Q-PLM

Quality Assurance for VET Providers Using Product Lifecycle Management

LdV/TOI

Project Nr° 538379-LLP-1-2013-AT-LEONARDO-LMP

WP 6: Development of software and handbook

WP 6: Report on Feedback from the panels of experts and stakeholders

provided by P6, Cork Education and Training Board,
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Defined aims of the Report: Feedback from the panels of experts and stakeholders

In all partner countries (except for DE) feedback panels will be established. The members of the feedback panels are representatives of the main target groups and stakeholders defined in the project (VET providers, adult education providers, social partners, labour market authorities, policy makers). The feedback panels can be established on virtual or face to face basis. The feedback panels will mainly give feedback on the beta version development steps of the PLM software for its coherence with the real needs and technical and functional specifications developed. Moreover the feedback panels will also give feedback on the variables selected for influencing a product lifecycle in VET offers as well as their indicators and measures.

Methodology

This report on Feedback from the panels of experts and stakeholders has been produced in combination with the report on Technical and functional specifications for the PLM software and the Report on Variables and Indicators for product lifecycles in Vocational Education and Training. It follows on from the Work package 5 Research & analysis report.

Report on Variables and Indicators for product lifecycles in Vocational Education and Training

Each country established a feedback panel generally comprising five stakeholders. These panels were given access to the material being developed in respect of Key Success Factors, phases and Indicators and were asked to provide input as appropriate throughout the discussion period. In order to formalise some of the suggestions / comments from the panels a questionnaire was developed and the results of this form the main basis for this report.

Panel of Experts

In order to gain a wide spectrum of opinion in respect of the project work in identifying indicators and Key success factors for Product Lifecycle Management in Vocational Education and Training and to include as many stakeholders as possible in the process of software development and testing each country gathered together panels of experts and stakeholders who will be consulted on developments throughout the project. The members of the panels created are listed below:

Austria

Name	Marion Bock
Name of organisation	Chance B Holding GmbH
Type of the organisation	Service provider for persons with disabilities
Role within the Organisation	Project manager
Organisation Website	www.chanceb.at
Country	Austria

Name	Sonja Wuscher
Name of organisation	bfi Steiermark
Type of the organisation	VET
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Type of the organisation	programmer
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Name	Nina Schuh
Name of organisation	bfi Steiermark
Type of the organisation	VET
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Country	Austria

Name	Georg Müllner
Name of organisation	Auxilium

Type of the organisation	Non profit association
Role within the Organisation	Deputy head of board
Organisation Website	www.auxilium.co.at
Country	Austria

Romania

Name	Otilia Clipa
Name of organisation	Faculty of Education Study
Type of the organization	Public university
Role within the Organisation	Dean
Organisation Website	www.usv.ro
Country	Romania

Name	Morosan Danila Lucia
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Role within the Organisation	Manager
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Country	Romania

Name	Elena Zamcu
Name of organisation	Chamber of Commerce and Industry Suceava
Type of the organization	Chamber of Commerce
Role within the Organisation	Secretary
Organisation Website	www.ccisv.ro
Country	Romania

Name	Boghean Florin
Name of organisation	University Stefan cel Mare Suceava
Type of the organization	Public University
Role within the Organisation	Teacher
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Country	Romania

Name	Doru Biliuta
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Name	Livia Vranciu
Name of organisation	Varias Studia

Type of the organisation	NGO
Role within the Organisation	President
Organisation Website	
Country	Romania

Ireland

Name	Pat Maunsell
Name of organisation	Limerick College of Further Education
Type of the organization	FET College
Role within the Organisation	Director
Organisation Website	www.lcfe.ie
Country	Ireland

Name	Branch Officers
Name of organisation	TUI Cork City Schools
Type of the organization	Teachers Union
Role within the Organisation	Branch Officers
Organisation Website	www.tui.ie
Country	Ireland

Name	Bertie Murphy
Name of organisation	St. John's Central College
Type of the organization	VET provider
Role within the Organisation	Principal
Organisation Website	www.stjohnscollege.ie
Country	Ireland

Name	Sean Murphy
Name of organisation	Department of Social Protection
Type of the organization	Government Agency
Role within the Organisation	Area Manager – Activation/ Employer Liaison
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Country	Ireland

Name	Bernadette Langford
Name of organisation	St. John's Central College
Type of the organization	VET provider
Role within the Organisation	Adult Education Director
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Country	Ireland

Belgium

Spain

Name	Javier Riano
Name of organisation	Denokinn
Type of the organization	Innovation & Research Organisation
Role within the Organisation	ADVISOR
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Country	Spain

Name	Alfredo Martinez
Name of organisation	IVAC-KEI
Type of the organization	Institute of Qualifications in Vocational Training
Role within the Organisation	Technician
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Country	Spain

Name	Maria Del Carmen Garrido Diez
Name of organisation	Fundacion Fondo Formacion
Type of the organization	Foundation
Role within the Organisation	Manager
Organisation Website	
Country	Spain

Name	Juan Angel San Vincent
Name of organisation	Politeknia Ikastegia Txorierri
Type of the organization	Vocational training center
Role within the Organisation	Principal
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Name	PABLO ALMARAZ
Name of organisation	Álava Chamber of Commerce and Industry
Type of the organization	Chamber of Commerce
Role within the Organisation	Manager of Training Department
Organisation Website	www.camaradealava.com
Country	Spain

Slovenia

Name	Mr. Dejan Papez, Ph.D.
Name of organization	Chamber of Commerce and Industry of Slovenia
Type of the organization	Chamber
Role within the Organoisation	Directors or consultant of branch Associations
Organisation Website	http://eng.gzs.si
Country	Slovenia

Name	Marjan Rihar,
Name of organisation	Chamber of Commerce and Industry of Slovenia
Type of the organization	Chamber
Role within the Organoisation	Directors or consultant of branch Associations
Organisation	Website http://eng.gzs.si
Country	Slovenia

Name	Ms. Valentina Kuzma
Name of organisation	Chamber of Commerce and Industry of Slovenia
Type of the organization	Chamber
Role within the Organoisation	Directors or consultant of branch Associations
Organisation	Website http://eng.gzs.si
Country	Slovenia

