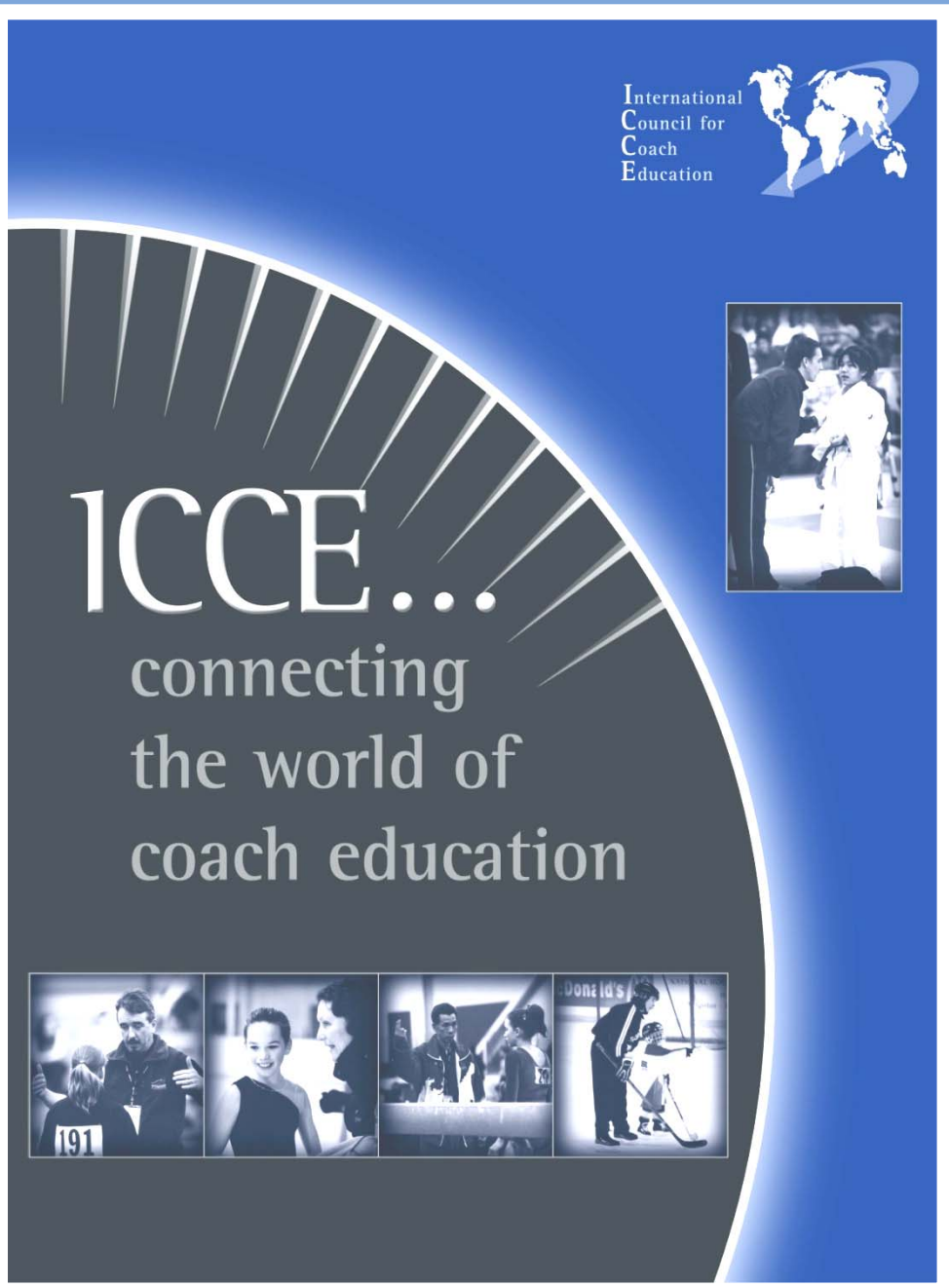
2009 World Congress

Canberra

The Use of Web-based Technologies by Coaches

John Bales

International Council for Coach Education



Probably the Only Sustainable Competitive Advantage You Have is the Ability to Learn Faster Than the Opposition

Arie De Geuss

Royal Dutch Shell

How are coaches using web-based technologies to aggregate and personalize knowledge?

What are the implications to sport information organizations?

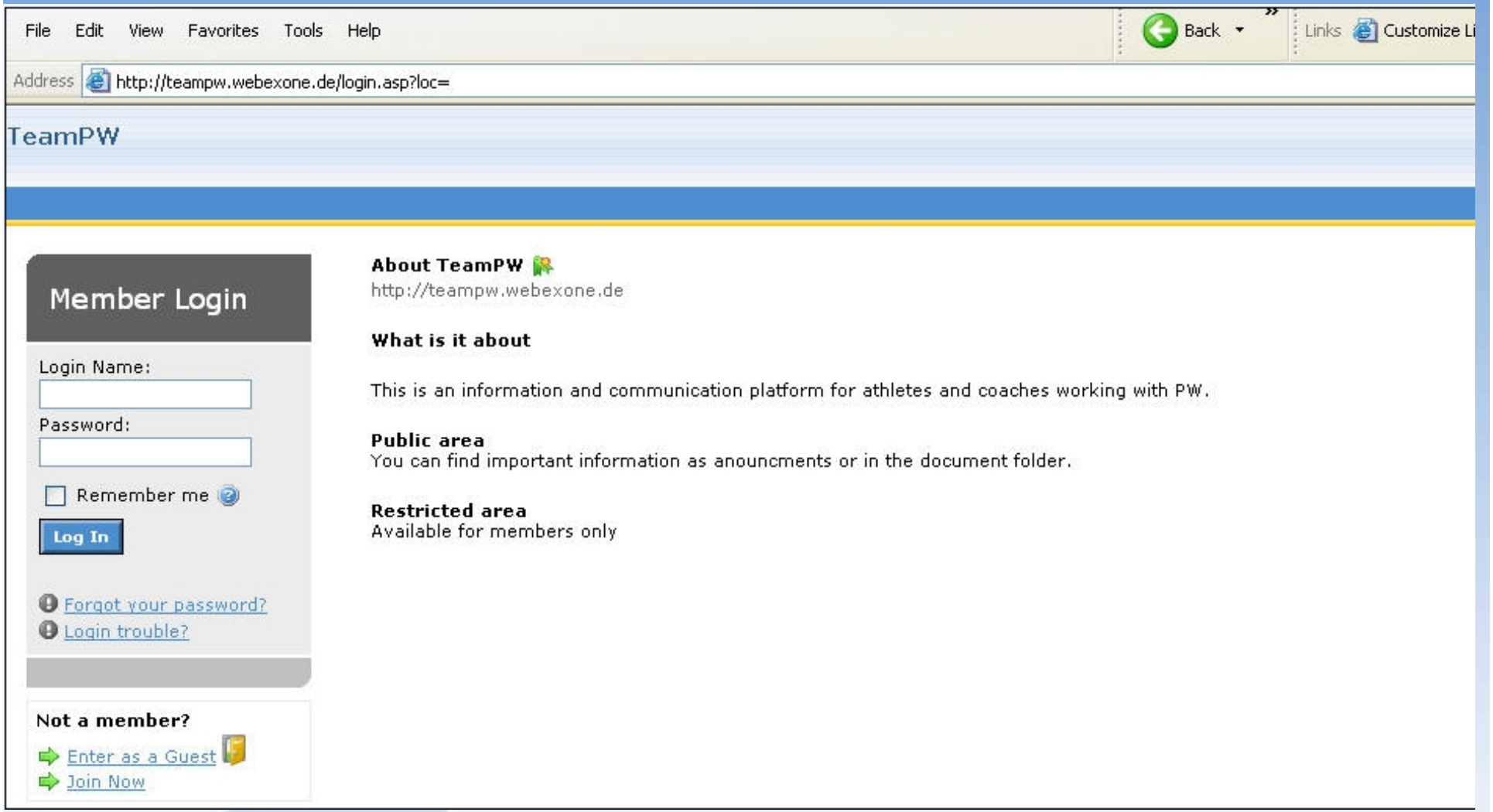
Coaching Challenge 1: Communicating training and team information to athletes

