Project no. FP6-028038

Palette

Pedagogically sustained Adaptive LEarning Through the exploitation of Tacit and Explicit knowledge

Instrument: Integrated Project

Thematic Priority: Technology-enhanced learning

D.EVA.01
A framework plan for the evaluation and depiction of PALETTE processes and outcomes

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Summary

This deliverable sets out the approach to be adopted for the evaluation of PALETTE design methodology. It is not concerned at this stage with the evaluation of the tools and services to be developed during the project but with the project method itself. It uses the RUFDATA methodology (RUFDATA standing for *R*easons and purposes, *U*ses, *F*oci, *D*ata and Evidence, *A*udience, *T*iming, and *A*gency of the evaluation) as a means of profiling the approach, describes the evaluation approach, defines its indicators from a usage point of view, and sets out a plan for the evaluation. It also contains as appendices examples of the production of *'provisional stabilities'* (depictions of the project to aid its development) and a statement of PALETTE method developed by WP1 as a reference

1 – Introduction to the evaluation approach

This plan embodies an approach to the formative evaluation and depiction of the way in which the project participants experience the methodology of the Palette project. It is formative in that it will be used during the project lifetime to help develop the project successfully. It should be noted that this evaluative process is not part of the management of the project but is designed as a resource for all project participants.

1.1 Our evaluation approach can be considered as a ***theory of evaluation as a process,*** i.e. the way evaluations should be carried out (mainly theories about how evaluations connect with elements or stakeholders in an evaluation process). In terms of this approach we note that it is ***'formative'*** i.e. is intended to have a diagnostic effect on the project. To that extent it is in the tradition of Michael Patton's Utilization Focused Approach (1997) to evaluation in which key elements of an evaluation design explicitly express the interests and intentions of the evaluation commissioners and programme designers. In this sense, the approach is *an evaluation for development*.

1.2 The evaluation approach we advocate can also be understood however, as *an 'evaluation for knowledge'* as Eleanor Chelimsky (1997, p100) suggests would have it. This means that the evaluative dimension of the project is built into the design and can be justified as evaluative research in which the evaluation was primarily undertaken to obtain 'a deeper understanding in some specific area or policy field'. This approach can be distinguished from a developmental or accountability imperative.

1.3 The approach has important antecedents in the work of other European projects undertaken by the WP6 team. In providing diagnostic resources and knowledge resources for deeper understanding of project process (see appendix 1 for a rendition of PALETTE methodology from the WP1 team), this depiction will act as a starting point in considering a ***'project theory';*** in other words; it constitutes a kind of hypothesis of the project process that can guide the evaluation's overall focus. ***Did the proposed project process result in the intended profile of project participant experience and did the project process yield added value?***

1.4 The final dimension of this integrated approach is to consider the evaluation as a provider of *provisional stabilities* (Saunders, Charlier and Bonamy2005). "This idea suggests an evaluation approach which provides all kinds of data (statistics, captured rehearsals, examples, metaphors, typologies, vignettes, cases, accounts and platforms, ways of working, principles of procedures, routines) that can be used as resources for course designers and innovators in networked learning within [a learning project] to increase understanding of the change process in which they had been a part and support course design."

The experience of evaluation in this model sees evaluation as a tool that might support development. We suggest that instead of trying to reduce complexity by searching for common solutions or systematised approaches, with the aim of creating a stable framework that tries to harness change, we prefer an evaluation framework that helps participants within a developmental process to create situated provisional stabilities. In this way, the design of evaluation processes and practices will provide resources for 'sense making'.

1.5 We are working and learning in circumstances that can continually produce periods of uncertainty and can lead, in some extreme instances to destructive instability but more often discomfort, indecision and insecurity. Under these conditions it can be very difficult to act and plan. In a project like PALETTE prompted by new ways of learning linked to the introduction of ICTs, CoPs and developers can be supported by constructing ***provisional stabilities*** as they seek creative solutions to problems created by change. Reflecting on e and understanding change, enabling choices or decisions for future action, create these provisional stabilities. Formative evaluations can provide the resources for such reflections and act as a ***bridging tool*** for planning and innovation. It will not act as a

policeman of the WPs but as a resource for all. The focus is on the Palette project as a whole not on individual WPs. To that extent it has a particular interest to project co-ordination.

1.6 The report on project participants' vision and early understanding of the project (**see appendix 2 and 3**) is an example of a depiction that will act as a 'provisional stability'. It will form a benchmark for early project understanding against which we can compare shifting emphases and priorities as the project proceeds.

2 – Using RUFDATA

(Note: RUFDATA stands for *R*easons and Purposes, *U*ses, *F*oci, *D*ata and Evidence, *A*udience, *T*iming, and *A*gency of the evaluation.)

2.1 This section will explore the intersection of some key ideas in this reconceptualisation of evaluator activity. It is consistent with and uses the idea of a community of practice in the analysis. First, evaluators are understood as working in some community. Lave and Wenger [1991] who coin the term 'communities of practice', see it as a variant on the notion that any social group forms recurrent behaviours which are governed by certain norms and values into which a new 'recruit' or 'novice' or 'entrant' would need to be socialised. More recently, Wenger [1999] has captured the essence of this process succinctly

> *'Over time, this collective learning results in practices that reflect both the pursuit of our enterprises and the attendant social relations. These practices are thus the property of a kind of community created over time by the sustained pursuit of shared enterprise. It makes sense, therefore, to call these kinds of communities, 'communities of practice'. [p 45]*

2.2 In the provision of a practical framework for evaluation then, we should be focusing on aspects of the evaluator's work that consists of problem solving and procedural guidance using a community of practice of evaluators as a resource. But, in what sense might an evaluation framework be 'practical' i.e. based on practices? In day-to-day usage, the idea of the 'practical' has a cluster of meanings: solving everyday problems, having an obvious utility or relevance, emphases on the practical rather than the theoretical emphasising use of a straightforward and accessible kind are all immediately recognisable.

2.3 Reification is of particular interest in the context of our approach in that it refers to the way in which processes and practices are consolidated into 'artefacts' or things. Wenger talks about experience becoming 'congealed' into 'points of focus around which the negotiation of meaning becomes organised' [Wenger p58]. A community of practice produces

> *'abstractions, tools, symbols, stories, terms and concepts that reify something of that practice in a congealed form.... with the term reification I mean to cover a wide range of processes that include making, designing, representing, naming, encoding and describing...'[Wenger 99 p59]*

2.4 In this sense, RUFDATA is an example of reification derived from the consolidated practices of a group of evaluators providing a 'tool' for those in the process of induction. Interestingly, a reified procedure like RUFDATA is based on several different types or images of knowledge. This section has attempted to show how RUFDATA is particularly apt in the context of the PALETTE project because it is an example of reified knowledge, produced by a CoP and an approach which has a high level of alignment.

