

Towards a learnscape in the Italian NSI

Silvio Stoppoloni
Istat, Italy

Summary

1. Why a 'learnscape'?	1
2. Experiences and studies in the mainstream of a learnscape-approach	3
3. HRD&T (Human Resources Development&Training) in Istat: a self-portrait	7
3.1. Part One: The HRD&T System	7
3.2. Part Two: Main HRD&T projects and activity	9
3.3. Part Three: Innovation and continuous improvement	14
3.4. Awards	14
4. Main prototypes towards a 'learnscape'	15
4.1. Intersection between Learning and Total Quality Management	16
4.2. From the classroom towards an integrated system to enhance the impact	17
4.3. Knowledge sharing and benchlearning	18
4.4. Mixing training modules and organizational ones	20
5. New perspective for an HRD&T staff.	21
6. References	22
7. Summary by graphic facilitation	25

1. Why a 'learnscape'?

'Learnscape' is a word used by Jay Cross¹. By this word he wants to draw our attention on the fact that in modern organization the essential perspective is to create an environment suitable for learners and anyway for the HR development. In fact, in our modern organizations – and in our NSI – an essential problem for management and training staff, as well as an important resource, is that learning mainly is generated outside the classroom. So there is evidence that we need a system by which people can develop by a continuous connection between content and context and build 'the' competence evolution by capturing and organizing every useful *tessera* of the mosaic which composes his/her professional status. Namely an environment which "involves removing obstacles, seeding communities, increasing bandwidth, encouraging conversation, and growing networks".

A different scenario is in front of us. If today training activities are characterised by a focus on key-words like "courses", "classroom", "training needs' analysis", "teaching", "e-learning", "blended e-learning", "ex post evaluation", a 'learnscape' could be a real open environment characterised by a focus on key-words like: "knowledge management", "knowledge sharing", "informal learning", "check and measurement of impact", "to sustain the application on the job" and finally "intersection" among "training, internal communication, organisational processes, competence, change strategy".

We should imagine an approach to a definite goal on the competences based not only on a unique and fixed situation like a classroom (or a classroom plus an e-learning tool), but on the combination of activities that give different but integrated contributes to the goal.

Learning in an organization is mainly conceived, actually, as training, but a real success of a learning investment towards change and competence improvement cannot be only training.

It also means that the actors are not only the teachers and the classgroups. It means that the actors multiply and everyone has in the organization a role in the process of learning.

- We need to dedicate time in a previous approach to the users as a condition of the investment's success.
- *This means a role of the internal communication staff for a good explanation of the reasons of specific learning investments decided by their company*
- We need to motivate persons.

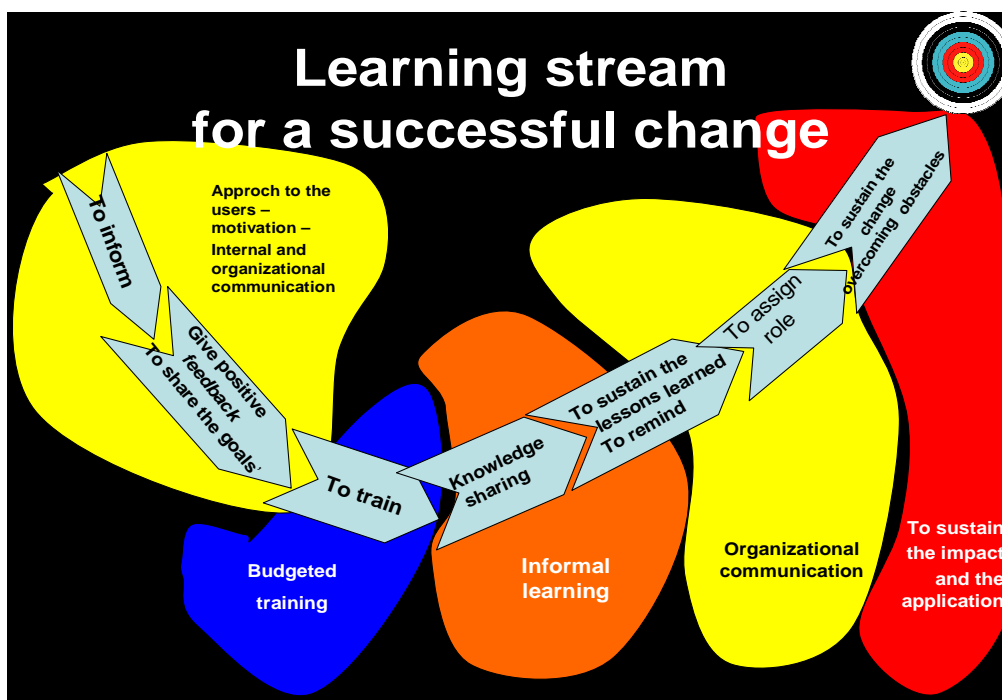
¹ informal Learning, John Wiley & Sons, 2007. See References

- *This means a role of managers to share with their own staff a common goal from the both perspectives of the organization and of the employee. We should try to find a common point between the WIIFM (What's In It For Me) of the employee and the WIIFM of the company.*
- We need environment in which people can share information and compare results and doubts in a kind of open and permanent workshop.
- *This means that HRD&T²-staff should ease the use of places and times to share information, have debates and draw elements to improve the work.*
- We need to explain people that, in some cases, a learning investment is a preliminary step towards a change of role.
- *In this case is up to the management to give a clear message to the staff.*
- We need to give an help for the after-the-course application.
- *This means that trainers and learning managers should invest time and attention in what happens on the job after the courses.³*

In a word, we think we should interpret a path towards a goal not as a one-shoot training moment, but as a multiple-shoot learning&organizational stream. Summarizing, given an organizational/learning

goal  :

Image 1 Learning stream / Training is only one topic of the integrated learning stream aiming to a definite goal.



For these reasons, we are exploring the way to create the fundamental pillars of a learning system conceived as a learnscape by three evolutionary steps: a) starting from a deployment of learning tools; b) creating a fusion of learning, organization and communication approaches; c) orienteering as a learning organization. We are at the beginning.

² Human Resources Development&Training

³ "Organizations should spend ten times more energy reinforcing the training they have just conducted instead of looking for the next great learning initiative" –Ken Blanchard

2. Experiences and studies in the mainstream of a learnscape-approach

At the beginning of this adventure, we have found well-built systems and significant experiences in other organizations and also in the framework of official statistics (see for instance the proceedings of UNECE seminars in Paris – 2006 and Skopje – 2008), which represent a kind of lighthouses for us.

Moreover, many studies encourage us to follow our intuition and improve our leading ideas and experimental projects.

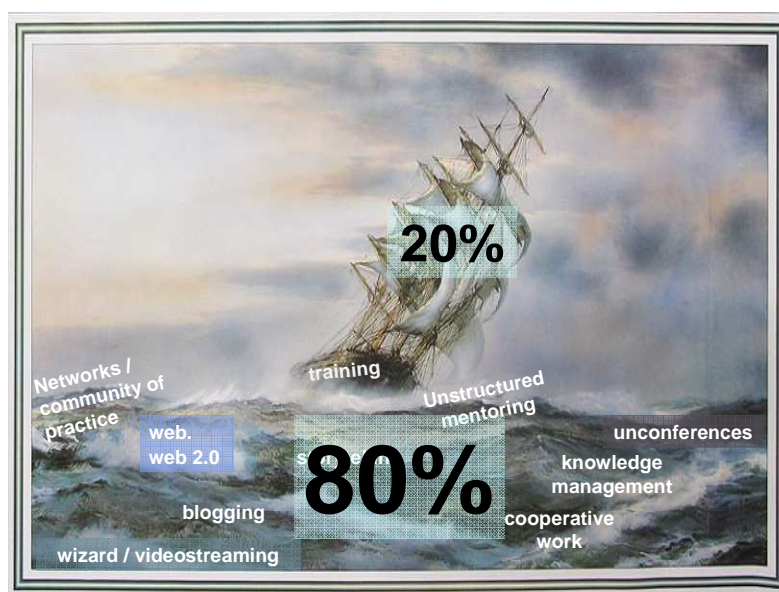
Let us summarize some of them by the following 4 reading-keys:

- The challenge of Informal Learning
- The challenge of Quality and the struggle against the waste in the learning processes.
- The challenge of Reflexivity
- A voyage starting from a course-centric view of knowledge towards a knowledge-centric view of knowledge and the challenge of a re-deployment of the HRD&T-staff's competence

The challenge of informal learning

There is a ghost walking in the training environment. It is more and more threatening as the learning opportunities by the web are growing. The ghost has a name: informal learning.