Communication of:

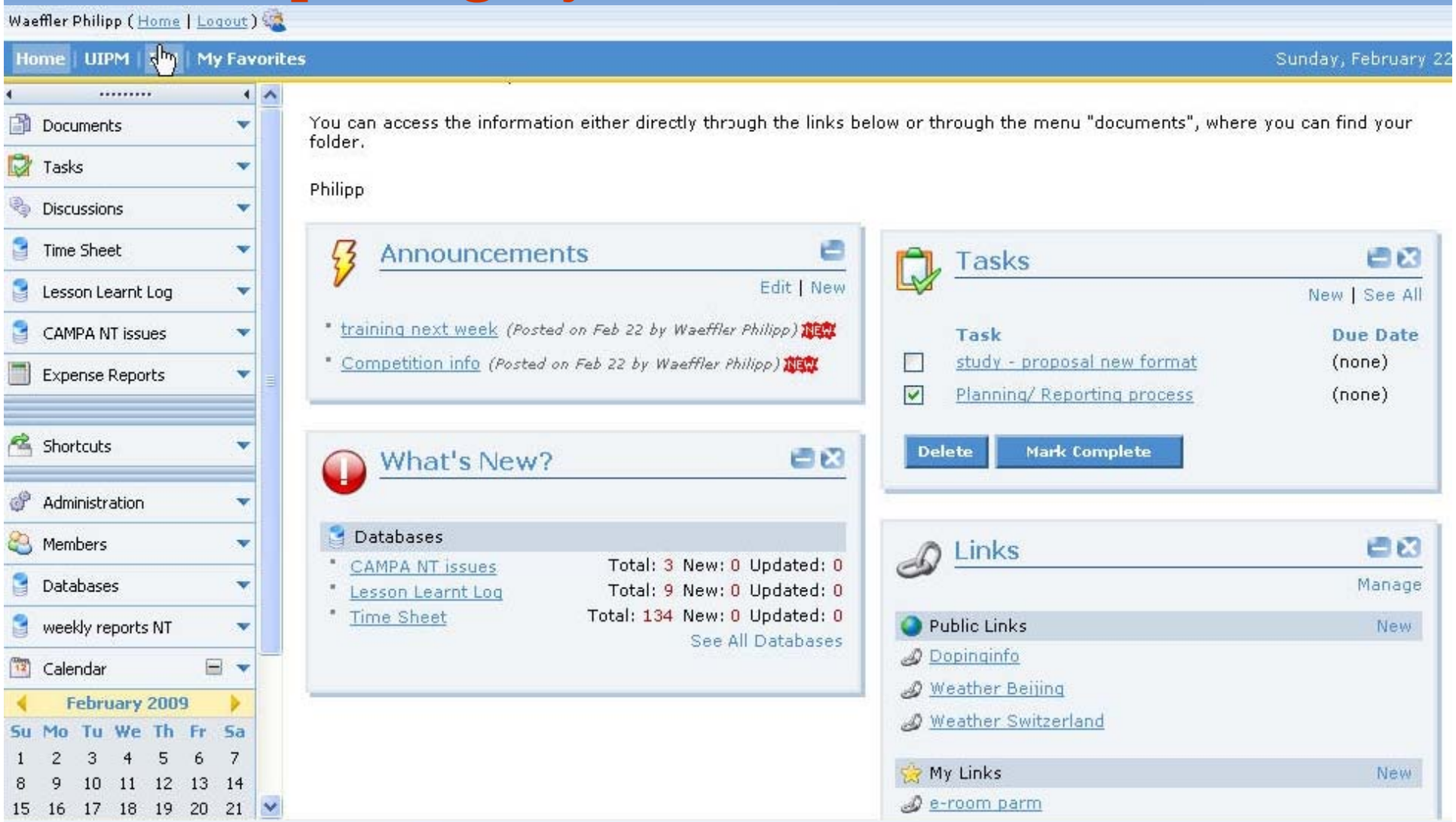
- team logistics,
- planning and monitoring of training
- analysis of competitive results

- Solution: customized team web sites

Team PW: coach's private space for athletes



Announcements: training next week
Tasks: reporting by the athlete



Coaching Challenge 2:
synthesizing input from multiple sources: individualize preparation

- Coaches need to individualize training programs for each athlete, communicate these individual differences
- Coaches and sport science teams are spread across the country and are often travelling internationally: linking the experts

- Solutions: web sites + web meeting software

The changing – and challenging – world of the coach

When I first started to play there was the coach and that was about it… I presently have a staff of more than 20…there are a couple of assistant coaches, a specialist coach for goalkeepers, a physiologist, a psychologist, a physiotherapy and medical network, video technicians and statisticians, a yoga coach, a water running coach, a weights coach…it is a substantial exercise co-ordinating all of those.