2.5 In line with the participative design principles of the general PALETTE method (see Appendix 1), this evaluation has also used participative design principles by adopting an inclusive approach to aspects of its design. This was undertaken both by the Visions exercise (see Appendix 3 for a full report) and continued involvement the wider wp6 team (EPFL, INRIA, CTI, ULG, CRP-HT, UT,

AESCRA-EM Lyon). This approach depicts is in the tradition of an inclusive or participative evaluation.

This tradition has four main characteristics and is inclusive in the following ways:

1. By involving project team members in identifying and using key questions, indicators or issues (concern with participatory approaches); outlined graphically in empowerment evaluation) at a 'strong' end of the participatory evaluation continuum (see Fetterman et al 1996 and its critique by Patton 97)

2. Being part of an ethically justifiable process (a concern with evaluation ethics)

3. Making sure their experience is faithfully reported even under political pressure (a concern with declamatory platforms)

4. Evaluation products entry into a public debate (a concern with evaluation as part of a democratic process and as a way of promoting democratic participation) (Saunders 2006)

We will emphasise all four characteristics at different times during the PALETTE project.

3 – Using Indicators

3.1 The concept of an indicator is not straightforward. It is helpful to understand them in the following way with three 'modes' of use.

Mode 1: **Indicators interpreted as the evidence focus** (i.e., areas, activities, domains or phenomena on which evidence will be collected).
[Indicators as a focus]

Example: the area of student achievement in assessment is identified in advance in an evaluation plan as an area on which data will be gathered

Mode 2: **Indicators interpreted as the evidence itself**

[Indicators as the evidence]

Example: actual student achievement data or results are identified ***'post hoc'*** [this is the important difference to mode 1] as indicators of the performance of an intervention

Mode 3: **Indicators as pre-defined or prescribed states to be achieved or obtained.** In this way indicators constitute desired outcomes.

[Indicators as prescriptions of good performance]
Example: grade C or above passes in national examinations are prescribed in advance as an indicator of good performance. Evaluation focuses on the 'gap' between actual performance and prescribed performance.

3.2 Within the PALETTE project, we suggest to predominantly use mode 1 indicators i.e. an indicator is an area or aspect of the project on which data and evidence will be collected. It is essentially using a series of descriptive categories. What is important to note is that they are not mode 3 indicators, i.e. indicators that are 'normative' but analytic/descriptive.

3.3 The plan suggests the timing of the evaluative activity in line with whether it is enabling, process or outcomes. This framework does have a 'temporal' dimension in that enabling indicators (see below)

are likely to be the focus at the 'front-end' of a project, the process indicators are usually used in the middle stages and the outcome indicators are left to the latter stages or after the project ends. These foci therefore do have a logic that depends on when it is sensible or feasible to look for different types of project characteristics.

This model identifies the following definition of enabling, process and outcome mode 1 indicator:

Figure 1: Types of [Mode 1] indicators

Enabling	**Process**	**Outcomes**
Aspects that need to be set up Frameworks for action Policies Protocols Space Time People Resources	Actions Ways of doing things Styles Behaviours Practices	Goals What you want to see as a product Numbers Impact Changes New practices

This suggests that for each of the foci the RUFDATA plan identifies, we will also have a consideration of whether the indicator is enabling, process and outcome. As we suggest above, consideration of enabling usually occurs at the front end of project activity, so we will be concentrating on that for feedback in month 10.

WP6 will provide support for mediating between the WPs and the implications of each of the three phases of the evaluation.

4 – The Evaluation framework for Palette processes and outcomes

What are our **Reasons and Purposes** for the formative evaluation?

These could be planning, managing, learning, developing, accountability.

1. Provision of evaluative evidence of the process of Palette development methodology.

2. New knowledge of how participative design works in practice.

What will be our **Uses** of the evaluation plan?

They might be providing and learning from embodiments of good practice, staff development, strategic planning, Public Relations, provision of data for management control.

1. The evaluation framework will be used to undertake evaluation leading to project adjustments in the light of feedback from the evaluation (this may be at the level of overall project co-ordination, within WPs and also work with the CoPs. It is connected to the idea of diagnostic ***provisional stabilities.*** The products from the WP will vary but it will produce a series of short focused reports based on the

key indicators (see section on focus below). These will form the basis of the final report.

Examples of formative uses might be:

Tabling]?] the evaluation reports at WP meetings to assess implications.
Deciding on what those implications might be and acting on them.
Doing so in an agreed timeline.
Undertaking staff development activities on the basis of the findings.

2. Evaluation reports will be disseminated as a learning resource for the sector in which the CoPs in the project are working.

3. Project participants will use the evaluation to reflect on project experience (project theory testing).
4. Scientific dissemination on participative design.

What will be the **Foci** for our evaluations?

These include the range of activities, aspects, emphasis to be evaluated; they should connect to the priority areas for evaluation.

1. Participative design (which can also be understood as symmetric involvement of users and developers: involving users {CoPs} in designing tools and services)

Examples of indicators:

The mechanisms for involvement of users in design decisions.
Types of users involved in design decisions.
Types of design decisions users' influence.
Pattern of resources users provide.
The ways tools are disseminated and communicated to CoPs

2. The development of a participative/inclusive approach (see appendix 1 for a full explanation)

Examples of indicators:

Involvement strategies.
Types of working patterns.
Participative practices.
Inclusive communication strategies.

3. The iterative or evolving nature of the project and reflexive processes and non-sequential/parallel development (the following indicators are descriptive categories on which WP6 will collect data i.e. mode 1 indicators).

Examples of indicators:

Variations from original project proposal.
Responsiveness of the project to new circumstances.

The project learning processes.
Use made of evaluations and other review mechanisms.
How developments in one activity connect with another.
The extent to which there is uneven development of dimensions of the project.

4. The open source culture (ways of doing things and understanding).

Examples of indicators:

Methods of dissemination of resources/tools and services created by Palette.
Levels of restriction on public access.
Levels of external project use and knowledge.
Processes and mechanisms for sharing experience and resources.
Use and appropriation of Palette products by the CoPs.

5. The processes of mediation and integration between project participants

Examples of indicators:

Processes of inter work package interaction.
Mechanisms for sharing experience.
Attitudes of project participants to joint working.
The mechanisms for achieving coherence across the project.
The extent to which work in one activity enables work in another.

6. Alignment between aspirations (project theory) and practices in the project

Examples of indicators:

Processes for achieving alignment.
Alignment and non-alignment of different dimensions of the project.
Project participants' experience of alignment.

7. Professional development of Palette partners

New practices on behalf of project participants enabled by Palette participation/
Outputs by project partners.

What will be our **Data and Evidence** for our evaluations? **(See Appendix 4 for a detailed description of focus, indicator type and timing, evidence type and data collector)**

Numerical, qualitative, observational, case accounts:

- Vignettes/depictions.
- Quantitative accounts of use.
- Interviews with stakeholders.
- Discussion fora captures.
- On-line questionnaires.