Name	Mr. Igor Milavec
Name of organisation	Chamber of Commerce and Industry of Slovenia
Type of the organization	Chamber
Role within the Organoisation	Directors or consultant of branch Associations
Organisation	Website http://eng.gzs.si
Country	Slovenia

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Name of organisation	Chamber of Commerce and Industry of Slovenia
Type of the organization	Chamber
Role within the Organoisation	Directors or consultant of branch Associations
Organisation	Website http://eng.gzs.si
Country	Slovenia

Finland

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Name of organisation	WinNova
Type of the organization	VET
Role within the Organisation	Project manager

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Name	Kirsi-Marja Tattari
Name of organisation	Kankaanpään opisto
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Name	Satu Neuvonen
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Country	Finland

The Questions

The questionnaire developed to obtain a formal response from members of the panel of experts and stakeholders was made up of eight questions. Mainly these deal with the choice and description of

Indicators and Key Success Factors. However the completed questionnaires only represent a small fraction of the input from the panels of experts. All through the process members of the panels were consulted in an informal manner and many of their ideas / suggestions were incorporated into the work carried out to date. Some members of the panels did not return questionnaires as they were already intimately involved in the work and decisions related to indicators and Key Success factors to date and so had no additional comments to make at this time.

In some cases suggestions were made that contradict the majority view or were in conflict with each other. While we cannot incorporate all of the suggestions made into the software we took the time to examine and discuss all of the suggestions and where necessary took the decisions as to where suggestions from the panels should be incorporated into the software or not.

The questions asked and the reason for each question is outlined below:

Are the Key Success factors identified appropriate to Product Lifecycle management in VET.? Suggest any rewording or deletions that you think appropriate.

The decision as to which key success factors to include in the software is crucial to the success of the project. This question was intended to ascertain whether we had chosen appropriate Key Success, Factors, were there others that we did not think of, Should any of the Key Success Factors be renamed in a VET context.

List and describe other Key Success Factors that should be included

If any Key Success Factors are missing we asked the panels to suggest additional ones.

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.

We have quite a long list of indicators but it is important that they are easy to understand and that they are appropriate to VET. Should any of the Indicators be removed or reworded to make their meaning clear.

List and describe any additional Indicators that should be Included.

If any Indicators are missing we asked the panels to suggest additional ones.

Has an appropriate form of measurement been adapted for each indicator? Suggest any changes you feel appropriate in the measuring of indicators.

We need to be able to measure each indicator. This is being done on a 1 to 10 scale with an option to remove an indicator by assigning a value of 0 to it. But how is this scale related to the data collected.

Have we found an appropriate way to convert what we know about an indicator to a measureable value.

Is the Scale provided for the measurement of the Indicators clear and appropriate? Suggest any improvements you would make to the scale.

If the scale for measuring indicators is not appropriate how can we amend it to give a better, clearer scale?

Do you have any additional comments regarding Key Success Factors or Indicators?

This was an open question to allow the panels to make any additional comments they thought appropriate regarding Key Success Factors or Indicators

Combined Data

This document contains a summary of the main suggestions made by the panels of experts from each country. Where suggestions are the same or very similar they have only been included once, also many short comments such as "all seem ok" etc. Have been excluded unless they are used to contradict a suggestion made by another stakeholder. Input from from Auxilium have been listed seperately from the other Austrian panels as they were quite comprehensive.

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.

Auxilium: In general I would suggest a proof reading of the whole success factors by an English native speaker, the language quality of these indicators appears to be crucial for the whole project and the software quality in the end. There are some misunderstandings in the understanding of single indicators, so proof reading would be advisable.

RO: Taking into consideration the answers to the WP6 questionnaire addressed to the target group, the following key success factors affecting the life cycle of the VET were identified :

KSF1,KSF 2, KSF 3, KSF 4, KSF 5, KSF 6, KSF 7 în proporție de **100%**
KSF 8 **0%**
KSF 9, KSF 10 **75%**

FI: The Key Succes facters are identified well and they are covering the whole product lifecycle in VET from student selection to the phase they are in the labour market.
Important factors /indicators are feedback from students, teachers competence and the education responding the market demands and also economical efficiency.

It is important that there is a suitable amount of Key Succes Factors, not too many, because that will lead to more complicated and too much time demanding to fill in gather the information.
Common opinion of feedback panel is that 10 is ok.

ES: Yes, all of them are appropriate

IE: The suggested KPI's are very suitable

AT: Yes they are appropriate, but some of them should be redefined.

Comment: The statement that there are some misunderstandings in the understanding of single indicators is rather vague as it does not indicate which indicators are hard to understand are could be misinterpreted. Likewise the statement that some indicators should be redefined is very general and it is hard to guess which indicators are being referred to.

List and describe other Key Success Factors that should be included

Auxilium: The question is if really all of the European Key success factors for quality in vocational education should be considered in the software tool since some of the areas appear not to be so relevant for the estimation of product lifecycle position of VET offers. Eg. Costs control, sustainability of infrastructure and materials, strategic provider benefits, also stakeholder engagement factors should be re-evaluated if these are really relevant for the lifecycle position of single VET offers.

RO: The study that we carried out denotes that there aren't any proposals of key success factors that should be included In the matrix of the product life cycle in the professional training.

FI: Possibility to add an additional KSF and indicator would be good. (Open box)

ES: - Identify learning needs
- Design of the learning proposal
- Management of the Learning project

SL: We think there are KSF for all relevant areas. Any additional KSF would be disturbing.

Comments: Finland have noted that the inclusion of cost control is essential for them. I think the KSF's included are necessary due to the need for the software to be relevant in different countries. The weighting of indicators and the consequent effect on KSF's will allow the removal of surplus KSF's in software use.
If an Open Box indicator was to be included this would have to be identified and weighted at an early stage in use of the software, a method to tie it to appropriate KSF's would also have to be established

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.

Auxilium: Some indicators are YES/NO indicators and a 1-10 scale is suggested for the estimation, this should be reconsidered. YES/NO indicators will be very difficult to implement in the lifecycle software as they would not easily determine a lifecycle position.

RO: The presented indicators are easily identified with some exceptions to some KSF where the stakeholders did not empathized for the organizations the belong, namely:
KSF 1 (1,15,21,24,35)
KSF 3 (1,)

KSF4 (4,5,6,7,19,32)
KSF 7 (9,41)
KSF8 (23,28)
KSF 9(11,12,13,14)
KSF10(3, 15,22)

FI: These indicators are very good and there are enough of them. The questions must be easy to answer.