Ric Charlesworth, 1997

From Sidelines to Centre Field, Murray Phillips

SPORT SCIENCE and MEDICAL SUPPORT

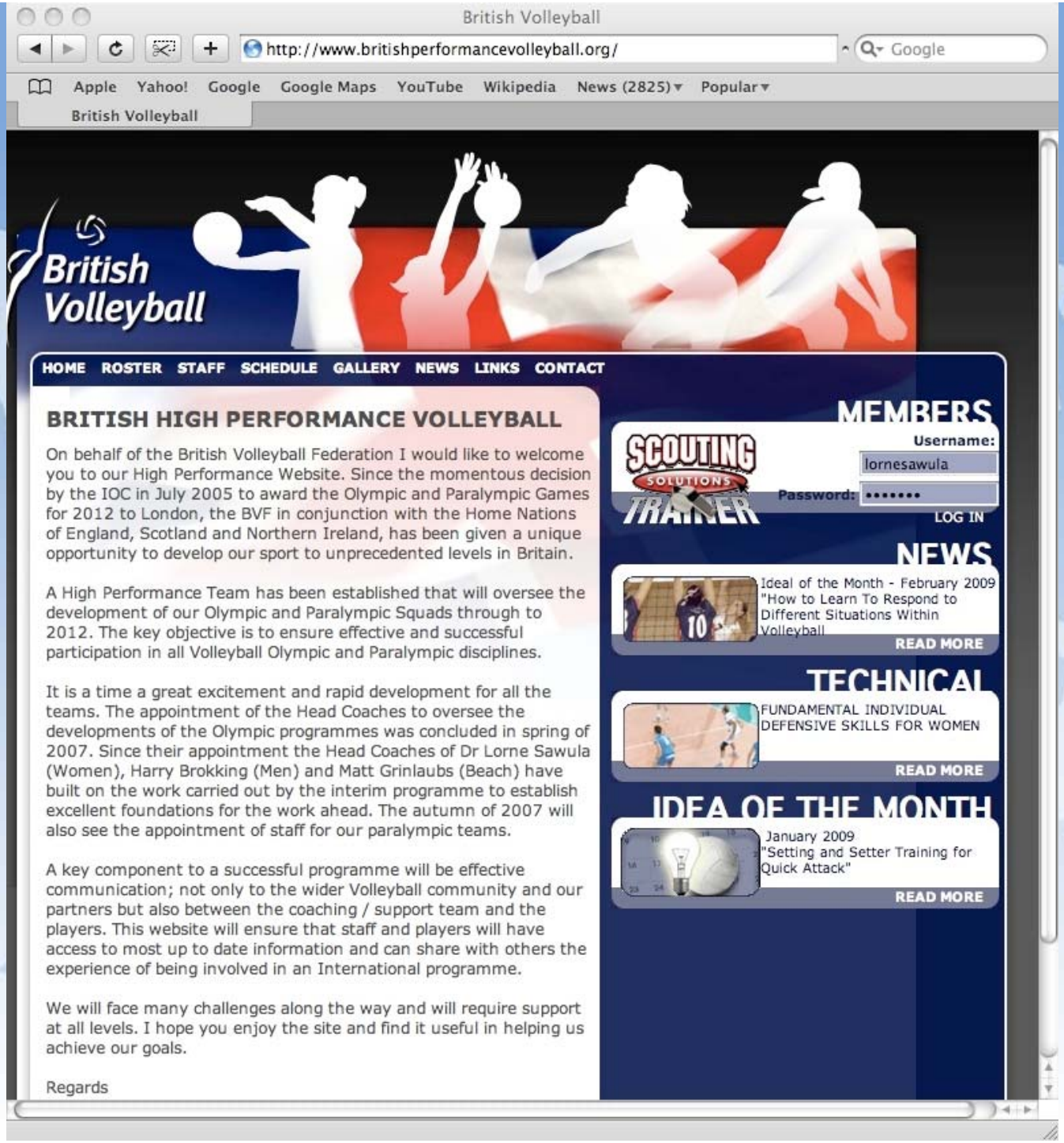
Smith, D.J. 99

Knowledge Transfer: How do High Performance Coaches Access the Knowledge of Sport Scientists?

Ian Reade, Wendy Rodgers and Nathan Hall
Faculty of Physical Education and Recreation, E471 Van Vliet Centre, University of Alberta, Edmonton, AB, T6G 2H9, Canada

Table 4. Most Likely Sources for Coaches to Consult When Looking for New ideas

	Number of coaches	%
Other coaches directly (not seminars)	53	32.3
Clinics, seminars, conferences	49	29.9
Videos	23	14.0
Sport science researchers/ academics	11	6.7
Watching elite competition live or on TV	9	5.5
Books/magazines	8	4.8
Published peer-reviewed articles in academic journals	7	4.2
Trainers	3	1.8
On-line discussions	1	0.8
Total	164	


British Volleyball
http://www.britishperformancevolleyball.org/
Google
Apple Yahoo! Google Google Maps YouTube Wikipedia News (2825) Popular
British Volleyball
British Volleyball
HOME ROSTER STAFF SCHEDULE GALLERY NEWS LINKS CONTACT
BRITISH HIGH PERFORMANCE VOLLEYBALL
On behalf of the British Volleyball Federation I would like to welcome you to our High Performance Website. Since the momentous decision by the IOC in July 2005 to award the Olympic and Paralympic Games for 2012 to London, the BVF in conjunction with the Home Nations of England, Scotland and Northern Ireland, has been given a unique opportunity to develop our sport to unprecedented levels in Britain.
A High Performance Team has been established that will oversee the development of our Olympic and Paralympic Squads through to 2012. The key objective is to ensure effective and successful participation in all Volleyball Olympic and Paralympic disciplines.
It is a time a great excitement and rapid development for all the teams. The appointment of the Head Coaches to oversee the developments of the Olympic programmes was concluded in spring of 2007. Since their appointment the Head Coaches of Dr Lorne Sawula (Women), Harry Brokking (Men) and Matt Grinlaubs (Beach) have built on the work carried out by the interim programme to establish excellent foundations for the work ahead. The autumn of 2007 will also see the appointment of staff for our paralympic teams.
A key component to a successful programme will be effective communication; not only to the wider Volleyball community and our partners but also between the coaching / support team and the players. This website will ensure that staff and players will have access to most up to date information and can share with others the experience of being involved in an International programme.
We will face many challenges along the way and will require support at all levels. I hope you enjoy the site and find it useful in helping us achieve our goals.
Regards
MEMBERS
SCOUTING SOLUTIONS TRAINER
Username:
lornesawula
Password:
LOG IN
NEWS
Ideal of the Month - February 2009 "How to Learn To Respond to Different Situations Within Volleyball
READ MORE
TECHNICAL
FUNDAMENTAL INDIVIDUAL DEFENSIVE SKILLS FOR WOMEN
READ MORE
IDEA OF THE MONTH
January 2009 "Setting and Setter Training for Quick Attack"
READ MORE

Apple Yahoo! Google Google Maps YouTube Wikipedia News (2825) Popular
Scouting Solutions Trainer
SCOUTING SOLUTIONS
BRITISH VOLLEYBALL
Lorne Sawula (Head Coach)
MAR MON TUE WED THU FRI SAT SUN
02 03 04 05 06 07 08
Training Log
Physical Training
Physio & Medical
Mental Training
Nutrition
Fitness Testing
Video Analysis
Athlete Evaluation
HOME
MESSAGES
FORUM
CALENDAR
FUNDRAISING
GALLERY
ATHLETE GUIDE
RESULTS
RESOURCES
PROFILE
TRAINER HELP
LOGOUT
CONTROL PANEL
SUPPORT
British Volleyball
HOME
view introduction
Hi Lorne!
Please remember to moderate your team wall in addition to completing the tasks in your tracker.
0 New Messages
111 New Journal Comments
3 Tasks
COACH TRACKER
Keeps you on track by showing you everything that is assigned to you on the current day.
Training Log View
Physio and Medical View
TASK TRACKER
Allows you to stay organized, showing you everything that is assigned to your team each day.
Training Log Monitor
Physical Training Monitor Assign 0 days remain
Physio and Medical Monitor Assign 0 days remain
TEAM WALL
Post messages and comments to share with your team.
Write something on the group Wall...
Post
RECENT MESSAGES
Training w/c 23rd Ma... Audrey
Re: What is happenin... Lizzie
Heart rate max tests David
Schedule Changes for... Lorne
More
NEWEST FORUM TOPICS
What questions do you want to ... british
What should we do for our off ... british
Any thoughts on the new Scouti ... british
RESOURCES

RESULTS
RESOURCES
PROFILE
TRAINER HELP
LOGOUT

CONTROL PANEL

SUPPORT

British Volleyball

How do you feel mentally?