Who will be the **Audience** for our evaluations?

Community of practice, commissioners, yourselves [to be logic with the section title ("Audience for *our* evaluations", we would say "ourselves"; isn't it?]
Audience for evaluations undertaken using this framework will mainly be:

- Project participants.
- Project steering group.
- Wider learning communities in CoPs.

What will be the **Timing** for our evaluations?

When should evaluation take place, coincidence with decision making cycles, life cycle of projects?

Three phases of evaluation: **(see appendix 4 for details on timing):**

End of month 10 (focus on enabling).
End of month 20 (focus on process).
End of month 30 (focus on outcomes).

Who should be the **Agency** conducting the evaluations?

W6 team will be the main users of the evaluation framework on behalf of the project overall.

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EPFL (Lausanne) CTI (Greece) CRP-HT (Luxembourg) UABB (Algeria) ULG (Liege, Belgium).

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Appendix 1 – Summary of the participatory design of the Palette's operational methodology

Charlier, B., Henri, F., Daele, A. & Künzel, M.

The Palette general methodology itself, or Participatory Design methodology, is composed of twelve sub-processes (links "C"), as suggested in the figure below (– The participatory design methodology Figure 1). In the following paragraphs, we will describe and specify each stage (difference with subprocesses?) of this model (difference with "methodology"?].

The figure more precisely depicts the process "Palette's R&D methodology", i.e. the whole process of collaboration with the CoPs involved in Palette. Three kinds of objects are depicted:

- The *actors* (yellow oblate hexagons): the developers (the Palette's partners) bringing together the different WPs and two sub-teams within the WP 1 as well as the CoPs with their delegates and members. These actors have different roles in each of the sub-processes.
- Twelve *processes* contained in the methodology (the circles around the "Palette's R&D methodology"). From left to right, the first one "Analysing and categorizing tools" and the last one "Following-up and evaluation of the CoPs' reflection about their activities" happen regularly all along the project and influence the other processes with their products. The ten other processes numbered from 1 to 10 happen one after the other.
- The *objects* as inputs/outputs in/from each process.

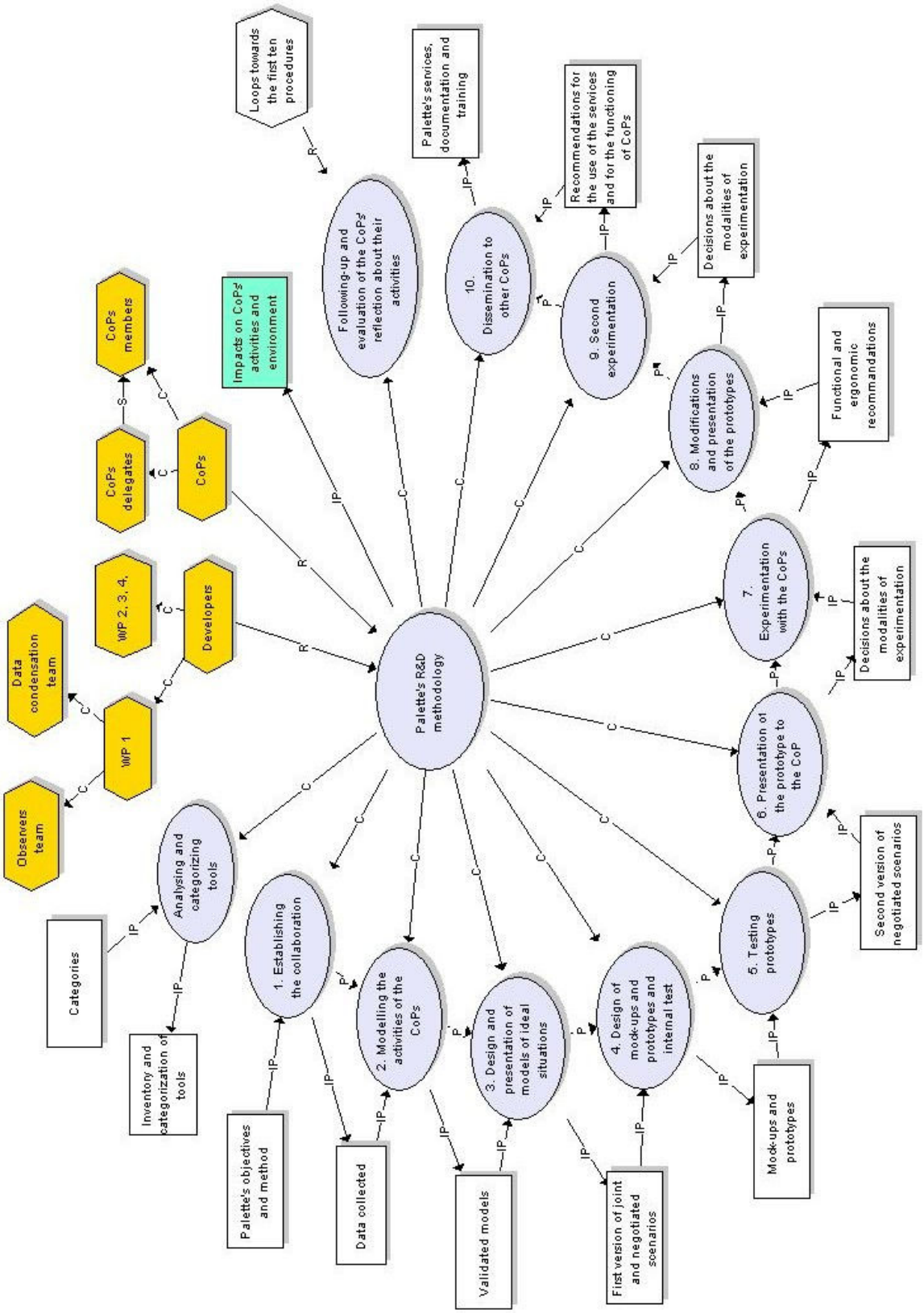

Figure 1 – The participatory design methodology

Caption:

"R" means "Regulates" (or "acts on") "C" means "is Composed of" "IP" means "Input/Product-Output" "P" means "Precedes" "S" means "is a Sort of"	◯ = Processes, actions ⬡ = Actors, principles ▭ = Objects, products

Before describing the different sub-processes, it is useful to specify the expected result of the methodology. It consists in "Impacts on CoPs activities and environment". Different tracks (or indicators of the achievement of the project's objectives) of this result for the individuals, the CoPs themselves, the organisations and the society are described in the figure below.