Image 2 The sea of the Informal Learning and the ship of Training / 70-80% of adults' learning happens outside the training budgeted by the organizations



Statistics Sweden estimates that competence development is 10% by budgeted courses and 90% in daily work. Jay Cross quotes a lot of studies whose conclusions are that approximately 70-80% of the lessons learned by adults is outside the courses budgeted and structured by the organizations. He quotes the Institute for Research on Learning (Palo Alto, California), a two-years research of the Education Development Center (Newton, Massachusetts) which has been developed with Boeing, Ford Electronics, Siemens, Motorola, other studies in United States and Canada. One of them, in particular, developed by NALL⁴ surveyed fifteen hundred Canadian adults on informal learning. Approximately 70% of Canadians say that their most important job-related knowledge comes from other workers or learning on their own rather than employment-related courses. Data that an investigator summarized in this way: "the major conclusion from this survey is that our organized systems of schooling and continuing education and training are like big ships floating in a sea of

⁴ National Research Network on New Approaches to Lifelong Learning at the Ontario Institute for Studies in Education of the University of Toronto

informal learning. If these education and training ships do not pay increasing attention to the massive amount of outside informal learning, many of them are likely to sink into Titanic irrelevancy“

The challenge of quality and the struggle against the waste in the learning processes.

Many training societies and companies' departments are ISO certificated. This means that – sometimes for marketing and competition reasons – quality approach represents an empowerment in the business scenario. Nevertheless, we know that a quality approach bound only to the work processes and not linked to the principles of Total Quality Management can be a partial one, so not fully satisfactory.

As far as this approach is concerned, there is a significant parallelism of the manufacturing industry and the learning processes. C. Wick⁵ points out that “for a surprisingly long time after World War II, American companies believed that they could ignore the quality problem. They were convinced that it was cheaper to produce a certain level of scrap than to try to manage a higher level of quality. It was only when Japanese firms began to really master quality, and as a direct result to capture market share, that American firms finally realized they could no longer afford to ignore high cost of scrap and do nothing about it. “Learning scrap“ is training that goes unused. It is the educational equivalent of manufacturing scrap. Like manufacturing scrap, learning scrap has a high cost in terms of the direct cost of trainers, travel, time, materials, and so forth, as well as the lost opportunity costs of having people spend time in programs learning things they cannot or will not use. There is also the very real cost of customer dissatisfaction when departments invest in training but observe no subsequent benefit. We are not suggesting that developing people will ever be as predictable as manufacturing a product. But there is ample evidence that learning transfer can be improved so that the cost of learning scrap is reduced. In a competitive economy, no company can afford the high cost of doing nothing“.

The challenge of reflexivity

From the relationship teacher-learner to the creative centrality of adults in the organizations. This can be a synthesis of the third challenge for the educational systems. It stems from the awareness that a pyramid approach isn't no more convenient to solve the challenge of complexity. Enzo Rullani⁶ says: “The post-fordist economy (has) to deploy the collective intelligence of people (who produce new ideas and metabolize the emerging complexity) and the ‘working-by-network‘ resources or, to say better, the resources of web-scattered learning. (...) Work and learning by web is based on the capacity of self-organizing the context in which available knowledge and power becomes useful, as it becomes a resource to give answers to the problems, in a convenient and flexible way. It doesn't matter of *problem solving*. It's does matter of *problem setting*. We are dealing with a great change, which matches a new idea of modernity: the reflexive modernization (see. Beck, U., Giddens. A., Lash, S.: *Reflexive Modernization*, Polity Press, Cambridge, 1994). By that we combine the systems created by the first modernity (the use of science, of technology, of calculation, of market a of universal laws) with a reflexive process which reshapes the preliminary conditions of their working depending on the results. Reflexive modernization scouts the crucial role of subjects, but asks them to be able of creative intelligence, autonomy in decision making, accountable regarding taken decisions instead of technicians or operators. It doesn't matter to work on by personal or organizational competences. The point is mobilizing the knowledge which is embedded is in the social network. For this reason the modern worker doesn't refer to a previous framework of activities-to-do. He rather sets off, begins a voyage to explore with others. Training becomes a resource to accompany people of the reflexive networks along this voyage. It doesn't matter to substitute people. The point is to accompany them. It isn't important if trainers have done that road before the travellers they want to accompany. Every traveller has to do his own voyage by himself, trying and dealing with dangers.“

On the same wave, we find this statement in the reflexion of Statistics Sweden “beyond vocational training“: “In order to learn from our everyday work, we must take time to stand and reflect over what has happened. It is not always easy to discover what has been learnt since learning often occurs in small, barely noticeable steps. It is only when we are involved in some dramatic event that a clear trace memory is created. We can nevertheless establish that these small steps gradually bring us a

⁵ Wick, C. et al.: *The 6 Disciplines of Breakthrough Learning*, see References

⁶ Rullani, E.: *La riflessività nella formazione: modelli e metodi – Premessa*, see References

good ways towards a new and deeper level of understanding. This is the learning that we need to strengthen and become aware of“.

Finally, about the effectiveness of combining structured training and ex-post investment, this is the view of Huis, R. et al.⁷: “When learning and working are combined in a powerful learning environment, three important learning processes take place: regulative, metacognitive and transformative learning. Usually, learning is limited to the regulative phase, and there is no reflection on what is learned. The chance that these different learning processes take place is enhanced when the learner has a good mentor and belongs to a community of practice. Another facilitator for these powerful learning environments is a close collaboration between training providers and organisations”.

A voyage starting from a course-centric view of knowledge towards a knowledge-centric view of knowledge and the challenge of a re-deployment of the HRD&T-staff’s competence

This paradigm shift is proposed by Marc J. Rosenberg⁸ explaining that a knowledge-centric view of knowledge doesn’t match a course or a catalogue, but a topic which is in the center of “wide array of additional resources: experts, information repositories, live events, and virtual communities“. All beyond “courses“. So, what is going to happen? “If you’ve ever done any brickwork, you know that it’s not easy to do it right. There is an artianship to the work that combines skill, knowledge and creativity. Just as master bricklayers are necessary in constructing a sound, beautiful building, master trainers and instructional designers are necessary in constructing sound, effective courseware. Yet bricklaying is usually just one part of an overall construction project that can also include plumbing, carpentry, and electric. (...) Like bricklaying, training is an essential professional craft, but it is more and more becoming just one piece of a more complex project that also include information, collaboration, and support components. When you design solutions that take this broader scheme into account, you are acting more like the architect than the bricklayer. (...) Training organizations, whether they are run as large corporate universities, small training departments, or outsourced services, will have to focus far more on the workplace than just the classroom and extend the learning and performance architecture to support people directly on the job. This means that instructional solutions will not be adequate to do this alone. The components of the learning and performance architecture are sophisticated in their own right; integrating them is a major challenge, requiring not just a smart enterprise philosophy but well-developed processes and powerful technologies. To blend this wider array of solutions, training organizations (...) will have to recognize that blended learning is a lot more than blended training and that true blending is a fusion of many technologies and approaches that cut across formal and informal learning solutions. And finally, training organizations will have to become much more involved in directly supporting work and the processes and tasks that comprise work. It will become increasingly important to suggest how the processes and tools of work can be made easier from the start rather than developing training to compensate for poor work design. (...) The growth areas with most promise and most challenge are those on the informal, work-based side: knowledge management (including information repositories, communities and networks, experts and expertise) and performance support.”

Learnscape architect or “facilitators of learning processes“⁹ or knowledge workers approaching the job as members of a newspaper’s editorial staff or of a research lab¹⁰: these are some leading definitions adequate to begin a reflexion on a re-deployment of the HRD&T-staff’s and knowledge workers’ competence.

As far as the experiences in organizations and mainly in NSI are concerned, as we said, many of them are paradigmatic. It’s the case of the organizations which have a 360° approach.

⁷ Huis, R. Et al.: *Enhancing learning opportunities at work*, see References

⁸ Rosenberg, M.J.: *Beyond E-Learning : Approaches and Technologies to Enhance Organizational Knowledge, Learning, and Performance*, see References

⁹ Alberici, A.: *Essere formatore: prospettiva storica e riconoscimento della professione nella società odierna*, see References

¹⁰ Progetto EU-Forma, see References

Image 3 Benchmarking / Lighthouses are the organizations close to a 360° approach.