Scale 1-10:

How do you feel physically?

Scale 1-10:

Comments:

How do you feel your sleep quality was?

Scale 1-10:

What extra attention to individual technical skills can help you this week?

Comments::

What aspects of team play do you need help with this week?

Comments::

Is there any training this week that you may miss?

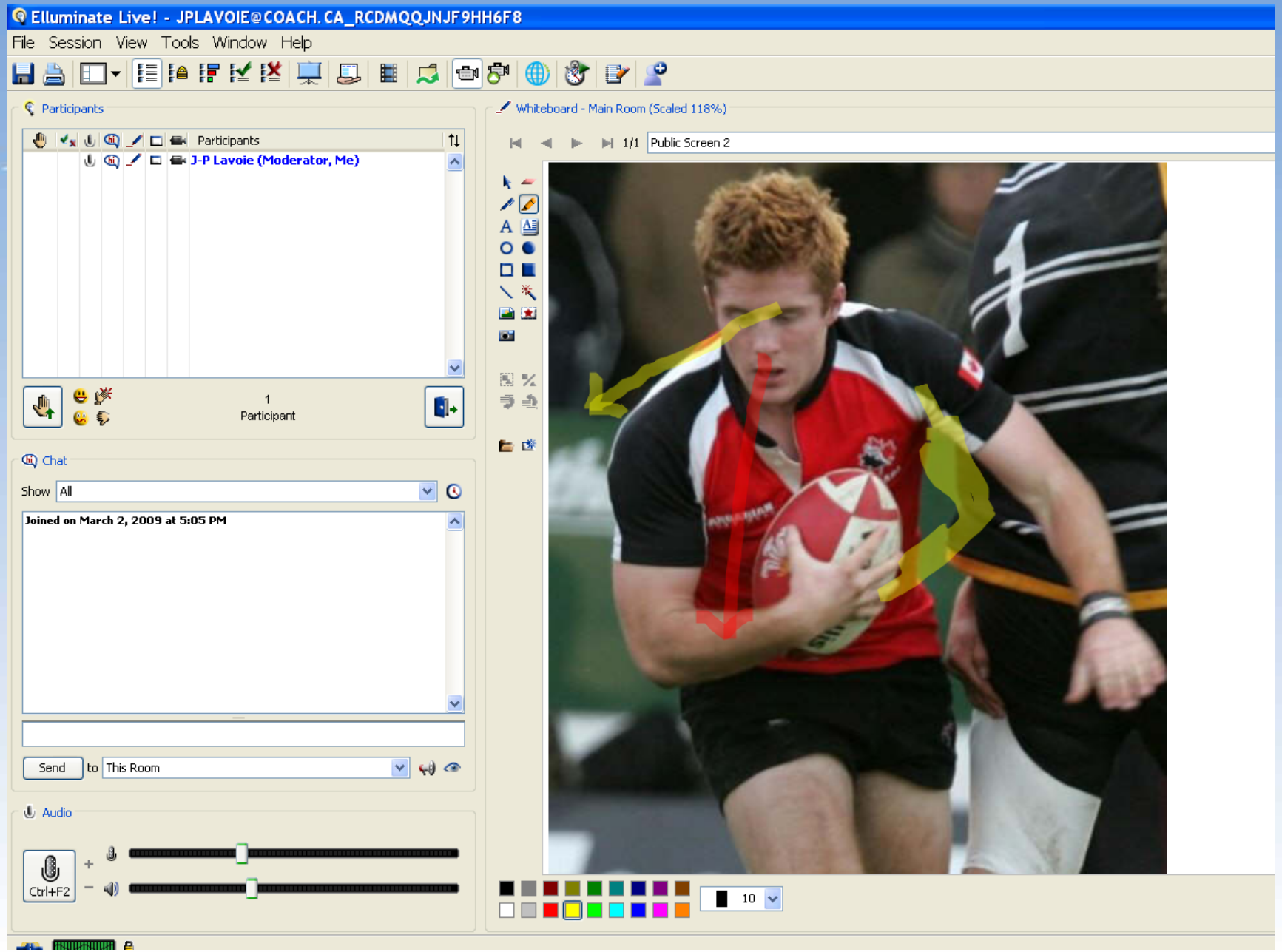
Comments::

Is there anything else that you want to talk to me about this week - do we need a meeting?

Comments::

Attitude:
What was your overall attitude after this training session?

“Elluminate” web meetings



Coaching Challenge 3: in the new competency-based education programs coaches need to track large amounts of information

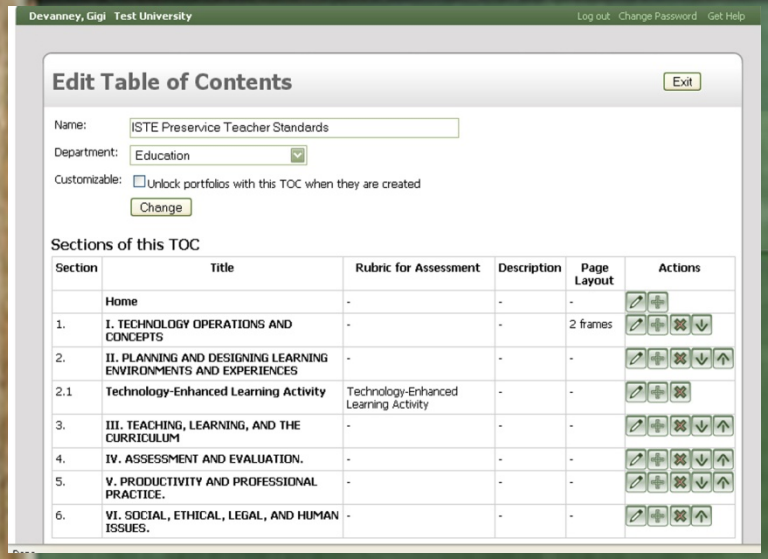
Coaching programs are changing to an outcomes or competency-based approach, and coaches need to collect evidence to demonstrate their competence.