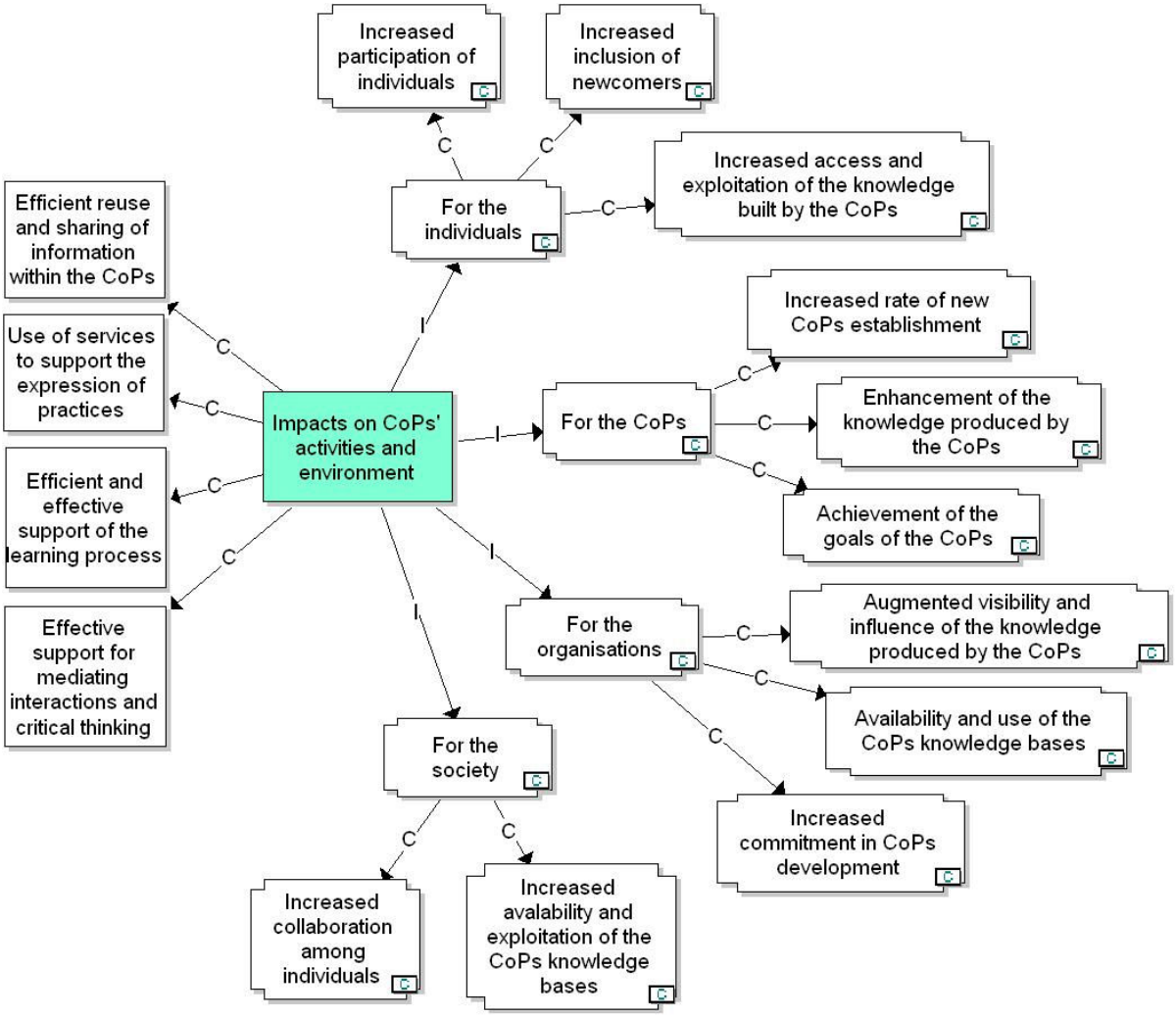

Figure 2 – The expected results of the methodology

Caption:

"C" means "is Composed of" "I" means "Instantiates"	= Objects, products = Instances, tracks

The different expected impacts on the CoPs' activities and their environment are described on the left of the figure above and the indicators (or tracks) of their achievement are described on the right: These indicators concern the individuals, members of the CoPs, the CoPs themselves, the organisations in which the CoPs are inserted and the society in general.

We now describe each process in greater detail. At the present stage of Palette (July 2006), the first two steps "1. Establishing the collaboration" and "2. Modelling the activities of the CoPs" as well as the process of "Analysing and categorizing tools" are under way.

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Appendix 2 – Summary of the depiction of the 'vision' of the Palette project from the participants point of view

The data for the visions depictions were gained from an on-line interview schedule and is based some 20 responses from PALETTE participants. The full report contains details.