It means organizations which have an integrated vision of:

- Organization
- Competence
- Training
- Formal and informal learning
- Recruitment
- Retention
- Well-being programmes
- Structured mentoring
- Sharing of the learning goal between line managers and learning staff
- Reflexion on the role of knowledge workers

In this perspective experiences like those of at Statistics Sweden (Beyond vocational training), Statistics Canada's (Human Resources Management Strategy), Australian Bureau of Statistics Statistical Excellence through Capability Development and Planning), Statistics Finland (Strategy-based Human Resources Management in Practice), Federal Statistical Office of Germany (Conceptual Approach to Human Resource Development), OCSE show a strategic view and interesting solutions

Particularly worthwhile are the solutions on the common platform of dialogue and sharing between managers and employees, the structured mentoring and coaching (Statistics Canada), the check of competence gap on formalized self-assessment and dialogue platform (like the OPALS - *Organisational People and Learning System* – in Australia) the integrated projects of well-being (Statistics Finland and Statistics Canada) and, last but not least, the connection between the Competence System and the Quality System (Statistics Sweden: "Statistics Sweden is continually improving documentation, tools and methods of working. In this way, our competence and know-how is converted into organisational and lasting competence – a means of ensuring quality in the processes. Well documented processes simplify the induction of new employees and diminish the vulnerability of the organisation by enabling more people to perform critical tasks. Up till now, about a third of the statistical processes and products are thoroughly documented, not always without some difficulties due to situations with scarce resources. The documentation in itself may occur in different forms. At Statistic Sweden we have started producing web distributed information with the help of authoring tools for multimedia purposes").

Now, as we – in the italian statistical Institute – are on the way of a learnscape and of an integrated vision of organization, learning, competence, well-being, let us, first of all, give a self-portrait of our HRD&Training System (chapter 3.) and then (chapter 4.) tell you some stories about the activities and prototypal contributions that, most of all, go in the direction of a learnscape, so representing the initial topics of a wider and strategic vision of HRD&T.

3. HRD&T (Human Resources Development&Training) in Istat: a self-portrait

Image 4 Self-portrait / The HRD&T System in Istat



3.1. Part One: The HRD&T System

HRD&T supplier and main stakeholders

In Istat, training's activities are in charge to the General Directorate, which provides by a dedicated unit (Human Resources Development Service). The main stakeholders are: †the Istat's workforce (2200, 1900 of them in the headquarter, 300 of them in the regional offices). A breakdown of the professional families has been made and allows a more detailed insight into them (see also paragraph 4.1.). † members of the National Statistical System (see paragraph 3.2.) †Istat's administration †Trade Unions †External Trainers †Other public administrations and research administrations †The scientific community.

Relationship with the internal stakeholders are ruled by a Chart of training's services, officially released on 29th of November 2005 (see also paragraph 4.1.).

How we are active in the international HRD&T framework

Istat takes part in the EU activities regarding training&development by permanent presence in †Eurostat Working Group "Training for European Statisticians" (since early '90's) † Eurostat Working Group on Human Resources Management (since 2004) †Eurostat Task Force Human Resource (2001-2003), †Task Force on ESS learning&Development Framework (2007-2010). Contribution has been given to the main recent meetings on HR, namely The Conference on Human Resource Management in NSI (Thessaloniki, 2003) and the UNECE Seminars on HR in Paris 2006 and Skopje 2008. Researchers from Istat actively attend ESTP initiatives (see paragraph 3.2.). Documentation is gradually implemented in the Section Staff Matters of iNSite.

Strategy, principles and values for HRD&T

Principles and values of training&development are inspired by fundamental Italian and international laws (e.g. Italian Constitution or EU mainstream on Lifelong Learning) and from the main directives at national and international level. Essentially: †Training&learning are values for the public administration development †Lifelong Learning is a fundamental requirement for modern organizations †Quality in Training&Learning in public administrations as user-oriented approach and lever of continuous improvement is a must †Knowledge management and collective intelligence are keys for the growth of persons and organizations.

This means attention to †Total Quality approach †Paradigm shift from training- to learning-approach, †ROI and impact's check&measurement, †Enhancement of the linkage learning/personal competence in the perspective of balancing *What's In It For Me* (WIIFM) from the people's and organization's points of view. In this perspective Competence System is a crucial part of the strategy to link training with people's development (see more in-depth at paragraph 4.1.)

The strategic multi-year goals stems from the above mentioned principles. That of the 2007-2009 states: "HRD sector will be dealing with training projects newly conceived from a methodological point of view, with the improvement of occasional internal trainers' quality and with the implementation of systems aiming to the evaluation and the quality assurance of the training's processes"

The HRD&T structure

How we manage the needs' analysis

Needs' analysis is under revision. We have seen that a only-one-survey for all the topics (statistics, management, ICT etc.) at the same moment isn't adequate. People often react to the training's need when they are very close to the event, but find some difficulties to foresee or to schedule medium- or long-term investment. Moreover we verified that one method isn't adequate for all topics. So we have changed strategy. A needs' analysis has been run as far as training on foreign languages is concerned (by a questionnaire); another one as been run as far as ICT is concerned (by two-session meetings aiming to build a strategy for the different ICT teams in the different structures) and so on. We must be aware that we need different approaches in different times. This also means that a HRD&T team should schedule a) *planning*, in some cases, when clear goals are well defined by the client in a yearly or multiyear perspective; b) *quite-planning* when the client asks a big investment to be run without the times and conditions right for a well built service; c) *no-planning*, when the client asks you a fast and quite immediate service, as the need is urgent and there is no other possibility to delay (we should be ready to combine efficiency, quality and speed...).

Resources I: Finance

Istat training budget is a part of the global budget of the Institute.

In the following graph the percentage of the money investment in training ("investimento in formazione") is documented in relation with the global salary amount ("sul monte salari dei dipendenti"). The graph documents also the percentage of the best performer among the public administrations and the average ("Media comparto") of the investment of the category of public administrations. In 2008 the finance investment of Istat for training has been € 1.386.481,35 (devoted to trainers, learning tools and materials, HRD&T-staff's salaries, accessories) equal to 1,34% of the salaries' amount ("Monte salari").

Graph 1 / Percentage of the investment in training 1999-2008 related to salaries' amount.



Resources II: Trainers

Trainers are:

External, namely a) recruited through public competitions among societies dealing with the different topics of interest; b) chosen *intuitu personae* for specific needs.

Internal, selected mainly in the statistical and ICT structures.

Resources III: HRD&T staff.

HRD&T-staff numbers 13 people: 7 researchers and 6 technicians with competences on †Training production cycle †Total Quality Management †Competence System †Web design of training web. Paths towards a competence evolution in the direction of methodological fusion, informal learning, knowledge management, knowledge sharing, learning process facilitation is on the way (for a more in-depth insight into the goal, see also paragraph 5.). Certificated competence is documented on: 1. training center's leadership.- 2. project leadership.- 3. action learning's coaching.- 3. CAF¹¹-based assessment. An internal Training-Contact-Points' network is instituted (18 Points with 27 persons).

Time and location for training&learning

Taking into account the different needs as far as scheduling of production steps is concerned, 16-18 weeks in the first semester and 10-12 in the second one are exploited.

Courses are managed in Istat's premises, as far as either normal classrooms or ICT-supported classrooms are concerned. May some courses are managed outside the Institute in premises of other organizations.

How we manage training projecting and delivering process

Training initiatives are managed by dedicated Project Teams. Teams are the intersection point of users, HRD&T-staff and trainers. Main topics analysed in the projecting phase are: insight into the class's features, mix of teaching tools, technological framework, impact evaluation, care of the communication issues. The projecting and delivery process is described (see par. 4.1.). Tools thought to sustain the learning process (before and after the event) and to enhance 'beyond-the-classroom' opportunities (benchlearning and knowledge sharing) represent currently an innovation (see paragraphs 4.2. and 4.3.)

Applications are received quarterly on the basis of the offer issued by quarterly calendars. Training Contact Points of the different structures organize the applications by a priority ranking. In the selection's phase attention is dedicated to give priority to well motivated applications, mainly those which reveal a concrete need of impact and change in the productivity processes.

Not 'in-house' training initiatives are offered, too (see later at Special programmes).

Evaluation and reporting

Feedbacks by users are received and evaluated after each initiative. They are available to reengineer the programme and to monitor the whole training activity.

Institutional reports are issued: Annual Report for the Government (which will be used for the global report of Training in Public Administration), for the Parliament, for the ICT Government's Agency etc. Institutional internal reports are issued twice a year.

Technological framework

Classified repository and individual employees' curricula are stored in a management system.

Information about training are available through Intranet. The site offers quarterly courses' calendars, a repository of didactic materials, access to on-line learning tools, documentation (planning documents, annual reports), evaluation documents (self-evaluation and external assessment). The site is now under revision to let people have access to an integrated learning environment (see also paragraph 5.4.).

3.2. Part Two: Main HRD&T projects and activity

Technical-scientific area (statistics – economics – demography)

Cross training - Statistical process - Statistical Output

Statistical Training has 4 main focuses: 1. methodological topics, 2. basics for surveys' management, 3. software for statistics, 4. training to enhance the reading capability of the phenomena under statistical analysis.

¹¹ CAF: Common Assessment Framework (see paragraph 4.1.)

In 1998-2008, 40-60 courses each year have been conducted. The learning days are constantly around 900-1100 every year, with 300-400 participants.