Solution: ePortfolios

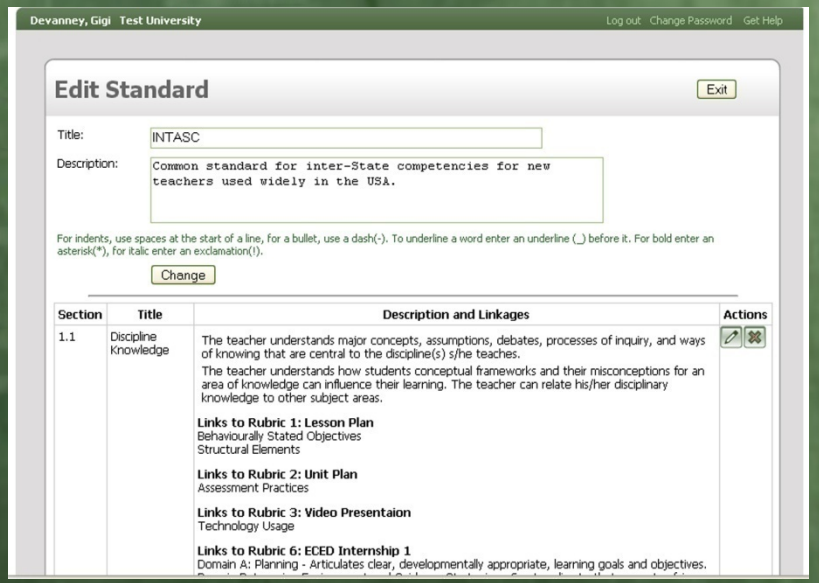
Core Competencies
• Problem Solving
• Valuing
• Leadership
• Critical Thinking
• Interaction
Coach Job Task Analysis
What does a coach need to do?
Coaching Outcomes
• Make Ethical Decisions
• Provide Support to Athletes in Training
• Analyze Performance
• Plan a Practice
• Support the Competitive Experience
• Design a Sport Program
• Manage a Sport Program
Coaching Criteria
• What is evaluated within each outcome?
Evidences
• What does the evaluator see to verify the criteria

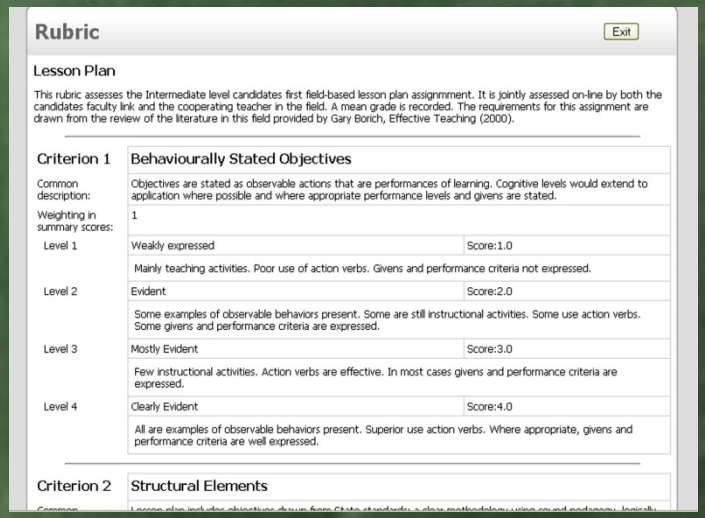
Coaches need to show evidence of their competency to earn certification

- *Chalk & Wire* ***ePortfolios*** may include virtually any type of file demonstrating any type of skill or competency --
  in any content area.

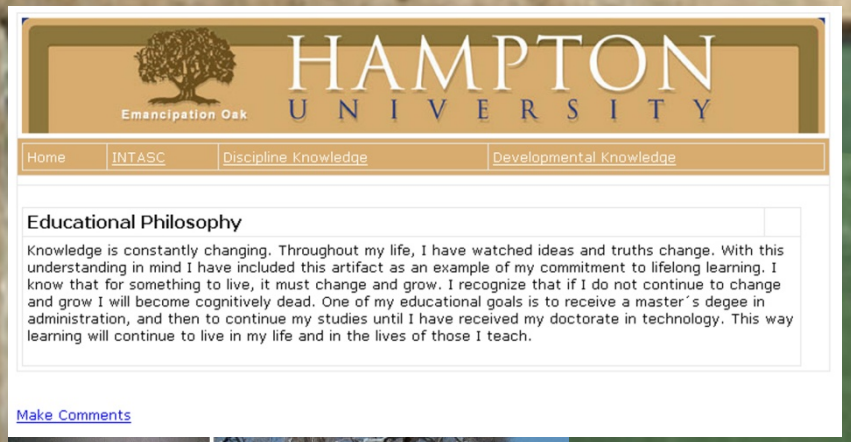


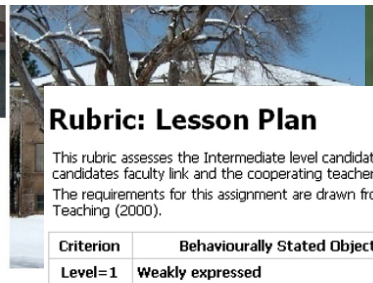
Faculty develop the ePortfolio *Table of Contents* based on relevant standards.





Rubrics are then connected to sections of the Table of Contents





- Discipline Knowledge
- Developmental Knowledge
- Instructional Adaptability
- Instructional Variety
- Effective Learning Environments
- Communication Skills
- Curriculum Planning
- Assessment Strategies

Rubric: Lesson Plan

This rubric assesses the Intermediate level candidates first field-based lesson plan assignmment. It is jointly assessed on-line by both the candidates faculty link and the cooperating teacher in the field. A mean grade is recorded.

The requirements for this assignment are drawn from the review of the literature in this field provided by Gary Borich, Effective Teaching (2000).

Criterion	Behaviourally Stated Objectives	Structural Elements
Level=1	**Weakly expressed** Mainly teaching activities. Poor use of action verbs. Givens and performance criteria not expressed.	**Weakly Expressed** Many relevant State standards are not addressed. The anticipatory set of the lesson is missing or not engaging for most students. The lesson delivery is disorganized and confusing.
Level=2	**Evident** Some examples of observable behaviors present. Some are still instructional activities. Some use action verbs. Some givens and performance criteria are expressed.	**Evident** Some relevant State standards are addressed. The lesson has an anticipatory set that may engage some but not all students. The lesson delivery provides the means for some learners to acquire new concepts/facts. Guided practice and feedback is included. The lesson has closure though it may be weak in its delivery.
Level=3	**Mostly Evident** Few instructional activities. Action verbs are effective. In most cases givens and performance criteria are expressed.	**Mostly Evident** Most relevant State standards are addressed. The lesson has a clear and engaging anticipatory set. The lesson delivery provides clear means for learners to acquire new concepts/facts, receive guided practice and feedback. The lesson has clear closure.
Level=4	**Clearly Evident** All are examples of observable behaviors present. Superior use action verbs. Where appropriate, givens and performance criteria are well expressed.	**Clearly Evident** All relevant State standards are addressed. The lesson has a very engaging anticipatory set. The lesson delivery is exemplary and creative in the way in which students acquire new concepts/facts, receive guided practice and feedback. The lesson has clear closure and relates back to the initial lesson objectives.
Devanney, Gigi	Level Comment	Level Comment