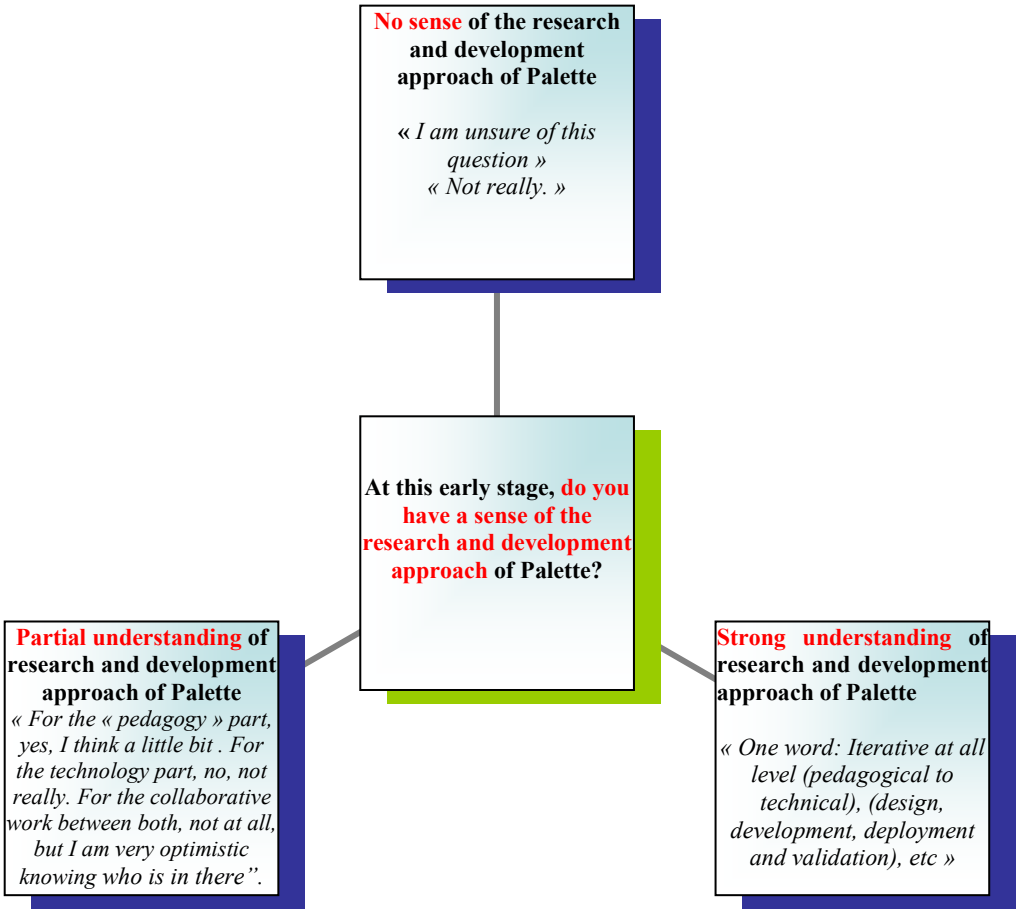

Figure 1 : *Starting point depiction*

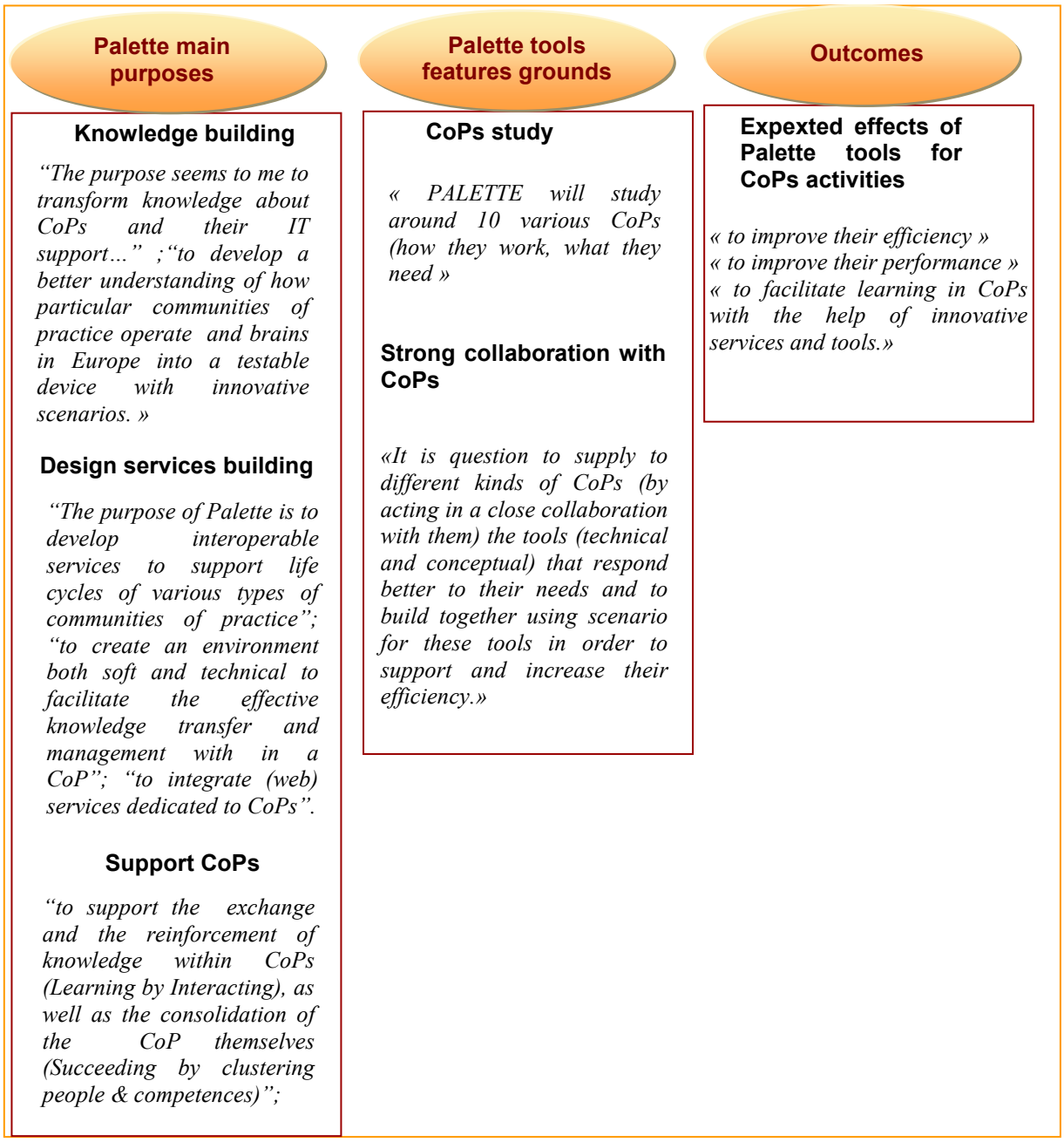

Figure 2 : *The main Palette issues*

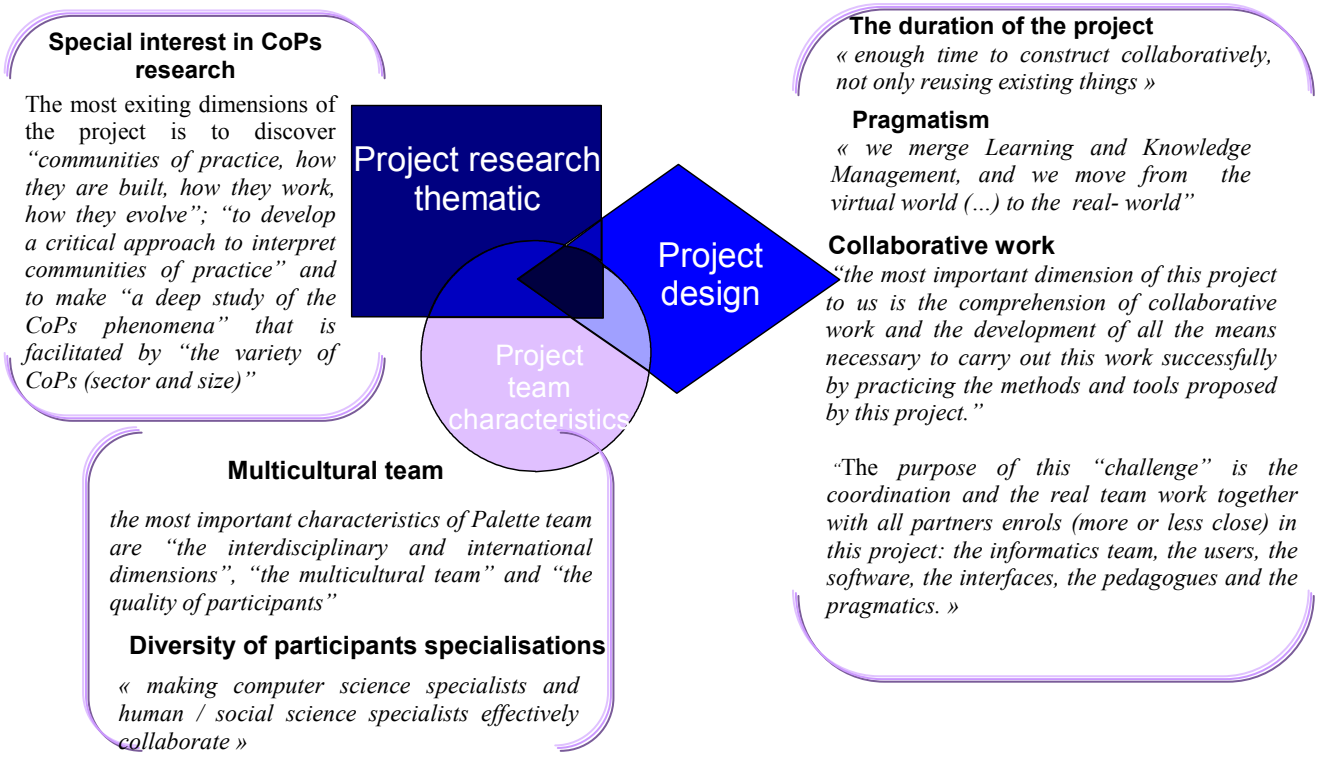

Figure 3 : *The cohesion factors*

Do we have the « typical » CoPs in Palette project?
Has the chosen CoPs really the characteristics traditionally assign to the CoPs? Do the CoPs really exist as the manager speeches depicted them, or we have to doubt it? By bringing tools to communities, the objective of Palette project is to bring together CoPs, to support them, either maybe both? The CoPs seem to be a priori disparate. While some seem to be just emergent (ex: Form@HETICE), the others already have years of practice behind them. The variety of the CoPs at all the levels and the notion of tools must be clarified so that the partners can understand it.

The complexity of project design
"Many people do similar things and should coordinate themselves at different levels: team, institutions, task and different work packages. There is a risk that intensive and may be important work is done and not well known, acknowledged or used at all these levels."

Manage the project
It would be in question to not missing the coordination of the work and the numerous partners of the project. As coordinator of the WP1, we shall have to watch that the concepts and the procedures are clear and the tasks are well distributed. It is the work which must be made as soon as possible. The links to be made between the various WPs are indeed essential (…).Some tasks are supposed to have already begun, while it would have been preferable that they are guided by the approval of the WP1 and the others. There is a not unimportant risk that this project is transformed into a group of small projects, each follow its own management and its own interests. It is necessary to pay attention to this danger. Who is going to coordinate all this and how? Is the light going to arise from the chaos?»

Uncritical acceptance of the notion of CoP
"The most problematic aspect to me would be if we are forced into an uncritical acceptance of the notion of communities of practice."

To transform Consortium into a living and inspiring CoP
"As for all the European projects: To transform words and promises (with implicit agendas) to reality with explicit deliverables. To transform the Consortium into a living and inspiring community of practice, with shared language and goals."

Communication
"The overruling of French speakers"
"I also feel that the integration of Pedagogic requirements to that of the Technical understanding" will be difficult.

Interoperability of tools and technological integration
"The most mysterious aspect, if not a problematic part - as I have no representation of the way this can be done - is the way the interoperability of tools will be maintained, and the way "intelligent agents" will interact."

Figure 4 : Palette challenges

Appendix 3 – Full report of the depiction of the 'vision' of the Palette project from the participants point of view

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1. Background and methodology

The strategy for the first stage of process evaluation of Palette project had three main goals:

- To depict the preliminary vision of all participants at the beginning of the project.
- To encourage project reflection and creativity by the various Palette participants
- To facilitate valuable insight into increased knowledge of the Palette project

Thus our main purpose was to provide a formative evaluation (i.e. "during") to the project at the beginning stage of his development (involving process and outcomes) and after the first 6 months. The information is used to demonstrate how the project is beginning, what it has achieved in his early stage, what his problematic aspects are and haw it is his evolution.

Background

Our aim is that formative evaluation will contribute to strengthening the project overall.