If courses on methodological topics are constantly delivered, a seasonal breakdown characterizes other topics which have been pointed out in the consequence of specific needs or change trends. 2004 and 2005 were characterized by a specific attention to Quality in the surveys' management. The first edition of a basic course has represented the starting point for the delivery of the same course to an European audience and, later, to a quick introduction to Quality for statisticians and not statisticians, too. Now courses about quality represent a basic routine in the training's catalogue. In 2004 and 2005 investment on "European thinking" has been conducted, by training initiatives (named "Learn Europe") run together by experts on Law of the European Community and statisticians involved in international projects. More recently (2007) the seasons of statistical integration and the transition towards open source software for statistics have represented new mainstreams which are, at present, requiring most of the engagement of HRD&T-staff and of the internal trainers. In 2009 a 'sociological season', namely a cycle of 10 lectures about the social change in Italy and Europe is on the way, thought in particular for researchers belonging to social and demographic areas. Availability by video-streaming allows to deliver the lectures also to a wider audience.

Istat employees participate to ESTP Programme of Eurostat. Since 98-99 (at the time TES-programme until 2003) participations to either in-house or at Member States courses number more than 400.

Management area

Organization and communication / Law and Administration

Investments have been done for managers and employees dealing with organizational tasks, differentiating the approach as far as high level managers or their collaborators are concerned. The mandates come from laws (technological innovation, new administrative rules etc.), internal directives, need of up-dating. Topics are delivered related to the following areas: management (finance, HR, project management), quality, administration, law, communication, training, safety-on-the-workplace / well-being).

In evidence:

- Approximately in last 10-12 years there are focuses on different topics, some of them constantly proposed and followed by the employees, as it matters to build - at different levels of specialisation - either a literacy or the preliminary bases for application. It's the case of project-and-time-management and public speaking, as well. In the case of other topics we have a picture of different seasons.
 - So, last '90 were characterized by courses and studies about process reengineering and research on competences.
 - Then, in first 2000's the prevalent attention was shifted on management control. In the same years the rising importance of flexible work required an analysis of the phenomenon and related up-dating, mainly from the legal point of view. Finally a programme of administrative decentralisation which produced new tasks for the lines required an investment on administrative competences for non specialists.
 - Then we have the season of quality: from some introductory and exploratory approach in 2004 to a strong investment on courses, but mainly on laboratories, in 2005-2008.
 - Finally in 2008-2009 an internal directive opened a new road: the question was: is it possible put in practice the principles of "key competence for all" following the Recommendation of EU-Parliament and EU Council in the perspective of Lifelong Learning [Official Journal L 394 of 30.12.2006]? See also paragraph 4.2.
- There is evidence of a gradual differentiation of methodologies: a course-centric approach of the last '90's has been accompanied by other approaches, like on the job training (2004: for initiatives on safety-on-the-workplace for executives), laboratories (2007-2008: to introduce principles of Total Quality Management and to build the essential tools and guidelines to translate into practice), group coaching (2007-2009: mainly to train occasional internal trainers), project work (2008-2009: to translate into practice basic management principles as far as, e.g., time management and teamwork are concerned).
- The course-centric approach is, mainly in this area, a weak one. If we should find an example of an area where the success of the investment is depending on the integrated cooperation of different actors, this is the case. The management area is strictly connected with the change

processes. We need, first of all, a clear message of the top management (comparing Image 1: internal communication to launch the program, training to overcome the competence gap, informal learning to follow-through people in the ex-post-training-event phase, organizational communication to give certainty about the expected new roles, organizational support to help people in case of difficulties, e.g. in case of resources' shortage).

Foreign languages

Investment on foreign languages' training has been constant. From a one-shoot-course approach (early '90's), the training offer has been gradually enriched. The goal is to offer methods that are up to different users' needs and, most important, that enable continuity in the practice of the language.

In evidence:

- Every year, since 1997-1998 at least 350-400 employees are given an opportunity of training in languages. We have evidence of 800-1000 learning days every year.
- Methodologies are very differentiated, namely: on the job training (8 months-course with weekly meeting for approximately 50 hours) – on the job training for special goals (20-24 hours of drill&practice on public speaking, scientific writing etc.) – special programs for groups involved in international projects – abroad stages (until 2003) – lessons for singles or couples.
- Recently, lessons by telephone (with support of a web platform) have been experimented and, as strongly appreciated, confirmed as very flexible opportunity. Blended e-learning, supported either by scheduled face-to-face check-meetings or by on-line tutoring have been experimented. Evaluation is on the way. Some evidence of the well known difficulty to organizing by themselves and maintaining a self-training continuity is anyway detected.

Training of occasional trainers

As every research organizations, managers and employees are required to be occasional trainers and/or speakers in different meetings. In NSI a specific task has to be added, namely the training activity on instructions, rules and behaviours aimed to the quality of data capturing. Some organizations have a dedicated trainers' staff. Some others require production staff to play the role of occasional trainers. Istat belongs to this second category. An investment to improve the quality of trainers has been conducted since 2004. Courses (with exercises on training's projecting and speech capability) have been followed by 88 occasional trainers since 2004 to 2006. Since 2006 on-the-job-training sessions have been dedicated to 160 members of staffs who had the task to train surveyors and/or call-centres' operators.

In evidence:

- Occasional trainers sometimes underestimate the importance of a previous good knowledge of the audience.
- Occasional trainers often are instructions-oriented than audience-oriented.
- Classroom's supports as slides are too often a 'slidument'¹² (neither effective slides nor well written document), a mix of text and images, good for the speaker but confusing and boring for the audience.
- One-shoot training moment attended by occasional trainers when a specific training task isn't imminent, is partially effective. More effective are coaching-like group-sessions aiming: a) to define the goals well; b) to build training tools to be used *in* the classroom, c) to build handouts to be delivered *after* the classroom, d) to simulate the training session in order to improve speech capability, time use, question time and so on.

Technological area

ICT for experts

Training of ICT experts has been a relevant part (up to 30-40%, depending on the annual programme) of the overall last 10 years training's investment, mainly linked to the season of ICT changes (1995-2000: season of the transition from main frame to distributed ICT architecture - 2003 until now: web tools, Internet and Intranet – 2005 until now: transition to open source software).

ICT for end-users

Training in ICT for end-users is mainly an activity aiming to ease the growth of technological literacy and, then, to improve it.

¹² Reynolds, G.: PresentationZen, Pearson Education, 2008

The years 1998-2004 have been characterised by a large investment (up to 400 participant and more per year) on courses about office automation. Then we have had two seasons: the first one, that of the so called *Pc-emergency*, a widespread programme aiming to let people to be more confident and relaxed in case of uncommon or unintelligible messages of the machine (as in the case of viruses or system warning); the second one was the season of specialisation (with smaller participation in comparison with the 'literacy-season': in 2009 approximately 200 participations are foreseen), with the goal to more and more combine learning goals with daily work. In this investment, an important modification has been to dedicate a quota of the trainers' time to check the requirements, but, most important, to check the real goal and the foreseen application of the software to the daily work. In this way, classrooms have become more homogeneous and people more motivated. In addition e-learning platform supported by face-to-face meetings has been offered, in order to differentiate the opportunities and also to let available an integrated tool for learning, self-assessment and refresh. An analysis of the reactions of users, not used to be autonomous in this kind of training pathways, is on the way. Some evidences are anyway emerging that, if people are alone in front of the pc and the proposed learning programme, the learning process can be tiring. Laziness and work urgency are the foes...

Special programmes

Newcomers

Newcomers are provided with training by classrooms when a recruitment is scheduled with a significant number of people. Topics are related to the organization of the Institute, to the main surveys and activities, to the Statistical System, to the safety-on-the-work system.

Problems arise from projecting and delivering points of view when recruitment is limited in the number and scattered.

For this case an approach based on the fusion of different methodologies enhancing the self-orienting ability of newcomers has been designed. Newcomers are provided with a kind of in-basket documentation, on-line tools, preliminary guidelines (*comparison and knowledge-capturing phase*); the first step is studying the documentation and defining a set of previous questions (*verifying and data processing phase*). On the basis of the mentioned questions, people are addressed towards different structures where they can *interview* members of the staff. At this point they have the possibilities to combine all the information acquired (*phase of reflection and knowledge's arranging*): so newcomers are ready for the last step, namely a presentation of the lessons learnt (speech supported by a written handout) to an audience composed by other newcomers and by HRD&T-staff (*storytelling and explanation's phase*).

In evidence:

- Let newcomer explore by himself: it will be less boring and more stimulating.
- Managing together information by Intranet and by one-by-one interview with pivots of different staffs enables a more complete vision of the organization.
- If enough trainers aren't available for a scattered new-coming, transform the newcomers in proactive self-trainers. But don't leave them alone. Provide them with effective maps. Through the organizational landscape exploration, newcomers will discover a learnscape.