KSF2/indicator 36 : notice that absenteism can be also something else than unsatisfaction. (ilness, worketc., this must be noticed when measuring the indicator!

KSF 1 /want to add an indicator: + description of the content, informatic value for learners
+ assesment methodology and validity

KSF2/KSF 9 same indicators, overlaping, but maybe there is an explanation to this.

ES: Identify learning needs: not only from market needs (cultural changes, evolution of the market,..) but also from the learner needs (learning methods, competences, skills, learning outcomes,..)

- Design of the learning proposal: which methods are the most appropriate ones to acquire the competences, which are the didactic means,.. Specify the learning project objectives, specific objectives, which methods are the most appropriate ones, resources to use,..
- Management of the learning project: not only the "financial monitoring", also other aspects related to the business (communication with stakeholders management, distribution channels, resources, ..)
-

IE: Some indicators do not apply in our situation. Too much emphasis on cost factors, educational issues should hold the priority.

AT: The indicators are clear, but the stages/phases need to be revised - relating to every single indicator to be able to show the lifecycle of a product. The now mentioned phases are relevant for Product management itself but not for the lifecycle of a product. Furthermore some indicators need to be redefined, because it's not possible to answer with 0-10. They are Yes, No questions.

Indicators are clear in my opinion, but the ones from EQUARF are not on product level. They should have another wording.

The allocation to the different stages is wrong, if you want to show the lifecycle of a product. Therefore I think the stages need to be revised

SL: They are ok. Questions for measurement explain the meaning if it is confused.

Comment: Yes/No indicators would receive a score of 0 or 10 on the proposed 10 point scale. In this case the allocation of a mark is still required as it has to be used to calculate the overall weighting of the attached KSF's
Yes absence can be for a whole host of reasons but is the reason really relevant in measuring the indicator?
Again yes/no questions can be answered automatically by the software as 0 or 10
The software should allow the course to be validated / assessed at different stages of the lifecycle ie.

Development, implementation etc.

List and describe any additional Indicators that should be Included.

Auxilium: Related to the graphical display I would consider to introduce two additional factors:
a) Market position (compared to other competitors for the VET offer)
b) Market development (is this a market which is going to grow or rather not)
The two figures would allow to deduct a position according to the BCG matrix and distinguish between newcomers, question marks, cash cows and dogs in the market position which will help a lot the quality managers for the VET offers.

RO: The analysis denotes that there aren't no other indicators that should be included.

FI: KSF 1 quality of education
Suggested new Indicator: the possibility to recognize international studies in curriculum, the use of ECVET –system. Question: is ECVET- system adapted ? Yes or no / scale

KSF3 / want to add: teachers practical periods in working life, teachers are updating their practical competence during these periods. Question: teachers activity to practical periods in working life, yes/no, and scale

KSF 4/ 4 could these be separately: achieved employment and higher level training?

- ES: Didactic objectives
- Pedagogic strategies
- Learning contents treatment

AT: None. I think some of them may be to much and are not defined on product level.

IE: Promotion of / leading to full time permanent teaching positions

SL: Too many indicators would discourage users.

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.

Auxilium: See above, some indicators are YES/NO and refer to a 1-10 scale, this should be corrected

RO: The Stefan cel Mare University of Suceava proposes that the indicator number 4 assignated to KSF4 should be considered after 12 months from the graduation date.

FI: The questions must be unambiguous and understandable. After yes or no it is good to have the possibility to give points.

ES: Suggestion:
- Use the "design thinking" tool (from the user point of view) to include improvement actions, innovations,…
- Use the PMbok tools (http://udbcomunicate.files.wordpress.com/2012/01/gui-pmbok.pdf)

IE: Well thought out

AT: The graduated scale from 10 – 0 is ok, but 0 needs to be specified as not relevant. If you tick 0 it should be clar, that this indicator or KSF is unimportant and will not be calculated at all. Like clicking it "away".

Yes, but 0 needs to be unrelevant and should not been measured. Mesurement from 1-10.

Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale.

FI: Finnish feed back panel is suggesting the scale 0-5!
0-10 is too wide.

ES: It is clear and easy to use scale.

IE: Scale seems appropriate

AT: Yes
Should always be reducable to a scale from 0 to 1, or 0% to 100%

Comment: Personally I believe that a scale of 0-5 is too restrictive and would favour the 0 – 10 as originally proposed. Often the difficulty with a scale is that there is a reluctance to use the extreme values and this results in a move to the centre when evaluating an indicator. This effect is more pronounced in a smaller scale range.

Do you have any additional comments regarding Key Success Factors or Indicators.

FI: Possibility to additional open box to have own indicator and KSF.

Notice: KSF 5 / cost analysis could be difficult to find relevant and comparable figures. (e.g long training courses).

The user must be careful of all inputs reliability and transparency

IE: Is an economic model and business based tools the best way to looking at education. PLM is very much an economic concept and does not adequately measure life enrichment achieved through general education

AT: For the lifecycle of a product (PLM) only the delivery phase needs to be focused, because as a result you should be able to identify the current stage of your product (introduction, growth, maturity, decline). It's also mandatory to see the whole process on a timeline. Therefore I would suggest to correlate time to enrolment rate/participants rate to gain a representative graph/curve for the lifecycle of a product. In a second step you may also relate turnover to time, so you will get a second graph to compare. An other possibility would be to transfer the results to the BCG Matrix and picture it in a graph/curve as well.

As mentioned before, the stages are not appropriate, if you want to generate and display the lifecycle of a product. Therefore I gave suggestions for the classification at the excel worksheet of indicators and KSF.

SL: The software should have the minimum number of indicators that users have to use or maybe some crucial indicator that users must include.

Conclusions and Recommendations

As we noted earlier it is not possible to incorporate all suggestions from the panels of experts and stakeholders into the final software. In some cases suggestions were made that contradict the majority view or were in conflict with each other. But we can say that each suggestion was examined in detail.

Generally the panels agreed that the Key Success Factors and Indicators as identified are appropriate**.** The statement by one panel that there are some misunderstandings in the understanding of single indicators is rather vague as it does not indicate which indicators are hard to understand or could be misinterpreted. Likewise the statement that some indicators should be redefined is very general and it is hard to guess which indicators are being referred to. However all Key Success Factors and Indicators will be examined by a native English Speaker and the wording of these can be adjusted during the software beta version test phase if any are found to be confusing.