We have had some experience in both researching evaluation practice as well as undertaking evaluations and it is clear that in a complex project like Palette, people participate for many different reasons, have a different 'vision' for the project and give priority to different things. This is quite normal and it would be a mistake to try and see things through the same lens! What is really useful though is to start a dialogue about these differences.

Methodology

Because of the distributed nature of the project, the bulk of the information was collected using the email. The strategy was kept relatively simple. Two weeks before the official beginning of Palette project, we have designed some questions we would like all Palette partners to consider, very briefly. We have synthesized the responses and feed them back at the March 2006 meeting. After Palette kick-off meeting, we restart the call nearby all participants that don't sent their responses during the first consultation. Our aim was to stabilize a project vision rallying the opinions of a higher number of participants. Finally 25 participants were sent their responses. Mainly of them are individual answers. However we received 3 teams' answers.

The questions of the beginning of the project are focalized on the issue, cohesion factors and challenges and overall goal of Palette project as participants' point of view. Moreover, one question asks to participants to put themselves in the project and to estimate their understanding about it (see Table 1).

Focus	Question
Globally **starting point description**	*At this early stage, do you have a sense of the research and development approach of Palette?*
The principal **Palette issue**	*What do you understand to be the vision of Palette, what is its core purpose?*

Cohesion factors	*What is the most important or exciting dimension of the project for you?*
Challenges	*What is the most problematic part of the project for you at the moment (could be lack of clarity, uncertainty over your role, practical issues etc)?*

Table 1: Questions related to Palette project at the beginning of the work

Six month after the beginning of Palette project, we made another survey by sending to all participants one question related to their general perceptions about the project evolution (see Table 2). Our aim was to stress the awareness about the Palette evolution. We received 15 responses (by phone or by email).

Focus	Question
Project evolution	*Do you think the Palette project has evolved/changed for you since its inception/beginning? If so, how?*

Table 2: Question address to Palette participants six month after the beginning of the project

2. Category-specific evaluation findings

This section presents descriptive findings regarding overall category of analysis of the questions addressed at the beginning of Palette project. Thereby, the aim of this part of document is to help project partners better understand common factors and specific challenges of Palette.

2.1. Starting point description

The question asking to depict the starting point representation about Palette approach received three main kinds of responses.

Firstly, we find project partners which **do not still have a clear representation** about the evolution of this project. So, their responses are "not really" or "*I am unsure of this question*."

Secondly, we observed the responses from Palette partners which **understand deeply the project and his evolution**. In this second category, a part of comments make reference to the various stages of the work to be made ("the observation of the CoPs, the modelling of the observations, the validation of the models, the development and the application of tools") whereas the others put rather in evidence the nature of the work which is to supply (the development and the research approach of Palette are "iterative at all level, pedagogical to technical (design, development, deployment and validation").