Students develop ePortfolios following the assigned Table of Contents

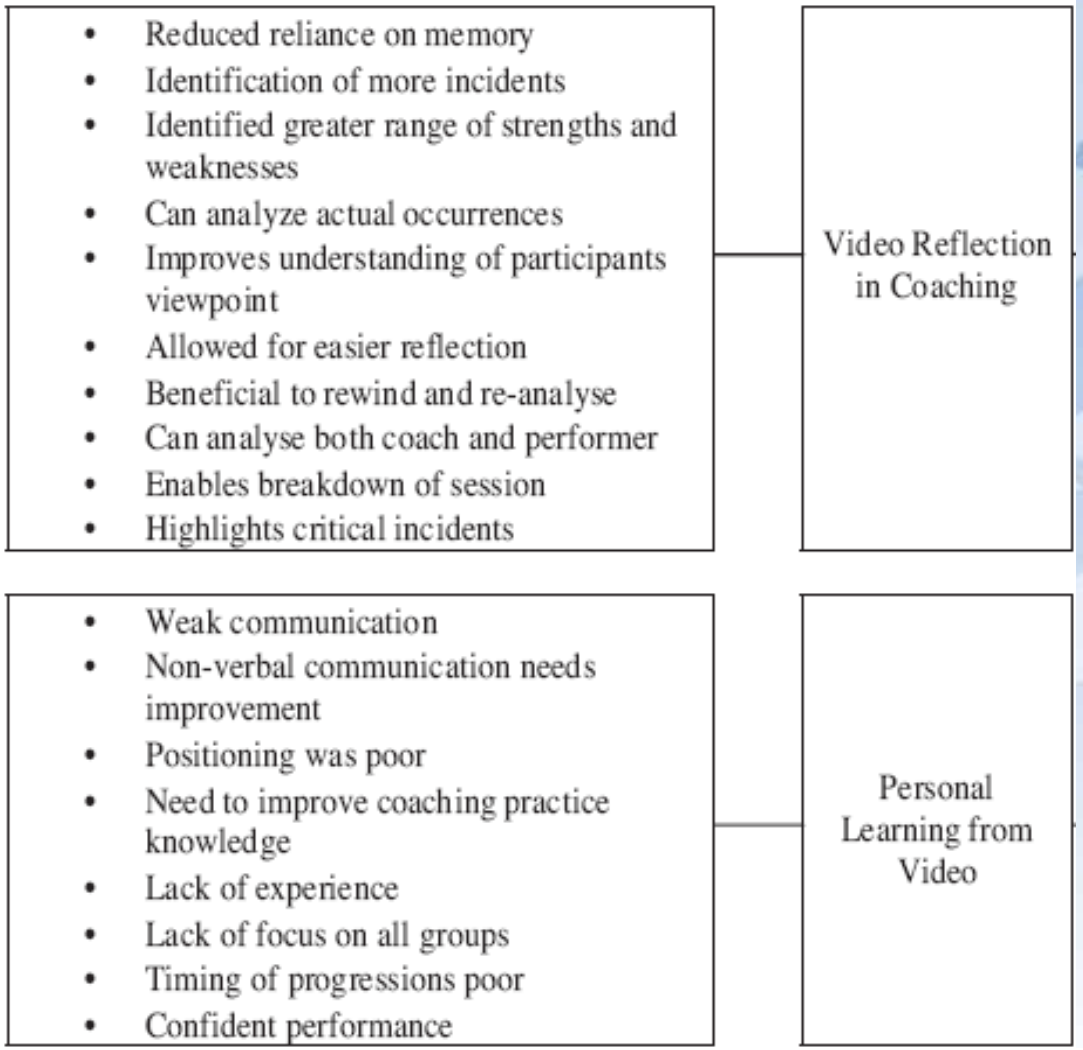
ePortfolios are assessed using connected rubric

File Cache Help
Standard Custom Explore Libraries
Overall Average
By Rubric
By Criterion
By Student Name
By Student Number
By Standard
Mean, Median and SD
By Rubric
By Criterion
By Student Name
By Student Number
By Standard
Performance Levels
By Rubric
By Criterion
By Student Name
By Student Number
By Standard
Standards
Demographic Averages
Demographic Distributions
Non-cached reports (slower)
Add to library...
Gigantic State University
Performance Levels by Criterion
Based on data stored on Mar 8, 2006 at 09:00 AM
Departments: All departments
Demographic filters: All students
Rubrics: All rubrics
Dates: All dates
Statistics: Performance Levels
List by: Criterion
Rubric | Criterion | 1 | 2 | 3 | 4 | 5 | N
Lesson Plan | Behaviourally Stated Objectives | 20% | 28% | 7% | 6% | - | 54
Lesson Plan | Structural Elements | 17% | 22% | 13% | 6% | - | 54
Unit Plan | Technology Usage | 8% | 23% | 8% | 8% | - | 13
Unit Plan | Assessment Practices | - | 8% | 31% | - | - | 13
Video Presentation | Technology Usage | - | 22% | 22% | 11% | - | 9
Video Presentation | Assessment Practices | 11% | 11% | 33% | - | - | 9
ECED Internship 1 | Domain A: Planning - Plans using student background knowledge and experiences. | - | 33% | 33% | 33% | - | 3
ECED Internship 1 | Domain A: Planning - Articulates clear, developmentally appropriate, learning goals and objectives. | - | - | 100% | - | - | 3
ECED Internship 1 | Domain A: Planning - Connects content previously learned with new learning | - | 67% | 33% | - | - | 3
ECED Internship 1 | Domain A: Planning - Creates/selects appropriate teaching methods, learning activites, and instructional materials. | 33% | - | 33% | 33% | - | 3
ECED Internship 1 | Domain A: Planning - Creates or selects assessment strategies that are appropriate for the students and the learning | - | - | 67% | 33% | - | 3
ECED Internship 1 | Domain B: Learning Environment and Guidance Strategies - | - | 33% | 33% | 33% | - | 3
Reports are designed and viewed
Add to library...
Gigantic State University
Mean, Median and S.D. by Standard
Based on data stored on Mar 8, 2006 at 09:00 AM
Departments: All departments
Demographic filters: All students
Rubrics: All rubrics
Dates: All dates
Statistics: Mean, Median and SD
List by: Standard
Standard: National Standard for Teacher Education
Section | SubSection | Overall Results
N | Mean | Median | St.Dev.
Understand Student Behavior | 63 | 1.7 | 1.5 | 1.40
Classroom Leadership | 30 | 3.5 | 3.3 | 0.80
Standard: INTASC
Section | SubSection | Overall Results
N | Mean | Median | St.Dev.
Untitled standard (2) | Discipline Knowledge | 130 | 1.4 | 0.9 | 1.31
Standard: Language Arts (6-8) Hawaii Sample
Section | SubSection | Overall Results
N | Mean | Median | St.Dev.

Coaching e-Portfolio: archiving video, audio and text “evidence”

Utilizing Video to Facilitate Reflective Practice: Developing Sports Coaches

Fraser Carson
Department of Sport and Physical Activity,
Edge Hill University, Ormskirk, Lancashire, L39 4QP, UK



Coaching Challenge 4a: Accessibility and effectiveness of coach education

- “I’m already volunteering my spare time to coach, and the courses are never available.” “The courses need to be more practical.”

- Solution: web-based learning to

►improve the effectiveness of face-to-face training time (ePrep),

► provide flexible delivery alternatives “when I want where I want”.

Pre-course “e-preparation”

C.S.C.F. F.E.S.C.