Disabled People

Special programs have been conducted for disabled people in the Institute:

- a) specific training for some groups with definite disability (e.g. deaf people);
- b) support for disabled people participating in ordinary classrooms (e.g. training on front-end activity for groups inclusive of blind switchboard operators);
- c) stage for specific limited cases.

Exploring 'outdoor'

Opportunity to attend courses and learning events outside the Institute is available for Istat's employees. In last 3 years 17-18% of the annual training's budget has been dedicated to this 'outdoor' activity. Every year 40-50 people attend approximately 40 outside courses, 150-170 people attend approximately 50-70 technical-scientific meetings, let alone exceptional cases of intensive participation, as in the cases of the 2008 Conference on Quality, organised by Istat in Rome, and of the biennial Italian National Statistical Conference.

Stages

Stages for students in Istat have been proposed since 2004 as a chance for just graduated young to meet the Statistical System and a big organizational environment. Since 2004 more than 1000 people met Istat by an apprenticeship period, which can last from 3 to 12 months. This period is not automatically linked with recruitment. At present, stages in Istat are organised on the basis of a specific one-to-one agreement between universities (which propose the young trainee and a project to be accomplished in the scheduled period) and Istat (which offers tutoring support). At present, every year 15-20 trainees have a stage period in Istat.

Workforce of the National Statistical System

Statistical Offices of the National Statistical System

Istat has the mandate to promote training in Statistical offices of the administrations which take part in the National Statistical System. The mandate comes from the 1989-law which instituted the System. Since 1989 Istat has made an effort to give a contribution to qualify the work-force recruited for the Statistical Offices and to improve a system-oriented approach.

In evidence:

- From the beginning to first 2000's there is evidence of a intensive work on literacy about statistics and Statistical System. Since 2002 to 2007, the courses (ordinarily 4-5 days long) number 20-30 every year on all the country. The learners' days number approximately over 1.000 every year.
- Since 2007 a different approach to the delivery of training to the System's work-force has matured. A 5-blocks-vision of the training offer is going to be proposed, namely: 1. Statistical literacy.- 2. Training as support of the system's goals.- 3. Special programmes (e.g. to develop new methodology in specific survey, up-dating of classifications, approach to census etc.).- 4. Statistics for the core purposes of the administrations.- 5. Tools to capture value from the good practices' sharing and manage the continuous improvement.
- A significant effort was made to prepare the Statistical Offices and, more generally, the Municipalities to the next census's season. In 2008 and 2009, 96 events were organized to explain the new approach to census. 6817 experts participated, belonging to 5025 municipalities (62% of the 8101 invited).
- The approach based on the experts' networks (those of Istat and those of the statisticians and of the other experts in the Municipalities) seem to be the right answer to the complexity of the effort which is needed to improve statistical capability from either the technical or the organizational points of view. Shortage of resources to be dedicated to stay in touch in a systematic way with the different experts' networks is the main problem we are facing at present.

Surveyors

Teaching the basic topics of data capturing is ordinary activity organised for surveyors. In Italy surveyors belong to a) local municipalities; b) private enterprises; c) special networks dedicated to specific survey (e.g. the Permanent work-force survey).

In evidence:

- Shifting from a questionnaire-oriented approach to a surveyor-oriented one can improve the global process of data capturing: this is gradually perceived as a must by our occasional trainers.
- When a different approach is proposed, namely the relationship with surveyors and/or their coordinators is built by a training approach (characterized by a programme previously delivered, operational *content* integrated with *context*, attention to the surveyor's role and behaviour etc.) instead an operational one, surveyors perceive that there is something changing ("you seem a *new NSI*", some participants told us).

Training for statistical cooperation

Training as supporting activity to the international statistical cooperation has a long tradition in Istat. International cooperation has been an Institute's goal since the beginning of '90's and the organization of training has been consolidated step by step.

In evidence:

- Since 2004 to 2008, 96 training events have been organized in the framework of 11 contracts/cooperation agreements related either to complex and multi-year projects (76 = 79%) or to spot events (20 = 21%) ;
- The rate of training in statistical cooperation on the overall training activity of the Institute since 2004 to 2008 is equal to 4% of the events and 6% of the learners' days;
- Since 2005, the activity for training&assistance run by the Istat's selected trainers is formalized by internal regulation;
- The distinction between training and assistance and between structured courses and activities bound to learning through the knowledge-sharing (e.g. study-visit) is becoming more and more dilute. This suggests to make an effort towards a new instructional design based upon the concept of learning-stream instead upon the classic course-centric vision. A strategy and a regulation aiming to give order to this newly-conceived design are needed.

3.3. Part Three: Innovation and continuous improvement

The investment on Total Quality Management in early 2000's has represented the lever of a systematic approach to innovation in HRD&T. Since 2004 a Chart of services of Istat's training was released. From that document that aimed to give the user-supplier relationship a consolidated dialogue platform, a more systematic approach has quickly matured.

In 2005 two activities aimed to give a contribution for the innovation processes, namely a) the training processes' description and b) the self-diagnosis developed by the Common Assessment Framework (CAF). These two activities and the subsequent documentation were the basis for a process of analysis and internal debate aiming to point out the main streams or projects which were considered as crucial for the evolution of the training function.

The outcomes were the following improvement actions for the period 2006-2009, taking into account also what stated as strategic goal in the multi-year planning 2007-2009 of the Institute¹³:

1. A new and systematic approach to trainers' training;
2. Training and organizational investment on the Training-Contact-Points' network of the Institute;
3. A differentiated approach to needs' analysis (to be synthesized in the slogan "from needs' analysis to "lines-training" alliance);
4. A step-by-step growth of the Quality Management System inclusive of an experiment of a "benchlearning protocol" along the guidelines of the Common Assessment Framework (CAF), release 2006;
5. Actions related to programmes inspired by the EU-framework of "key-competences for all", to actions of knowledge sharing, to the design of a new web-environment (to be considered as prototype of a learnscape);
6. The introduction of customer satisfaction surveys.

3.4. Awards

Year	Awarder	Activity or Project Awarded
2009	VIII ed. AIF-Prize F. Basile- Training in Public Administration	<ul style="list-style-type: none"> • 1st Prize for the Project <i>Info&For/cens – An Approach to the 2010-2011 census.</i>

¹³ "HRD sector will be dealing with training projects newly conceived from a methodological point of view, with the improvement of occasional internal trainers' quality and with the implementation of systems aiming to the evaluation and the quality assurance of the training's processes"

2008	Ministry for Public Function: Subjects, projects, solutions for innovation (<i>Against Idleness!</i>)	<ul style="list-style-type: none"> Istat's Training awarded as one of the best 100 stories of good public administration
2008	VII ed. AIF-Prize F. Basile- Training in Public Administration	<ul style="list-style-type: none"> 2nd Prize for the project <i>Learning by comparison – Benchlearning Prototypes: Quality and Good Practices as Lever of Continuous Improvement</i> Award for the project <i>Orienteering in organizations</i>
2008	Prize Quality PPAA 2007	<ul style="list-style-type: none"> Finalist Prize Best Administration (Awarded the Best performers since the previous edition of the Prize)
2007	VI ed. AIF-Prize F. Basile- Training in Public Administration	<ul style="list-style-type: none"> Award for the project <i>A blended e-learning model to teach Statistics in Public Administration Network</i>
2006	Prize Quality PPAA 2005	<ul style="list-style-type: none"> Finalist (40 finalists among 193 candidates)
2005	IV ed. AIF-Prize F. Basile- Training in Public Administration	<ul style="list-style-type: none"> 3rd Prize for the <i>Chart of services of Istat's training</i> Award for the project <i>Training in Istat as Support to Diversability</i>
2004	III ed. AIF-Prize F. Basile- Training in Public Administration	<ul style="list-style-type: none"> 3rd Prize for the <i>Competence System as support to the training and learning activity in Istat</i> Award for the Project <i>PC-Emergency</i>

4. Main prototypes towards a 'learnscape'

Image 5 Prototypes / In the italian Institute, at present we feel like explorers of *prototypes towards a learnscape*.



The prototypes stem from the improvement actions and from different activities regarding a) training of Istat's workforce; b) training of Italian Statistical System's members; c) projects in cooperation during Istat's participation in international programs. Hereby an essential sketch of the main prototypes.

4.1. Intersection between Learning and Total Quality Management

The Competence System as support to Training Programmes [since 1999-...]