Thirdly, at middle-road between the two opinions above, we find the comments that try to **limit the field of appreciation**: «*for pedagogy part, yes, I think a little bit ; for the technology part, no, not really ; for the collaborative work between both, not at all…* »).

2.2. The participants' perception of the principal Palette issue

Palette main purposes at the beginning of the project

At the beginning stage of project development, the answers of all the participants join the main Palette purposes: knowledge building and design services to better support CoPs activities.

Thereby some answers consider the core issue of Palette project is rather to develop a **better understanding of CoPs working process** by following the purpose, either to transform, or to improve their performances. On the other side, many answers are situated in the concrete perspective of reflection about Palette project. For them, the fundamental approach is **to design and develop services useful, acceptable and adaptable for CoPs**. We find these opinions either separately, as specific core message, or overlapping in the same response.

Knowledge building dimension

Some participants in Palette project are mostly concerned by the knowledge building dimension. Firstly, they are interested by the development of the reflection about CoPs, about their working process and needs. "*The purpose seems to me to transform knowledge about CoPs and their IT support…"; "to develop a better understanding of how particular communities of practice operate and brains in Europe into a testable device with innovative scenarios.* »

Services building dimension

On the over side, we can note the participants that seems to be more concerned by the services building dimension of Palette project. For them, "*the purpose of Palette is to develop interoperable services to support life cycles of various types of communities of practice"; "to support the exchange and the reinforcement of knowledge within CoPs (Learning by Interacting), as well as the consolidation of the CoP themselves (Succeeding by clustering people & competences)"; "to create an environment both soft and technical to facilitate the effective knowledge transfer and management with in a CoP"; "to integrate (web)services dedicated to CoPs".*

Palette tools features

From a methodological point of view, the responses are convergent. Thereby, the tools which will be develop in Palette project will be set up in a systematic study of communities of practice: « *PALETTE will studies around 10 various CoPs (how they work, what they need ». These tools will be build collaboratively with CoPs : "It is question to supply to different kinds of CoPs (by acting in a close collaboration with them) the tools (technical and conceptual) that respond better to their needs and to build together using scenario for these tools in order to support and increase their efficiency."*

Outcomes

By introducing Palette tools in the day life of CoPs, the participants expect the follow main outcomes: « *to improve their efficiency », « to improve their performance », « to facilitate learning in CoPs with the help of innovative services and tools. ».* Moreover, these tools and services must evaluate according to CoPs needs.

2.2. Cohesion' factors

Cohesion is a key issue for a veritable collaborative work. Cohesion concept is related to appreciation and interaction of all Palette members notably on the basis of shared values. The cohesion of Palette team enhances the appreciation of each of its members.
The more participants appreciate each other, the more they have share common values, the more they will interact. Interaction being a glue factor, it will reinforce cohesion.

The answers in the beginning of project give an insight of shared values within all members of Palette. These comments renew three mains levels of assertion of the shared values:

- project research object
- project team characteristics
- project design

Some Palette partners assert their interest in research domain of CoPs. Thereby the most exiting dimension of the project is to discover "communities of practice, how they are built, how they work, how they evolve"; "*to develop a critical approach to interpreting communities of practice" and to make "a deep study of the CoPs phenomena*" that is facilitate by "*the variety of CoPs (sector and size)".* It is also important that CoPs are perceived as a "hot research topics" so a lot of people will be interested in the future.

The composition of the project team, its capital of varied and multidisciplinary experience and its international dimension are crucial factors for the participants to support this project. Therefore, the most important characteristics of Palette team are "*the interdisciplinary and international dimensions", "the multicultural team" and "the quality of participants*". The diversity and the multidisciplinary belonging are also appreciated and their work together it's an important challenge: *« making computer science specialists and human / social science specialists effectively collaborate* ».

In Palette project, the most attractive are the follows: the **duration of the project** - « *enough time to construct collaboratively, not only reusing existing things* » ; the **pragmatism** – « *we merge Learning and Knowledge Management, and we move from the virtual world (...) to the real- world (...)*" and the **collaborative work** – "*the most important dimension of this project to us is the comprehension of collaborative work and the development of all the means necessary to carry out this work successfully by practicing the methods and tools proposed by this project* "
Another very important aspect is the **management and the coordination of the project**: "*The most important dimension concern the organization by who represent clients' interests, of the communication with the architects, the builders, the suppliers and the equipment builders. It is in question the support of CoPs learning and the help to develop tools really useful for them. These tools could integrate the most interesting technological progress brought the last years by bringing also the pedagogues opinions. The purpose of this "challenge" is the coordination and the real team work together with all partners enrolls (more or less close) in this project: the informatics team, the users, the software, the interfaces, the pedagogues and the pragmatics*."

2.3. Challenges

By their motivation for the creative work, challenges are important ingredients of an activity. As all projects life, Palette project can be decomposed in several stages of phases as follows: the initiation design, the planning, the regulation and the execution. All this stages are examined in the beginning of the project activities.

Initiation design phase

The most important question about this stage concern the best CoPs chose for Palette Project: "**Has the chosen CoPs really the characteristics traditionally assign to the CoPs**? *Do the CoPs really exist as the manager speeches depicted them, or we have to doubt it? By bringing tools to communities, the objective of Palette project is to bring together CoPs, to support them, either maybe both? The CoPs seems to be disparate. While some seem to be just emergent (ex: Form@HETICE), the others already have years of practice behind them. The variety of the CoPs at all the levels and the notion of tools must be clarified so that the partners can understand it.*"

Planning phase

The most important question link to planning phase is related to the **complexity of project design**: "*Many people to similar things and should coordinate themselves at different levels: team, institutions, task and different work packages. There is a risk that intensive and may be important work is done and not well known, acknowledged or used at all these levels*."

Regulation phase

The regulation phase is a great challenge in some comments like this on: "*it would be in question to not missing the coordination of the work and the numerous partners of the project. As coordinator of the WP1, we shall have to watch that the concepts and the procedures are clear and the tasks are well distributed. It is the work which must be made as soon as possible. The links to be made between the various WPs are indeed essential (...).Some tasks are supposed to have already begun, while it would have been preferable that they are guided by the approval of the WP1 and the others. There is a not unimportant risk that this project is transformed into a group of small projects, each follow its own management and its own interests. It is necessary to pay attention to this danger. Who is going to coordinate all this and how? Is the light going to arise from the chaos?* "

Thus it is very important **to form « *complementary goals between the Palette* specialists** » because "*this project requires a lot of interactions between the partners and they must learn to work together (first time we work together and maybe we have different cultural context and project vision.)*"

Execution phase

The most important number of comments is related **to the execution phase of the project**. All the participants are mostly interested in concrete aspects of Palette realization: "*The most problematic aspect to me would be if we are forced into* ***an uncritical acceptance of the notion of communities of practice***"; the most problematic is "*as for all European projects: to transform words and promises (with implicit agendas) to reality with explicit deliverables****; to transform the Consortium into a living and inspiring community of practice, with shared language and goals***."