It is noted that many members of the panels seem to confuse Key Success Factors and Indicators and in some cases questions relating to Key Success Factors returned results that clearly referred to indicators. This confusion should not arise in the software as users will weight and measure Indicators but Key Success Factor values will be calculated by the system based on Indicator values.

Finland have noted that the inclusion of cost control is essential for them. Without doubt other countries can point to indicators that are of key relevance to them as well. This fact should not create a difficulty as the weighting of indicators and the consequent effect on KSF's will allow the removal of surplus indicators and in some cases KSF's in software use. Some additional indicators were also proposed and each of these should be examined, however the addition of indicators needs to be balanced by comments from other panel members indicating that the current list is sufficient and that too many indicators may lead to confusion and reduce the userfriendly nature of the software product.

Another suggestion was to allow for an Open Box indicator. There is merit in this idea but if it was to be incorporated into the software then the additional indicator would have to be identified and weighted at an early stage in the software user process. A method to link the new indicator to its appropriate Key Success Factor(s) would also have to be established. This sugestion should be raised with the software developer to see how it might be incorporated into the program.

There were some questions regarding how indicators that will lead to a Yes / No response can be incorporated into a ten point measurement scale. The answer to this concern is that Yes/No indicators would receive a score of 0 or 10 on the proposed 10 point scale. In this case the allocation of a mark is still required as it has to be used to calculate the overall weighting of the attached KSF's. The software should allow the user to submit the Yes / No answer for these indicators and should then convert this answer to the appropriate numeric response automatically.

The suggestion that the software should allow the VET product to be validated / assessed at different phases of the lifecycle is an essential one and should be incorporated into the software.

In relation to the measurement of Indicators a number of suggestions were made in respect of the scale to be used. A scale of 0 – 5 was proposed but this was discussed at a partner meeting and it was felt that a scale of 0-5 is too restrictive and generally the partners would favour the 0 – 10 as originally proposed. Often the difficulty with a scale is that there is a reluctance to use the extreme values and this can result in a move to the centre when evaluating an indicator. This effect is more pronounced in a smaller scale range. One way of avoiding this is to give textual choices to the user which will then be converted by the program to the required numeric scale. For example the user may choose between, "Indicator not met" – value 0, "average result for indicator" – value 5, "Indicator totally accomplished" – value 10

There also seems to be some confusion between measurement and weighting. When an indicator is given a weighting a value of zero effectively removes the indicator from the PLM process. In effect you decide that this Indicator is not relevant to your situation. This is different from measurement where a value of 0 indicates that the Indicator has not been achieved at all. The suggestion that the measurement scale should run from 1 – 10 and that 0 should be reserved to remove an indicator is not relevant as this removal will already have occurred when the weighting is entered into the program.

It was suggested at partner meetings that the software should be capable of running on individual phases of the lifecycle process. However the opposite view has also been expressed. It was pointed out that it is also mandatory to see the whole process on a timeline. Therefore it was suggested that a process to correlate time to enrolment rate/participants rate to gain a representative graph/curve for the lifecycle of a product be incorporated into the program. In a second step you may also relate turnover to time, so you will get a second graph to compare. Another possibility would be to transfer the results to the BCG Matrix and picture it in a graph/curve as well. The argument for allowing the program to run on specific phases of the Product Lifecycle would be to give advance warning of potential difficulties at an early stage in the product lifecycle. To run the program over the full lifecycle assumes that you have the necessary data from all phases in order to gain a valid result.

While the primary focus of the software should be to examine the VET product over its full lifecycle there is merit as a secondary use in allowing the software to run at the level of individual phases.

Appendix 1

Feedback form for the panels of experts and stakeholders

Q-PLM

LdV/DOI

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WP 6: Feedback forms for the panels of experts and stakeholders

Feedback Form

Organisation data

Name	
Name of organisation	
Type of the organisation (Vocational training center, university, Chamber, …)	
Role within the Organisation	
Organisation Website	
Country	

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.
List and describe other Key Success Factors that should be included
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.
List and describe any additional Indicators that should be Included.

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale.
Do you have any additional comments regarding Key Success Factors or Indicators.

Appendix 2

Feedback forms submitted by each partner country

Austria

Organisation data

Name Georg Müllner	Name of organisation Auxilium
Type of the organisation	(Vocational training center, university, Chamber, …)
Non profit association	Role within the Organoisation Deputy head of board
Organisation Website www.auxilium.co.at	Country Austria
Name Georg Müllner	Name of organisation Auxilium
Type of the organisation	(Vocational training center, university, Chamber, …)

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.

In general I would suggest a proof reading of the whole success factors by an English native speaker, the language quality of these indicators appears to be crucial for the whole project and the software quality in the end. There are some misunderstandings in the understanding of single indicators, so proof reading would be advisable.

List and describe other Key Success Factors that should be included

The question is if really all of the European Key success factors for quality in vocational education should be considered in the software tool since some of the areas appear not to be so relevant for the estimation of product lifecycle position of VET offers. Eg. Costs control, sustainability of infrastructure and materials, strategic provider benefits, also stakeholder engagement factors should be re-evaluated if these are really relevant for the lifecycle position of single VET offers.

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.

Some indicators are YES/NO indicators and a 1-10 scale is suggested for the estimation, this should be reconsidered. YES/NO indicators will be very difficult to implement in the lifecycle software as they would not easily determine a lifecycle position.

List and describe any additional Indicators that should be Included.

Related to the graphical display I would consider to introduce two additional factors:
a) Market position (compared to other competitors for the VET offer)
b) Market development (is this a market which is going to grow or rather not)
The two figures would allow to deduct a position according to the BCG matrix and distinguish between newcomers, question marks, cash cows and dogs in the market position which will help a lot the quality managers for the VET offers.
3

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.

See above, some indicators are YES/NO and refer to a 1-10 scale, this should be corrected

Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale.

Do you have any additional comments regarding Key Success Factors or Indicators.