CANADA ALPINE SKI ALPIN

Canadian Ski Coaches Federation
Fédération des entraîneurs de ski du Canada

Modules/Lessons

- THE CANADIAN APPROACH
- SKILL DEVELOPMENT
- MENTAL SKILLS TRAINING
- EQUIPMENT SELECTION
- BASIC SKI TUNING
- EVALUATE THE PROGRAM
- APPLICATION SERVICES

Welcome to the CSCF Entry Level e-Prep Learning Experience for Coaches

Bienvenue à l'expérience d'apprentissage en ligne ePrep du niveau introduction de la FESC

Modules/Leçons

- L'APPROCHE CANADIENNE
- LE PERFECTIONNEMENT DES HABILETÉS
- DES HABILETÉS PSYCHOLOGIQUES
- LE CHOIX DE L'ÉQUIPEMENT DE SKI
- L'ENTRETIEN DE BASE DES SKIS
- ÉVALUER LE PROGRAMME
- SERVICES D'APPLICATION

National Coaching Certification Program

Programme national de certification des entraîneurs

Pre-course “e-preparation”

Objectives | Introduction | **Technical Tools** | Tactical Skiing | Skiing Biomechanics

Children learn from what they "see" and "do" rather from what is "said". The challenge to the Entry Level coach is to:

- provide good demonstrations **ation** stage.
- promote volume skiing to all ment. This is the **acquisition** stage.

To help participants develop skiing hey are:

- basic skiing skills
- planes of balance

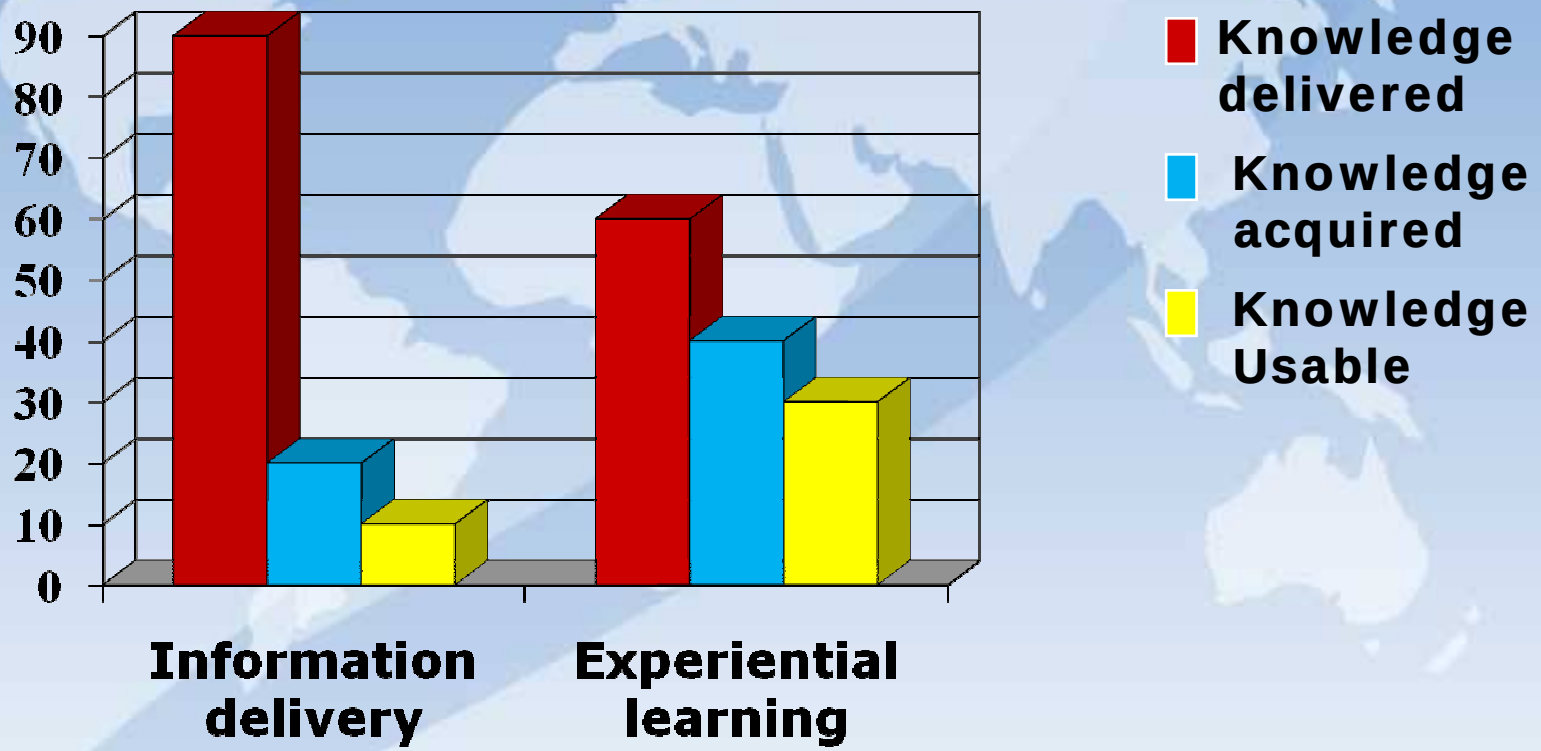
	Video Clips
▪ **Stance** – adopt a position o **and/or agility**	Video
▪ **Balance** – to attempt to ma	Video
▪ **Timing** – selection of the rig	Video
▪ **Coordination** – to combine mon action	Video
▪ **Edging** – the ability to use the skis as a cutting tool	Video
▪ **Steering** – to guide the skis in a desired direction	Video
▪ **Pressuring** (loading and unloading the skis) – the result of increasing edge angle and/or steering	

Challenge 4b: Retaining effective learning methods in an e-learning environment

- Experiential learning and problem-based methods increase the effectiveness and impact of learning

- Solution: Instructor-led 3D e-learning.

Experiential learning



Demers, G. Adapted from Morissette, R. (2002). Accompagner la construction des savoirs. Montréal : Chenelière Éducation.

A Framework to Improve the Impact of Learning

1. **Develop an awareness of the nature of current practice**

2. **Clarify the new learning and how it relates to your current understandings and practice**

3. **Integrate the new learning and the current understandings and practice**

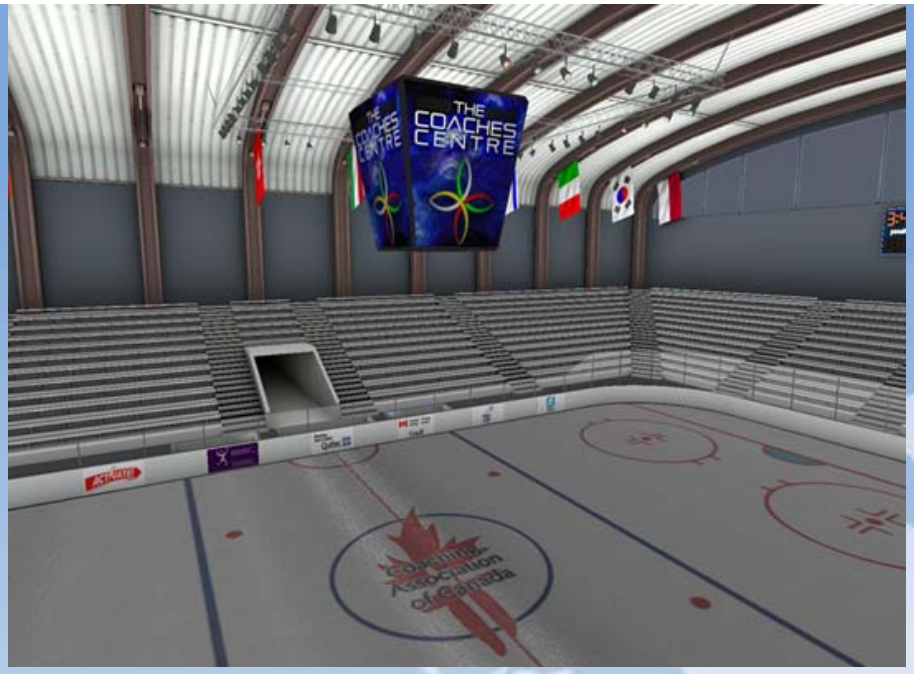
4. **Anticipate or imagine the nature of improved practice**