In 1999, Istat launched a project, whose goal was the description of the main competences of the different professional staffs. A survey on 16 professional families was made. A more-in-depth analysis led to the description of 32 specialisations. The competences are described by matrices with different grades of depth of the required knowledge, skills and behavioural approach. They are available on Intranet and analysed mainly in the case of instructional design for training for specific staffs. A step more towards the application of competences to career evolution, appraisal System, internal mobility etc. in a HRM¹⁴-oriented vision wasn't approached, yet. The analysis and the outcomes of the work on competences are anyway an orienteering point as far as the Quality System is concerned. In the perspective of a global approach to Quality, the competence approach played an important role pointing out that Quality doesn't refer only the production cycle and the validity of products, but also to balancing and interconnecting well defined goals, effective leadership, position of the stakeholders, efficiency, measurement, finance *and* persons, as they are the main asset in a knowledge-based organization. The model represented a contribution for the design of the competences of the European Statistician, issued by a Pilot Group of an Eurostat Task Force on Human Resources (2003) and for further drafts which have been built by the Eurostat Task Force which is dealing since 2007 with a new version of ESTP.

Chart of services [since 2005-...]

The first Chart of services for Istat's training was issued in 2004 and was awarded in the annual Prize for Training in Public Administration. After this Chart, Istat issued 6 Charters of services more, related to other functions (recruitment, maintenance, general services etc.). All the Charts have been formally adopted by official internal acts of the administration. Now the Chart is regularly updated as far as processes, procedures and indicators are concerned.

Processes' description and Quality Handbook's building [since 2005-...]

An evolution in the building of a Quality System was represented by the description of the training's processes. The related document has been formally adopted. It represents either the training's processes on charge to the training's structure or the processes which are in charge of other units (as in the case of the administrative flow regarding contracts with trainers or with companies assigned to deliver training services). The processes' description was part of the work for the Quality Handbook, which was released in 2007. Maintenance of these documents is permanent.

Total Quality Management applied to Educational System through Common Assessment Framework (CAF) [since 2005 to 2008]

In 2005 Istat took the decision to manage a quality's self-evaluation of HRD&T activities using the Common Assessment Framework (CAF). CAF is the method adopted at European level to assess quality in public administrations and in 2005 in Italy the government decided to launch a Quality Prize to encourage public administrations to match with quality's principles and to accept the examination of external assessors. The experience was hard, but really challenging and the final document represented a valuable test of the activities and a powerful tool to understand points of weakness and strength concerning the 9 criteria of the diagnosis (*Enablers*: Leadership, Strategy and Planning, People, Partnerships and Resources, Processes.- *Results*: Citizen/Customer-oriented Results, People Results, Society Results, Key Performance Results). A second version of the document was released in 2007. Both self-evaluations reached the final of the two editions of the Prize. This allowed to receive two *visits on site* by assessment-commissions, who delivered their final evaluation (From 2005 to 2007 the score improved from 250-300 to 350-400 on the scale 0-1000 adopted by CAF. No competing administration reached a score higher than 550; the 16% of the administrations was in the range 350-400; the 33% of the administrations reached a score higher than 350-400). The documentation

¹⁴ Human Resources Management

produced was the starting point for the adoption of a strategy of continuous improvement through specific actions and monitoring. The experience and the outcomes were presented at the European Conference on Quality in Official Statistics, Rome, 2008, where a significant benchmark came in evidence by matching the analogous experiences of Basque Statistic Office and Statistics Estonia.

In evidence (tips towards a learnscape, findings, surprises, warnings...)

- If you refer to NSI's competences, be aware of the importance to refer not only to statisticians' competences, but also to those of all the staffs working in a NSI (ICT experts, administrative staff, HR staff, Lawyers and so on).
- Chart of Services, Processes' description and Quality' Handbook *are* learning tools. In a framework of Informal Learning, supported by an effective mentoring of training leaders and line managers, can be like a bridge between theory, procedures a daily life. Suitable, among others, for newcomers.
- Investing on quality, e.g. through the design and the implementation of a Chart of services is an activity thought to deliver better products and services for users. Be aware that the first to profit from an investment on quality will be the suppliers themselves. The implementation of a Chart of services or a self-diagnosis based on three basic questions like "what you do?", "how?", "why?" will force you to wear the user's clothes and see with different eyes your own daily work.
- May your staff is not ready to work by a Chart of services. May your users, too. May you deliver a procedures for complaints (so waiting for reactions and useful warning to improve systematically your service). May people will ignore them and tell you occurred inconveniences only "by the way" or at the coffee-dispenser.
- Don't be surprised if not all your staff will be enthusiastic about the investment in activities aiming to Quality, continuous improvement and so on. Quality-oriented processes require specific attention to the 0-measurement, to indicators of effectiveness and, most affecting the daily life, a careful documentation. This can be perceived as vital for someone, but also really annoying for someone else.
- If you will implement Quality in your HRD&T staff, you will discover champions, but you will find resistance, even strong. Good luck!
- Matching with external assessors, with their vision, their evaluation criteria may be irritating as you are exposed to criticism. But if you consider that moment / document as a kind of risk analysis, you will profit, like a preview, of a wide-lens glance on your work and, most of all, on the possible users' reactions.
- Working through Quality opens the doors of your sector. If you are a HRD&T expert you'll discover bridges towards other worlds (administration, production, strategy-staff etc.).
- Working through Quality on processes which cut different structures can reveal a kind of organizational Esperanto.

4.2. From the classroom towards an integrated system to enhance the impact

Key competences [since 2008-...]

An internal directive in 2008 gave the Training's Sector the mandate to organize a training programme to enhance the key competences for the modern knowledge worker. The project is an example of a fusion between a) long-perspective mainstream (in the case the recommendation of EU Parliament and Council on key-competences as far as Lifelong Learning is concerned), b) closer analysis of the structures' needs (in the case, interviews were conducted with some key-managers to compare the EU perspective, the internal competences' matrices and the organizational needs); c) mix of classroom, project work, pilot applications of individual coaching (in the case to have as much as possible immediate impact on daily work). Two main key competences were pointed out, namely: time management and problem solving and the experience, which lasted six months, revealed - through the concrete objects produced by learners (to be mentioned an original self-made guide to meetings' time-management) - the effectiveness of the method.

Cross training and newcomers [2005-...]

As programmes for newcomers have been already described at paragraph 3.2. (Section Special Programmes), here the link with the general category of cross training actions can be highlighted. Cross training actions are those aimed to ease the cross knowledge and the cross fertilization. They

are of interest of newcomers, but also – and with a growing importance – of all the employees. On this mainstream → initiatives to update people engaged in front end tasks about the innovation in the statistical production cycle have been taken → a prototype for on-line access to the main topics of the Statistical System and of the life of the Institute has been released; it has been built by conceptual maps → an on-line tool to introduce to the Safety-on-work System has been developed and delivered, built by conceptual map, as well.

Impact's Check&Measurement [2008-...]

An impact evaluation approach has been taken in some programmes, namely: → introduction to open source software for statistics → ICT for end-users → ESTP courses. We tried to stimulate a kind of clear definition of the learning goals ex ante by the self-evaluation of the applicants; we checked the impact in individual and in classes, as well. We managed this kind of check by follow-up events and/or by questionnaires.

After-the-event support-tools [2008-...]

A prototype of 'on-line after-the-event tool' has been created and used to sustain the class in the post-course phase. The occasion was a project for next census (see also paragraph 5.4.), which required to train 60-70 trainers in order to develop a wide programme of updating on methodological innovation. Interesting topics to be pointed out are: → the adoption and diffusion of guidelines as organizational and learning tools → regular updating on the work-in-progress → repository of learning materials and guidelines for use → A section dedicated to History&Memory of the project → On-line availability of the essential tools for an 'effective trainer'.

Before-the-event support-tools [2009-...]

Investment on ex ante attention to the class has been introduced in terms of motivation and analysis of foreseen impact from the point of view of participants. Experiments have been done in the most recent ICT-courses for end-users (see paragraph 3.2. "ICT for end-users") and in the pathway on Key-competences (see above in this chapter).

In evidence (tips towards a learnscape, findings, surprises, warnings...)

- May people are not familiar with the concept of 'impact' of learning and not yet used to thinking about the difference the learning will make to them and their work area, or any return on investment so far as time and money are concerned. Periods of consultation (to raise awareness), to share goals and frameworks should be carefully planned. A learning culture needs to be promoted by the organization, too, to ease the awareness in learners of the learning cycle (assessment – planning – learning – evaluation).
- Developing a culture which measures the impact of learning takes time and needs to be owned, practised and reinforced by organisations.
- The more training aims to support an organisation's policy and strategic goals, the more it has impact on the performance (critical success factor). An important task of the organisation should be to set and to share SMART (Specific, Measurable, Achievable, Realistic and Timed) goals. Without a strong strategic commitment there is no chance of linking the lessons learnt by the single learner to the structural framework of the organisation.
- Stressing the organisational goals in a learning process can generate a kind of impact divide. People with resistance to change may forget the lessons learnt quickly. People change-bound, curious and motivated will be rocketed by the course from the competence point of view and from the proactive attitude point of view. In these cases there is also an added value: people change their feeling towards training programmes, because they move the focus from the 'course' to the 'learning process'.
- Lasting and integrated programs give assurance for change for learners aware of the impact's goals. In lasting, even if integrated, programmes often people leave if there isn't a strong boss' commitment.