Organisation data

Name Sonja Wuscher	Name of organisation bfi Steiermark
Type of the organisation	(Vocational training center, university, Chamber, …)
VET	Role within the Organisation Controlling
Organisation Website www.bfi-stmk.at	Country Austria
Name Sonja Wuscher	Name of organisation bfi Steiermark
Type of the organisation	(Vocational training center, university, Chamber, …)

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.
Yes they are appropriate.

List and describe other Key Success Factors that should be included
None

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.
Yes, the indicators are clear in my opininon, but the ones from EQUARF are not on product level. They sould have an other wording.

List and describe any additional Indicators that should be Included.
None

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.
Yes, the graduated scale from 10 – 0 is ok, but 0 should be specified as not relevant. If you tick 0 it needs to be clear, that this indicator or KSF is unimportant and will not be calculated at all.

Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale.
See above!

Do you have any additional comments regarding Key Success Factors or Indicators.
For the lifecycle of a product (PLM) only the delivery phase needs to be focused, because as a result you should be able to identify the current stage of your product (introduction, growth, maturity, decline). It's also mandatory to see the whole process on a timeline. Therefore I would suggest to correlate time to enrollment rate/participants rate to gain a representative graph/kurve for the lifecycle of a product. In a scond step you may also relate turnover to time, so you will get a second graph to compare.
An other possibility would be to transfer the results to the BCG Matrix and picture it in a graph/curve as well.

Organisation data

Name Robert König	Name of organisation robert könig – Software und Schulung
Type of the organisation	(Vocational training center, university, Chamber, …)
Programmer	Role within the Organoisation Programming
Organisation Website	Country Austria
Name Robert König	Name of organisation robert könig – Software und Schulung
Type of the organisation	(Vocational training center, university, Chamber, …)

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.
They are OK

List and describe other Key Success Factors that should be included
None

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.
Yes

List and describe any additional Indicators that should be Included.
None

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.
Yes

Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale.
Yes

Should always be reducable to a scale from 0 to 1, or 0% to 100%

Do you have any additional comments regarding Key Success Factors or Indicators.
No

Organisation data

Name Susanne Plank	Name of organisation bfi Steiermark
Type of the organisation	(Vocational training center, university, Chamber, …)
VET	Role within the Organisation Controlling
Organisation Website www.bfi-stmk.at	Country Austria
Name Susanne Plank	Name of organisation bfi Steiermark
Type of the organisation	(Vocational training center, university, Chamber, …)

Are the Key Success factors identified appropriate to Product Lifecycle management in VET.

Suggest any rewording or deletions that you think appropriate.
Yes they are appropriate, but some of them sould be redifined.

List and describe other Key Success Factors that should be included
None.

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.
The indicators are clear, but the stages/phases need to be revised - relating to every single indicator - to be able to show the lifecycle of a product. The now mentioned phases are relevant for Productmanagement itself but not for the lifecycle of a product.

Furthermore some indicators need to be redefined, because it's not possible to aswer with 0-10. They are Yes, No questions.

List and describe any additional Indicators that should be Included.
None. I think some of them may be to much and are not defined on product level.

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.
The graduated scale from 10 – 0 is ok, but 0 needs to be specified as not relevant. If you tick 0 it should be clar, that this indicator or KSF is unimportant and will not be calculated at all. Like clicking it "away".

Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale.
See above!

Do you have any additional comments regarding Key Success Factors or Indicators.
For the lifecycle of a product only the delivery phase needs to be focused, because as a result you should be able to identify the current stage of your product (introduction, growth, maturity, decline) with the well known BCG matrix.

Organisation data

Name Nina Schuh	Name of organisation bfi Steiermark
Type of the organisation	(Vocational training center, university, Chamber, …)
VET	Role within the Organisation Marketing
Organisation Website www.bfi-stmk.at	Country Austria
Name Nina Schuh	Name of organisation bfi Steiermark
Type of the organisation	(Vocational training center, university, Chamber, …)

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.
Yes they are appropriate for a VET provider.

List and describe other Key Success Factors that should be included
None in this case.

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.
The indicators itself are appropriate.
The allocation to the different stages is wrong, if you want to show the lifecycle of a product. Therefore I think the stages need to be revised.

List and describe any additional Indicators that should be Included.
None

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.
Yes, but 0 needs to be unrelevant and should not been measured. Mesurement from 1-10.

Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale.
See above!

Do you have any additional comments regarding Key Success Factors or Indicators.
As mentioned before, the stages are not appropriate, if you want to generate and display the lifecycle of a product. Therefore I gave suggestions for the classification at the excel worksheet of indicators and KSF.

Organisation data

Name Marion Bock	Name of organisation Chance B Holding GmbH
Type of the organisation	(Vocational training center, university, Chamber, …)
Service provider for persons with disabilities	Role within the Organoisation Project manager
Organisation Website www.chanceb.at	Country Austria
Name Marion Bock	Name of organisation Chance B Holding GmbH
Type of the organisation	(Vocational training center, university, Chamber, …)

Are the Key Success factors identified appropriate to Product Lifecycle management in VET.

Suggest any rewording or deletions that you think appropriate.

List and describe other Key Success Factors that should be included

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.

List and describe any additional Indicators that should be Included.

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.

Is the Scale provided for the measurement of the Indicators clear and appropriate.

Suggst any improvements you would make to the scale.

Do you have any additional comments regarding Key Success Factors or Indicators.

Chance B was not able to answer the questions above - see statement:

Chance B is a service provider for persons with disabilites. Amongst others we are also offering nonformal vocational training as one aspect of a day care structure. This training is embedded in different working fields (bakery, gardening, maintainance of a small agricultural farm), but it is only one aspect of the offered programme. We don't "sell" the vocational training on the educational market – our participants come to us after getting a decision on their needed support. For each participant an individual plan is set up to define individual learning goals, we also don't have fixed data for entering the programme. Thus our vocational training is not like a clearly defined curriculum all participants have to follow. As our training setting differes very much to a regular VET programme most of the criteria / key success factors stated in the list are not relevant for us or don't exist at all.

Ireland

Organisation data

Name	Pat Maunsell
Name of organisation	Limerick College of Further Education
Type of the organisation (Vocational training center, university, Chamber, …)	FET College
Role within the Organoisation	Director
Organisation Website	www.lcfe.ie
Country	Ireland

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. The suggested KPI's are very suitable.
List and describe other Key Success Factors that should be included
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. As above.
List and describe any additional Indicators that should be Included.
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. Well thought out.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale. Scale seems appropriate.
Do you have any additional comments regarding Key Success Factors or Indicators. Overall, they look very comprehensive.