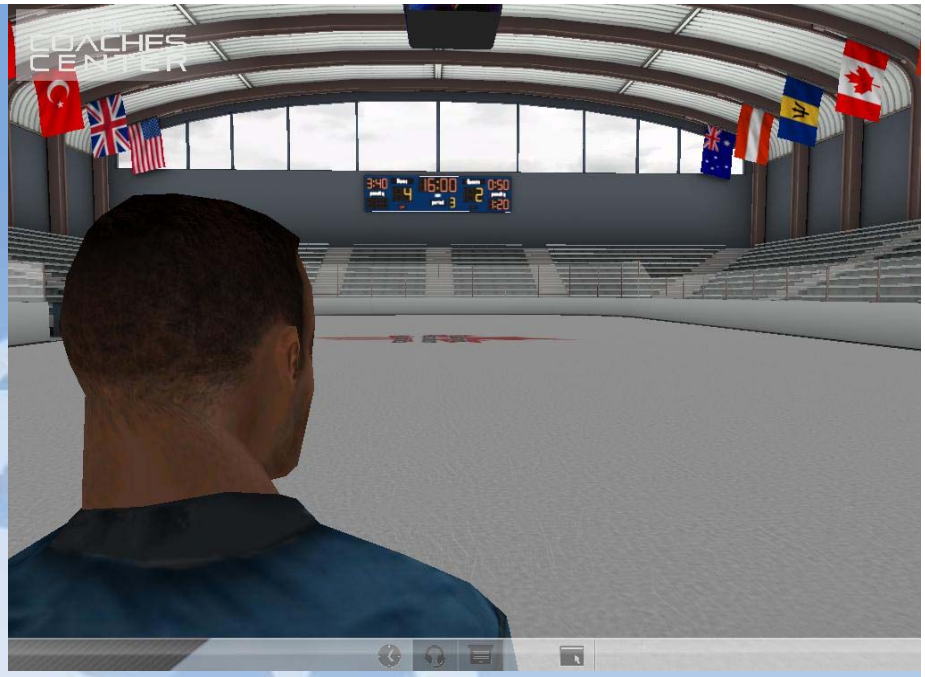
Jennifer Moon “Short Courses and Workshops: improving the impact of learning, training and professional development” Kogan Page 2001

E-Learning: The virtual 3D world in coach education

The synchronous, learning facilitator-lead 3D model retains interactivity among the coaches in an e-learning environment

Avatar: a computer user's representation of him/herself (Wikipedia)





DEMONSTRATION 1

DEMONSTRATION 2

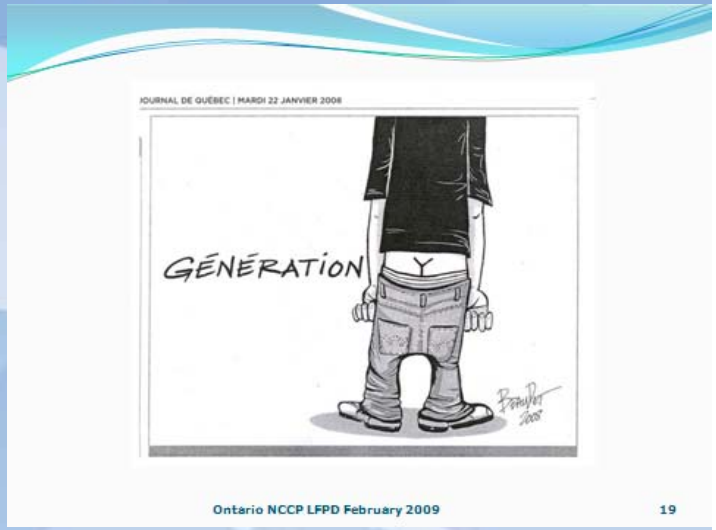
Coaching challenge 5: life long learning

- Creating an environment that encourages ongoing interaction and daily learning
- Solution: Using web-based technologies to create on-line communities (social networks)

Generation Y 1981-2000

Ages 8-28

- 1st Generation to grow up with technology
  - Computers in Nursery school
  - 100s of cable channels
  - 9 out of 10 have personal computers
  - 50% of 12 have own cell phones
  - ¼ of 18-24 year olds have Internet-enabled phones



Source: BusinessWeek 2/15/99; Microsoft Small Business Center, Retail Traffic Magazine 4/1/04

Global Coach Social Network

GCSN Services

Social Network Platform: connectivity with other coaches

Sport Management & Administrative Tools

Online Course Training: synchronous and asynchronous

Online Publishing

Entertainment: Fantasy Coaching

Internet TV And Radio

Retail sales

Summary

1. Communication with athletes, monitoring training
   - ► **Customized web sites**
2. Linking the experts
   - ► **On-line meetings**
3. Tracking information to demonstrate competence
   - ► **ePortfolios**
4. Accessibility and effectiveness of coach education; retaining effectiveness in an e-learning environment
   - ► **E-learning: asynchronous and synchronous**
5. Life long learning
   - ► **Social networks**

What are the implications to sport information organizations?

- Can information providers work with experiential learners to increase applicability? ("usable knowledge")
- How does information need to be adapted for more effective use over the web?
- Helping coaches to access and use video

Thank you!

John Bales

jbales@coach.ca

International
Council for
Coach
Education

Further reading

1. Clarken, Rodney. “Using Web-Based Technology to Effectively and Efficiently Place and Evaluate Student Teachers, Supervisors and Programs” Paper presented at the annual meeting of the American Association of Colleges For Teacher Education, Hilton New York, New York, NY Feb 24, 2007 Online <PDF> . 2009-02-02 <http://www.allacademic.com/metal/p142071_index.html>
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5. Reade, I., Rodgers, W. and Spriggs K., New Ideas for High Performance Coaches: A Case Study of Knowledge Transfer in Sport Science, International Journal of Sports Science & Coaching **Volume 3 –** Number 3 – 2008.
6. Reade, I., Rodgers, W. and Hall, N., Knowledge Transfer: How do High Performance Coaches Access the Knowledge of Sport Scientists? International Journal of Sports Science & Coaching **Volume 3** – Number 3 – 2008.
7. Rocco, M. C. Bainbridge, W. S., Converging Technologies for Improving Human Performance: Nanotechnology, Biotechnology, Information Technology and Cognitive Science, Publisher: Springer; 1 edition (April 1, 2003) .
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