4.3. Knowledge sharing and benchlearning

Enhancing the collective intelligence (knowledge sharing) [2007-...]

'Formalizing the informal': may be the slogan which identifies the introduction of 'knowledge-sharing' events in Istat. You know how many interesting topics captured by managers and employees during

events attended outside the organizations (courses, meeting etc.) are lost for the majority of colleagues. You know how the informal meetings close to the coffee-dispensers often offer the chance to capture the right information, the idea, the connection, when you are so lucky to meet the colleague who tells you some events or some stories. In Istat we decide to build a prototype of 'formalized coffee-dispenser' asking people who have attended a course/meeting to tell it to an audience. The meetings are announced on the Intranet course-calendar, are quarterly programmed, are short (an afternoon) and have the goal to share the main topics focused by the participant and to promote debate and comparisons. In 2008 there were 13 knowledge sharing events, participated by 152 persons. Reporting on ESTP courses have recently been added to the programme, too.

Good practices sharing&capturing (benchlearning) [2007-...]

The process of benchlearning is a learning method embedded in the 2006-release of Common Assessment Framework [CAF]. Benchlearning, *unlike classical benchmarking*, "emphasises more the process of learning from other rather than making comparisons. The goal of benchlearning is to learn from the strengths of other organizations, to learn from them the things they do well, to search for inspiration in our own work and to learn from and to avoid the mistakes that others have made. It is an active, continuous process and not just a comparison of benchmarks (fact and measurements)". "Self-assessment is a preliminary step towards the process of benchlearning (aiming) to have a clear picture of the current performance of the organization in order to decide on the areas/criteria that will be used as the basis for the improvement process". After that the process can continue through a 5-step cycle: 1. Plan, 2. Collect, measure and compare interesting procedure, strengths and results, 3. Analyse areas for learning, 4. Implement the good practices in your organization, 5. Evaluate progress and repeat. In Istat we applied the method building a set of guidelines, as for the contributing organization as for the demanding one. We have described the steps of the process and have built the "logbook" of the benchlearner, namely a kind of laboratory logbook, by which single participants and the groups involved, as well, register the evolution of the work. The logbook is an essential tool which eases the work, giving emphasis on the ex-ante and ex-post phases of the moment (ordinarily a brainstorming day) in which the contributing partner explains its good practices. We have experimented the method choosing as partner the training's structure of the Treasury's Department of the Ministry of Economy which had got significant results in building a Quality System for Training and ISO certification.

In evidence (tips towards a learnscape, findings, surprises, warnings...)

KNOWLEDGE SHARING

- As it matters of an engagement beyond the event, approval can be refused at the moment you propose the work.
- As learners have to change role, from 'only-learner' to 'actor', so they are given the chance to empower their cognitive process. Beyond the relationship teacher-learner, which often risks to be static, learner has possibilities of managing important phases of his cognitive process, often put aside. Namely: comparing, knowledge-capturing, verifying, data processing, reflecting, knowledge's arranging¹⁵ as previous requirements of storytelling and explanation towards someone else. The first beneficiary of a knowledge sharing moment will not be his/her audience, but he/she himself/herself.
- 68% of participants to knowledge sharing events in 2008 in Istat said they acquired good advices and ideas to improve/innovate their own work.
- Knowledge sharing events ease disciplined conversation. "People love to talk (J. Cross)" and conversations in those events become a source of learning and reflection.

BENCHLEARNING

- An effective tool which represents a new offer of learning, beyond the classroom, in the context of an integrated learnscape
- Better results if applied in communities of practice.
- Effective when organization is stressed by new challenges, as new regulation, technological innovation etc.

¹⁵ "Knowledge isn't a quantity, but an arrangement" (Bartezzaghi, S., *Quella differenza generazionale*, La Repubblica R2, 2009, 29th of April).

- Employee used to being learner in classroom quickly becomes active actor on the stage. Peer-dialogue, goal sharing, storytelling of his/her own work transform people from “guided voyagers” to “drivers”.
- Understanding that the ex-ante and ex-post steps of the benchlearning process have the same importance of the brainstorming-day requires a lot of time.
- May participants think that something “informal” has a light learning impact. Listen: may you will learn more than in a formal course. On the condition that analyse, measurement, documentation and evaluation are well run.
- Create – immediately after the capture of a good practice – a fast-implementing internal laboratory.
- Should be attended by all staff, not only by leaders or middle management. Furthermore you’ll discover that the team spirit will be empowered.
- Not easy to convince users that it is a good alternative to formal classroom.
- HRD&T-staff has to make its own paradigm shift, from ‘course producer’ to ‘learning process facilitator’

4.4. Mixing training modules and organizational ones.

A learning stream to support next census (Info&For/cens) [2008-2009]

The project by which Istat has began to build a network as a cooperative tool towards the 2011 census has been described in paragraph 3.2. Beyond the importance of cooperating with more than 5000 municipalities during 96 meetings, the key of this project is in the preliminary step of a system based on a integrated approach: in fact, the activity has been carried on with either training modules or sharing-oriented ones, transforming the class activity in a kind of continuous feedback aiming to capture every useful advice to improve the census organization. A kind of permanent workshop has been created, putting together moments related to innovation with others enhancing what necessary from an organizational point of view as a preliminary step towards a system of interconnected networks. In this particular and innovative vision, the project is an example of a learning stream, as illustrated by Image 1.

Train the trainers by-an-invisible-coaching [2004-...]

The experience of trainers’ training has shown (see paragraph 3.2.) that the most effective action is that combining the hard work of preparing a speech and/or a lesson with the capture of some fundamental knowledge about training techniques. We are obviously speaking about occasional trainers, namely people involved in training processes, as teacher or speakers, only when this activity cross the production stream and there is the need to train operators. Or when researchers are asked to present to peers their works, their projects and/or explain how they are managed. We have verified that a ‘silent intrusion’ of an expert, in terms of an invisible coaching during the production phases is the most effective way to convey useful notions and “tricks”. In those moments, when trainers are stressed by the time and the upcoming event, advices, technical explanation on the reasons why to doing something or to avoiding some type of behaviour are well accepted because perceived as a real help and not something only at theoretical level.

Web environment /The metaphor of the voyage [2008-...]

A new web environment dedicated to learning process is on the way by us. We are building it trying to combine formal and informal opportunities of learning. The idea is that – like in a voyage – your learning will stem from defined organizational topics (e.g. as flights, tickets, booking, guides etc. during the voyage, so application’s sheet, attendance in the courses in the company), absolutely unexpected experiences (e.g. as a meeting with a “right” person during the voyage, so informal mentoring in the company), tools which allow you to combine the daily experience with collective intelligence (e.g. as catching a may-be-right bus during the voyage, so web-navigating in the company). The concept is that user will have the chance to access to structured training (as when he will book a “classic” course) or to learning opportunities by cooperative work (as when he wanted to organize a benchlearning’s pathway) or by exploring alone (as when he will choose an on-line programme). Sharing materials, opportunities, courses, projects in a unique environment will be, in our perspective, the way to introduce people to a stronger awareness of the power of combining guided learning topics (like courses), self-responsibility (like web-navigating), informal enrichment (as in the case of unstructured mentoring), immersion in processes’ integration (as when cooperation among different structures on

Summarizing:

Competences needed in the instructional design, at present [BRICKLAYER]

- Needs' analysis
- Planning
- Macro-projecting of the course
- Micro-projecting of the course
- Learners' analysis
- Places and logistic
- Administration
- Tools for the classroom
- Technologies / Instructional media
- Learning support / materials
- Care of the classroom
- Evaluation
- Reporting – Documentation - Registration

Competences needed to build and maintain a learnscape [LEARNSCAPE ARCHITECT]

Connecting information

- Expert in monitoring metrics / in check&measurement of the impact
- Wiki gardener
- Internal publicist
- News anchor
- Performance consultant

Connecting people

- Tutor of learning networks for collaboration, communication and learning opportunities
- Leader carrying the vision
- Promoter of network participation

Connecting knowledge

- Supporter of continuous experimentation
- Facilitator of the knowledge sharing processes
- Group's coach in action learning processes
- Facilitator who accompanies a change program
- Coach of the intersection between quality and learning
- Synthesizer
- Knowledge-maps' designer

Connecting intelligence

- Facilitator in the benchlearning process
- Supporter of the ex-post-event learning
- Cultural mediator in the alliance between lines and learning management

6. References

Experiences and literature on the following key-words: Informal Learning, Impact, Learning Organization, LifeLongLearning (3L), Competence System, Knowledge Management, Competence of the modern knowledge worker.