Organisation data

Name	Branch Officers
Name of organisation	Teachers Union of Ireland Cork City Branch
Type of the organisation (Vocational training center, university, Chamber, …)	Union
Role within the Organoisation	Branch Officers
Organisation Website	www.tui.ie
Country	Ireland

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. The suggested success factors are suitable but some may have a higher priority than others.
List and describe other Key Success Factors that should be included None
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. Some indicators do not apply in our situation. Too much emphasis on cost factors, educational issues should hold the priority.
List and describe any additional Indicators that should be Included. Promotion of / leading to full time permanent teaching positions
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. These are ok
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale. Scale seems appropriate.
Do you have any additional comments regarding Key Success Factors or Indicators. Is an economic model and business based tools the best way to looking at education. PLM is very much an economic concept and does not adequately measure life enrichment achieved through general education.

Slovenia

Organisation data

Name	Mr. Dejan Papez, Ph.D. Marjan Rihar, Ms. Valentina Kuzma, Mr. Igor Milavec, Mr. Žiga Lampe
Name of organisation	Chamber of Commerce and Industry of Slovenia
Type of the organisation (Vocational training center, university, Chamber, …)	Chamber
Role within the Organoisation	Directors or consultant of branch Associations
Organisation Website	http://eng.gzs.si
Country	Slovenia

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. Key Success factors identified are appropriate.
List and describe other Key Success Factors that should be included We think there are KSF for all relevant areas. Any additional KSF would be disturbing.
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. They are ok. Questions for measurement explain the meaning if it is confused.
List and describe any additional Indicators that should be Included. Too many indicators would discourage users.
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. Forms of measurement are clear and easy and that is great for users.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale. The scale is clear and appropriate.
Do you have any additional comments regarding Key Success Factors or Indicators. The software should have the minimum number of indicators that users have to use or maybe some crucial indicator that users must include.

Belgium

Finland

Organisation data

Name	Liisa Sarasoja
Name of organisation	WinNova
Type of the organisation (Vocational training center, university, Chamber, …)	VET
Role within the Organisation	Project manager
Organisation Website	www.winnova.fi
Country	Finland

Name	Marko Kemppinen
Name of organisation	Sataedu
Type of the organisation (Vocational training center, university, Chamber, …)	VET
Role within the Organisation	Head of International Affairs
Organisation Website	www.sataedu.fi
Country	Finland

Name	Marita Syrjälä
Name of organisation	Koulutuskeskus Sedu
Type of the organisation (Vocational training center, university, Chamber, …)	VET -center
Role within the Organisation	Educational manager
Organisation Website	www.sedu.fi
Country	Finland

Name	Kirsi-Marja Tattari
Name of organisation	Kankaanpään opisto
Type of the organisation (Vocational training center, university, Chamber, …)	VET –center
Role within the Organisation	Development manager
Organisation Website	www.kankaanpaanopisto.fi
Country	Finland

Name	Satu Neuvonen
Name of organisation	TAKK
Type of the organisation (Vocational training center, university, Chamber, …)	Adult education center
Role within the Organoisation	Development manager
Organisation Website	www.takk.fi
Country	Finland

Name	Tuike Kankare
Name of organisation	Turun ammatti-instituutti, adult education
Type of the organisation (Vocational training center, university, Chamber, …)	Ammatilllinen oppilaitos
Role within the Organoisation	Development coordinator
Organisation Website	www.turku.fi
Country	Finland

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.

The Key Succes facters are identified well and they are covering the whole product lifecycle in VET from student selection to the phase they are in the labour market.
Important factors /indicators are feedback from students, teachers competence and the education responding the market demands and also economical efficiency.

It is important that there is a suitable amount of Key Succes Factors, not too many, because that will lead to more complicated and too much time demanding to fill in gather the information.
Common opinion of feedback panel is that 10 is ok.

List and describe other Key Success Factors that should be included

- Possibility to add an additional KSF and indicator would be good. (Open box)

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.

These indicators are very good and there are enough of them. The questions must be easy to answer.

KSF2/indicator 36 : notice that absenteism can be also something else than unsatisfaction. (ilness, worketc., this must be noticed when measuring the indicator!

KSF 1 /want to add an indicator: + description of the content, informatic value for learners
+ assesment methodology and validity

KSF2/KSF 9 same indicators, overlaping, but maybe there is an explanation to this.

List and describe any additional Indicators that should be Included.

KSF 1 quality of education Suggested new Indicator: the possibility to recognize international studies in curriculum, the use of ECVET –system. Question: is ECVET- system adapted ? Yes or no / scale KSF3 / want to add: teachers practical periods in working life, teachers are updating their practical competence during these periods. Question: teachers activity to practical periods in working life, yes/no, and scale KSF 4/ 4 could these be separately: achieved employment and higher level training?
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. The questions must be unambiguous and understandable. After yes or no it is good to have the possibility to give points.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggst any improvements you would make to the scale. Finnisf feed back panel is suggesting the scale 0-5! 0-10 is too wide.
Do you have any additional comments regarding Key Success Factors or Indicators. Possibility to additional open box to have own indicator and KSF. Notice: KSF 5 / cost analysis could be difficult to find relevant and comparable figures. (e.g long training courses). The user must be careful of all inputs reliability and transparency

Romania

Formular de Feedback

Internal Organisation data Name	Otilia Clipa
Name of organisation	Faculty of Education Study
Type of the organisation (Vocational training center, university, Chamber, …)	Public university
Role within the Organoisation	Dean
Organisation Website	www.usv.ro
Country	Romania

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. The following key success factors affecting the life cycle of the VET were not identified : KSF 8, KSF 9 and KSF10
List and describe other Key Success Factors that should be included There aren't any proposals of key success factors that should be included In the matrix of the product life cycle in the professional training.
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. **Yes, but the indicators are easily identified with some exceptions:** KSF 1 (1,15,21,24,35), KSF 3 (1,) KSF4 (4,5,6,7,19,32) KSF 7 (9,41) KSF8 (23,28) KSF 9(11,12,13,14) KSF10(3, 15,22)
List and describe any additional Indicators that should be Included. There aren't no other indicators that should be included.
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. The indicator number 4 assignated to KSF4 should be considered after 12 months from the graduation date.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggest any improvements you would make to the scale. We don't have any suggestion.
Do you have any additional comments regarding Key Success Factors or Indicators. No.