On of the most complex factor in Palette execution phase seems to be the communication because of different language communication ("the overruling of French speakers") and of the different team specialties ("I also feel that the integration of pedagogic requirements to that of the technical understanding."). The multicultural composition of the project team is both an important resource and a crucial challenge.

Interoperability of tools or, more common, technologies integration are important questions addressed in many comments: "*The most mysterious aspect, if not a problematic part - as I have no representation of the way this can be done - is the way the interoperability of tools will be maintained, and the way "intelligent agents" will interact*."

3. The evolution of Palette project representations

This part of document will summarize the main directions of the last evolution of the opinions of Palette participants. The goal is to supply information relating to the way in which Palette project evolve.

3.1. More clear vision about project

Six month after the beginning of Palette project, all participants to our inquiry declares that **their global vision does not radically change**: "*My personal vision does not change a lot. Firstly, I was impressed by the project, and then I learn about both the CoPs and tools developed within the project. It doesn't change but evolve through each step*."

The spectacular evolvement concerns their **concrete apprehension** about their own tasks and the WP role and functions: "*now I can see more clearly the project, we can see what we must to do and how we must acting"; "what is really changed is the ambiance in the Palette project: now we can observe a lot of WP interacting and the partners work more together*"; "*Now I can see what each partner is supposed to work in this project and where the difficulties can occur*."

The explanation mostly given for this evolution concern the organization of Palette Summer School in Fribourg, during the last week of June: "*My vision of the project has evolved slightly owing to the content of the Summer School activities;" "Summer School was the cement of the work together in the project.*" With regard to other projects they have experience, when a joint activity is organized mostly after one year, the Summer School Palette took place at the appropriate moment: "*it was a very good time to organize this Summer School and to permit to Palette people to meet together: it was not a long period of individually work, so the partners have not time to develop something individually. By coming to the Summer School, they can meet and confront their opinions and strengthen the collaboration and the interaction within the project*."

3.2. Main questions addressed to the project

Despite the fact that a lot of participants are optimistic regarding the Palette evolution, they are also concerned by the manner in which the project will evolve. The concrete implementation of the participative design seems to be the most important worry: "*While knowing that the people can not be forced to participate, how we are going to implement concretely the participative design?"; "In Palette project we find many different interests. Do we manage to harmonize all of them?"*

Another question handles with the integration of different Palette tools. Some responses stressed the importance of this problem in project evolution: "*What definition for tools integration? Who must formulate it? When we will put the tools and services integration as a priority in our project?"*

Appendix 4 – Detailed table of focus, type and timing of indicators, type of evidence and agency for Palette processes and outcome evaluation

The table below outlines the relationship between the four dimensions of the evaluation approach. The wider WP6 team has now validated the indicators.

1. In the first column of the Table the main focus is identified. Under each focus the indicators associated with it are listed. The steps refer to Figure 3 – 'The participatory design methodology' in Appendix 1 Page 16

2. In the second column, the indicator is described as either an enabling, process or outcome indicator. In some instances the indicator is identified as more than one type. The period of the project during which each indicator will be addressed is also identified.

3. In the third column, the main types of evidence that will be used to address each indicator are identified.

4. In the fourth column, the agency responsible for collecting and analysing the data is identified.

Focus and indicator	Enabling Process or Outcome indicator	Evidence	Data collecting Agency
1. Participative design (which can also be understood as symmetric involvement of users and developers: involving users {CoPs} in designing tools and services) **Examples of indicator:**			
The mechanisms for involvement of users in design decisions (steps 1 to 4)	Enabling (month 7-12)	Vignettes/depictions Interviews with stakeholders Discussion fora captures	WP6 wider and core team involved in the developers teams working with the CoPs
Types of users involved in design decisions (steps 1 to 4)	Enabling (month 7-12)	On-line questionnaires	
Types of design decisions users' influence (steps 7 to 9)	Process (month 12-18)		
Types of resources CoPs suggest will be useful to them (steps 7 to 9)	Enabling (month 7-12)	Quantative accounts of use	

2. The development of a participative/inclusive approach **Examples of indicator:**			
Involvement strategies (steps 1 to 4)	Enabling (month 7-12)	Vignettes/depictions Interviews with stakeholders Discussion fora captures On-line questionnaires	WP6 wider and core team
Types of working patterns	Process (month 12-18)		
Participative practices	Process (month 12-18)		
Inclusive communication strategies	Process (month 12-18)		
How tools are disseminated and communicated to CoPs (step 10)	Outcomes (after month 18)		

3. The iterative or evolving nature of the project and reflexive processes and non sequential/parallel development **Examples of indicator:** Variations from original project proposal Responsiveness of the project to new circumstances The project learning processes Use made of evaluations and other review mechanisms How developments in one activity connect with another The extent to which there is uneven development of dimensions of the project	Process and outcome (months 1-18+) Process (months 12-18+) Process and outcome (moths 12-18+) Process and outcome (months 12-18+) Process and outcome (months 12-18)	Vignettes/depictions Interviews with stakeholders Discussion fora captures On-line questionnaires	WP6 wider and core team

4. The open source culture **Examples of indicator:** Methods of dissemination of resources/tools and services created by Palette Levels of restriction on public access Levels of external project use and knowledge Processes and mechanisms for sharing experience and resources Use and appropriation of Palette products by the CoPs	Process and outcome (months 1-18+) Process (months 12-18+) Outcome (months 18+) Process and outcome (months 12-18+) Process and outcome (months 12-18)	Vignettes/depictions Interviews with stakeholders Discussion fora captures On-line questionnaires Quantative accounts of use	WP6 wider and core team

5. The processes of mediation and integration **Examples of indicator:** Processes of inter work package interaction Mechanisms for sharing experience Attitudes of project participants to joint working The mechanisms for achieving coherence across the project The extent to which work in one activity enables work in another	Process (months 1-18+) Process (months 12-18+) Process (months 18+) Process (months 12-18+) Process (months 12-18)	Interviews with stakeholders Discussion fora captures On-line questionnaires	WP6 wider and core team

6. Alignment between aspirations and practices in the project **Examples of indicator:** Processes for achieving alignment Alignment and non-alignment of different dimensions of the project Project participants experience of alignment	Process (months 12-18) Process (months 12-18) Process and outcome (months 12-18+)	Interviews with stakeholders On-line questionnaires	WP6 wider and core team
7. Professional development of Palette partners **Examples of indicator** New practices on behalf of project participants enabled by Palette participation Outputs by project partners (steps 10 and impacts)	Outcome (months 18+) Outcome (months 18+)	Interviews with stakeholders Discussion fora captures On-line questionnaires	WP6 wider and core team