1. Alberici, A.: *Essere formatore: prospettiva storica e riconoscimento della professione nella società odierna*, Firenze, Convegno AIF PA, 2008 [speech worthwhile to be quoted as a

paradigm shift was stated regarding evolution of roles and jobs of trainers in the knowledge-based organizations, namely: “from a role of trainers towards a role of *facilitators of the learning processes*“. A paradigm shift that could be adapted to every profession strongly linked with knowledge-based organizations].

2. Alonso, S.: *Formazione fra innovazione e crisi*, Escola d'Administració Pública de Catalunya, Roma, Forum PA, 2009 [How the crisis can be an opportunity of innovation of the training processes using professional networks, collective intelligence, mentoring, knowledge and good practice exchange as integrated resources]
3. Australian Bureau of Statistics, *Organisational People and Learning System, Statistical Excellence through Capability Development and Planning*, United Nations - Economic and Social Council: Economic Commission for Europe: Statistical Commission, Conference of European Statisticians, Paris, 2006
4. Cross, J: *Informal Learning*, John Wiley & Sons, 2007 [About learnscape, unconferences, envisioning etc. in the framework of Informal Learning]
5. Cross, J., *Columnist*, CLO, June 2009. [About re-deployment of HRD&T-staff's competence and, quoting Clark Quinn, about the expression learnscape architect]
6. Edersheim, E.H.: *The Definitive Drucker*, Ch. 5: People and Knowledge, pp. 157-208, Mc Graw Hill, 2007 [“What differentiates organizations is whether they can make common people perform uncommon things” – “ You don't “empower“ people. You help measure themselves by their contribution to the whole“ - “Liberation and mobilization of human energies – rather than symmetry or harmony – are the purpose of organization“ - “Knowledge can't be taught, but it can be learned“ – Information and social connectivity through connection of people, information, knowledge, intelligence]
7. Edmonson, A.: *The Competitive Imperative of Learning*, Harvard Business Review, July-August 2008 [It focuses on “Execution-as-efficiency” vs. “Execution-as-learning”, pointing out that to-day central managerial challenge is to inspire and enable knowledge workers to solve, day in and day out, problems that cannot be anticipated]
8. EU-Parliament and EU Council, *Key Competences for Lifelong Learning, Recommendation of the European Parliament and of the Council, of 18 december 2006, on key competences for lifelong learning* [Official Journal L 394 of 30.12.2006]
9. Eurostat, *ESS learning and development framework and international exchange programmes*, United Nations - Economic and Social Council: Economic Commission for Europe: Statistical Commission, Conference of European Statisticians, CES Forum on Human Resource Management and Training, Skopje, 2008. [It is interesting as it focuses the transition from an ESTP programme which enhances training to a new programme which enhances learning&development].
10. Federal Statistical Office of Germany, *Conceptual Approach to Human Resource Development*, United Nations - Economic and Social Council: Economic Commission for Europe: Statistical Commission, Conference of European Statisticians, Paris, 2006
11. Garrick, J.: *Informal Learning in the Workplace*, Routledge, New York, 1998
12. Gardner, H., *Five Minds for the Future*, Harvard Business School Press, 2006 [...synthetizing the current state of knowledge, incorporating new findings, and delineating new dilemmas is part and parcel of the work of any professional who wishes to remain current with her craft]
13. *Giovannini, E., Pery, I., Ynesta, I., Transforming OECD statisticians from "information providers" into "knowledge builders": the role of training*. United Nations - Economic and Social Council: Economic Commission for Europe: Statistical Commission, Conference of European Statisticians, Forum on Human Resources Management and Training, Skopje, 2-3 September 2008 [Gives evidence to the necessity of investment on processes and human resources dealing with the development of knowledge building in the organizations]
14. Huys, R., De Rick, K., Vandenbrande, T.: *Enhancing Learning Opportunities at Work*, Katholieke Universiteit Leuven, 2005 [May better profit of the workplace as learning environment if the job is designed by multiple executory tasks, mutually related tasks leading to a coherent whole, organisational tasks, related preparatory and supportive tasks and by a socio-technical approach (it means tasks not according to operation but to product or order). - In a *regulative learning climate*, the organisation has the main responsibility for the development of learning activities, in an *explorative learning climate* both the organisation and individual employees share this responsibility. – New goals of training should be not giving the learners skills for operational tasks, but resources to cope with uncertainties in social situations].

15. Nonaka, J.: *The Knowledge-Creating Company*, Harvard Business Review, November-December 1991 [Creating new knowledge is not simply a matter of mechanistically processing objective information. Rather, it depends on tapping the tacit and often highly subjective insight, intuitions and ideals of employees. The tools for making use of such knowledge are often “soft” – such as slogans, metaphors and symbols – but they are indispensable for continuous innovation].
16. Progetto EU-Forma – Linee-guida per la formazione del training manager nelle P.A. regionali e locali in Europa, ISMO (Garuti, M-G.), FORMEZ (Agnesa, G., Keymeulen, I., Sassu, N.), IAAP (Serrano Checa, J.), EIPA (List, H.), FOLDOC (Ardea, G.), Programma Leonardo da Vinci 2000-2006. [Should HRD&T-staff and people dealing with knowledge in the organizations work like members of a newspaper’s editorial staff or of a research laboratory]
17. Rosenberg, M.J.: *Beyond E-Learning : Approaches and Technologies to Enhance Organizational Knowledge, Learning, and Performance*, John Wiley&Sons, Inc., 2006).
18. Rullani, E., *La riflessività nella formazione: modelli e metodi – Premessa*, Isfol, Collana I libri del FSE, 2008. [About reflexivity in training. A paradigm shift from a strict approach teacher-learner to an approach bound to enhance the learner’s autonomy and responsibility, accompanied and sustained by the learning staff]
19. Statistics Canada, *Statistics Canada’s Human Resource Management Strategy*, United Nations - Economic and Social Council: Economic Commission for Europe: Statistical Commission, Conference of European Statisticians, Paris, 2006
20. Statistics Finland, *Strategy-based Human Resources Management in Practice*, United Nations - Economic and Social Council: Economic Commission for Europe: Statistical Commission, Conference of European Statisticians, Paris, 2006
21. Statistic Sweden, *Beyond Vocational Training – Competence Management at Statistics Sweden*, United Nations - Economic and Social Council: Economic Commission for Europe: Statistical Commission, Conference of European Statisticians, Paris, 2006
22. Wick, C. et al.: *The 6 Disciplines of Breakthrough Learning*, John Wiles & Sons, 2006 [No hope of results if the training events are not systematically supported by a process which requires ex ante investments (1. define outcomes in business terms.- 2. design the complete experience.- 3. Deliver for application) and ex-post investments (4. Drive follow through.- 5. Deploy active support.- 6. Document results)]

Papers and presentations about the prototypes towards a learnscape in the Italian NSI (key-words: Good practices, Training vs. Learning, Knowledge sharing, Impact evaluation, Competence, Quality in HRD&T, Waste, Informal Learning).

1. Cimbelli, M., Frankenberg, J., Miles, W., Stoppoloni, S.: *Impact Evaluation – An experiment in the context of the European Learning and Development Framework*, 2008
2. Cimbelli, M., Carrino, T.: *Impact Evaluation and Knowledge Sharing, The Italian Experience on ESTP Programme 2008*, 2009
3. Clark, A., De Nijs, P., Liewendhal, P., Stoppoloni, S. – Ottaiano, A., Navarra F.: *Profession: Statistician – Grid of Competencies Required in the Production of Official Statistics*, 2003, iNSIte, Italy – Staff Matters
4. Stoppoloni, S., Navarra, F.: *An Approach Based on Competence and Quality in the HRD&T Framework of the Italian National Statistical Institute (Istat): An Organizational Story*, 2008, iNSIte, Italy – Staff Matters
5. Stoppoloni, S., Cimbelli, M., Navarra, F., Ottaiano A.: *Improving Quality in Management of NSI Staff Training&Learning*, European Conference on Quality in Official Statistics, 2008
6. Stoppoloni, S., *La formazione ha un nemico: lo spreco*, in *Etica delle professioni*, 3/2008
7. Stoppoloni S., Cimbelli M., *Imparare dal confronto. Prototipi di benchlearning – Qualità e buone pratiche come leve del miglioramento continuo*, 2008.
8. Stoppoloni, S., Carrino, T., Cimbelli M., Nardi, N., *Orientarsi nelle organizzazioni - Cross training in Istat*, 2008.
9. Stoppoloni, S. *Imparare dalla collaborazione di reti. Info&For/cens: un progetto di approccio al censimento della popolazione*, 2009.

7. Summary by graphic facilitation