Formular de Feedback

Internal Organisation data

Name	Boghean Florin
Name of organisation	University Stefan cel Mare Suceava
Type of the organisation (Vocational training center, university, Chamber, …)	Public University
Role within the Organoisation	Teacher
Organisation Website	www.usv.ro
Country	Romania

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. The following key success factors affecting the life cycle of the VET were not identified : KSF 8, KSF 9 and KSF10
List and describe other Key Success Factors that should be included There aren't any proposals of key success factors.
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. **The presented indicators are easily identified with some exceptions to some KSF where the stakeholders did not empathized for the organizations the belong, namely:** KSF 1 (1,15,21,24,35) KSF 3 (1,) KSF4 (4,5,6,7,19,32) KSF 7 (9,41) KSF8 (23,28) KSF 9(11,12,13,14) KSF10(3, 15,22)
List and describe any additional Indicators that should be Included. The analysis denotes that there aren't no other indicators that should be included.
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. The indicator number 4 assignated to KSF4 should be considered after 12 months from the graduation date.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggest any improvements you would make to the scale. We don't have suggestion.
Do you have any additional comments regarding Key Success Factors or Indicators. No.

Formular de Feedback

External Organisation data

Name	Morosan Danila Lucia
Name of organisation	Consulting Group
Type of the organisation (Vocational training center, university, Chamber, …)	Vocantional training center
Role within the Organoisation	Manager
Organisation Website	contact@consulting-group.ro
Country	Romania

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. Yes. We don't have any suggestion.
List and describe other Key Success Factors that should be included It is not necessary.
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. The presented indicators are easily identified.
List and describe any additional Indicators that should be Included. It is not necessary.
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. Everything it is ok.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggest any improvements you would make to the scale. We don't have suggestion.
Do you have any additional comments regarding Key Success Factors or Indicators. No.

Formular de Feedback

External Organisation data

Name	Doru Biliuta
Name of organisation	ADER – ASSOCIATION FOR ECONOMIC AND REGIONAL DEVELOPMENT
Type of the organisation (Vocational training center, university, Chamber, …)	nongovernmental organization
Role within the Organoisation	Executive manager
Organisation Website	adersuceava@gmail.com
Country	Romania

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.

We didn't identified : KSF 8 and KSF 9, KSF 10

List and describe other Key Success Factors that should be included

No.

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.

Yes. We don't have any suggestion.

List and describe any additional Indicators that should be Included.

It's not necessary.

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.

Yes. We don't have suggestion.

Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggest any improvements you would make to the scale.

Yes. It is not necessary.

Do you have any additional comments regarding Key Success Factors or Indicators.

No.

Formular de Feedback

External Organisation data

Name	Elena Zamcu
Name of organisation	Chamber of Commerce and Industry Suceava
Type of the organisation (Vocational training center, university, Chamber, …)	Chamber of Commerce
Role within the Organoisation	Secretary
Organisation Website	www.ccisv.ro
Country	Romania

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. Yes. We don't have suggestion.
List and describe other Key Success Factors that should be included No.
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. The presented indicators are easily identified with some exceptions to some KSF, namely: KSF 1 (1,15,21,24,35), KSF 3 (1,) , KSF 9(11,12,13,14), KSF10(3, 15,22)
List and describe any additional Indicators that should be Included. We don't have other indicators that should be included.
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. No.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggest any improvements you would make to the scale. Yes.
Do you have any additional comments regarding Key Success Factors or Indicators. No.

Formular de Feedback

External Organisation data

Name	Livia Vranciu
Name of organisation	Varias Studia
Type of the organisation (Vocational training center, university, Chamber, …)	NGO
Role within the Organoisation	President
Organisation Website	-
Country	Romania

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. Yes, the key success factor are identified appropriate to Product Lifecycle management in VET. We don't have any suggestion.
List and describe other Key Success Factors that should be included It's not necessary.
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. Yes, exception KSF4 (4,5,6,7,19,32), KSF 7 (9,41), KSF8 (23,28)
List and describe any additional Indicators that should be Included. There aren't no other indicators that should be included.
Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators. Yes.
Is the Scale provided for the measurement of the Indicators clear and appropriate. Suggest any improvements you would make to the scale. Yes.
Do you have any additional comments regarding Key Success Factors or Indicators. No.

Spain

Organisation data

Name	JAVIER RIAÑO
Name of organisation	DENOKINN
Type of the organisation (Vocational training center, university, Chamber, …)	INNOVATION & RESEARCH ORGANISATION
Role within the Organisation	ADVISOR
Organisation Website	www.denokinn.eu www.socialinnovationpark.com
Country	SPAIN

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.
Yes, all of them are appropiate.

List and describe other Key Success Factors that should be included
- Identify learning needs
- Design of the learning proposal
- Management of the Learning project

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.

- Identify learning needs: not only from market needs (cultural changes, evolution of the market,..) but also from the learner needs (learning methods, competences, skills, learning outcomes,..)
- Design of the learning proposal: which methods are the most appropriate ones to acquire the competences, which are the didactic means,.. Specify the learning project objectives, specific objectives, which methods are the most appropriate ones, resources to use,..
- Management of the learning project: not only the "financial monitoring", also other aspects related to the business (communication with stakeholders management, distribution channels, resources, ..)

List and describe any additional Indicators that should be Included.

- Didactic objectives
- Pedagogic strategies
- Learning contents treatment

Has an appropriate form of measurement been adapted for each indicator. Suggest any changes you feel appropriate in the measuring of indicators.

Suggestion:

- Use the "design thinking" tool (from the user point of view) to include improvement actions, innovations,..
- Use the PMbok tools (http://udbcomunicate.files.wordpress.com/2012/01/gui-pmbok.pdf)

Is the Scale provided for the measurement of the Indicators clear and appropriate? Suggest any improvements you would make to the scale. It is clear and easy to use scale.
Do you have any additional comments regarding Key Success Factors or Indicators?

Organisation data

Name	Alfredo Martinez
Name of organisation	IVAC-KEI
Type of the organisation (Vocational training center, university, Chamber, …)	Institute of Qualifications in Vocational Training
Role within the Organisation	Technician
Organisation Website	http://www.kei-ivac.com/es/
Country	Spain

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate.

I agree with the 10 KSF. Some remarks are included:

1. Quality of VET Training
The didactic innovation techniques can include methodologies as simulators, learning based on error testing or other methodologies. Theoretical and practical knowledge must be taken into consideration for the final project.

3. Quality of the staff.
The continuous training of the teachers/trainers is a key aspect and it has to be compulsory.

4. Responding to market demands.
Key factor to favour the inclusion in the labour market. Resources to improve the relation between the training center and the company have to be used.

6. Suitability of Infrastructure and Material.
The update of the equipment and the didactic means must be in parallel with the technical and technological development of the sector.

7. Stakeholder Engagement
The commitment to training affects the society in general, especially to the company where the students finally end. In this sense, it is necessary to offer all the possibilities: grants, training, joint projects, training for company product, ...

8. Strategic Provider Benefits
Provider could perhaps take a more active role.

9. Evaluation Mechanisms
Evaluation systems to ensure the quality are needed. Internal and external evaluation systems must be used.

List and describe other Key Success Factors that should be included
No one.

Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate.

All the indicator are appropriated but depending on the organisation, courses,.., some of them will give more interesting information about an specific product.

The more relevant KSF from my point of view are:

1. **Quality of the Staff:**

The training courses for the teachers/trainers must be compulsory (specially inside VET systems)

4. Responding to Market Demands:

Linked to KSF 6 (Suitability of infrastructure and material) will give key information about the product and the labour market.

9. Evaluation Mechanisms:

The evaluation must collect enough evidence about the degree of compliance between students (knowledge, skills,..) and the job position and according to the standards defined for a specific activity.

List and describe any additional Indicators that should be Included.

I pointed a number of indicators which by its nature could fit into different blocks of critical factors:

- Investment in mixed projects (VET training and labour market).

- Analysis of the technical means and of the labour market and update them with the requirements of the labour market.

- Review and update the offer according to the demand of the labour market.

- Ability to consider the education and training (VET) providers as a technical adviser not only as a seller.

- Use of “real” methodologies to favour the motivation and development of entrepreneurial mindset.

- Internal interdisciplinary cooperation (between subjects or modules) and businesses.

- Create a monitoring system (via software or other means) to report the evolution of technological means based on current and recommend products.

Has an appropriate form of measurement been adapted for each indicator? Suggest any changes you feel appropriate in the measuring of indicators.

The questionnaire used seems appropriate.

Is the Scale provided for the measurement of the Indicators clear and appropriate? Suggest any improvements you would make to the scale.

I agree with it.

Do you have any additional comments regarding Key Success Factors or Indicators?

No

Organisation data

Name	MARIA DEL CARMEN GARRIDO DIEZ
Name of organisation	FUNDACION FONDO FORMACION
Type of the organisation (Vocational training center, university, Chamber, …)	Foundation
Role within the Organisation	Manager
Organisation Website	
Country	SPAIN

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. They are appropriate.
List and describe other Key Success Factors that should be included I would add the degree of success in improving employability or how the participation in training courses increases the opportunity of inclusion in the labour market. Nowadays it is more common that the training courses are linked to the insertion in the labour market. That is why the % of participants that has an opportunity in the labour market as consequence of the training courses could be included.
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. They are appropriate.
List and describe any additional Indicators that should be Included.
Has an appropriate form of measurement been adapted for each indicator? Suggest any changes you feel appropriate in the measuring of indicators.
Is the scale provided for the measurement of the Indicators clear and appropriate? Suggest any improvements you would make to the scale. Try to avoid in the measurement scale the medium score (inside the scale 0 to 10, avoid 5). This leads us to have results "comfortable" but unrealistic information. I even include a scale will score in "opposite" ... ie ask negative question to not answer as a robot.
Do you have any additional comments regarding Key Success Factors or Indicators? No

Organisation data

Name	JUAN ANGEL SAN VICENTE
Name of organisation	POLITEKNIKA IKASTEGIA TXORIERRI
Type of the organisation (Vocational training center, university, Chamber, …)	Vocational training center
Role within the Organisation	PRINCIPAL
Organisation Website	www.txorierri.net
Country	DERIO-BIZKAIA (SPAIN)

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. There are enough KSF and they are appropriate.
List and describe other Key Success Factors that should be included There is not necessary more KSF
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. For some KSF it seems that there are a lot of indicators.
List and describe any additional Indicators that should be Included. Inside "Quality of VET training" KSF maybe it will be interesting to include an indicator about the use of innovative methodologies and use of TICs (moodle,..) Inside "Quality of the staff" KSF, I will include two indicators "technical competences" and "leadership competences" of trainers. All competency assessments should follow a 360 cycle (self-assessment, assessment by the responsible person, peers evaluation and evaluation by clients).
Has an appropriate form of measurement been adapted for each indicator? Suggest any changes you feel appropriate in the measuring of indicators. Related to the monitoring of indicators, it is important to do a benchmarking with other organizations. All data management (objectives, outcomes, comparisons) would be important to do it by using internet tools.
Is the scale provided for the measurement of the Indicators clear and appropriate? Suggest any improvements you would make to the scale. The scale is appropriate
Do you have any additional comments regarding Key Success Factors or Indicators? No

Organisation data

Name	PABLO ALMARAZ
Name of organisation	Álava Chamber of Commerce and Industry
Type of the organisation (Vocational training center, university, Chamber, …)	Chamber of Commerce
Role within the Organisation	Manager of Training Department
Organisation Website	www.camaradealava.com
Country	Spain

Are the Key Success factors identified appropriate to Product Lifecycle management in VET. Suggest any rewording or deletions that you think appropriate. The KSF are appropriate, but maybe it will be interesting to put them in order. In this way it will be more easy to see the whole process, from the beginning (design) to the end of the lifecycle.
List and describe other Key Success Factors that should be included
Are the Indicators identified clear and are they appropriate to Product Lifecycle Management in VET. Suggest any rewording or deletions that you think appropriate. The indicators identified are appropriate to PLM, but maybe it will be interesting to make the difference of the indicators for different clients: public administration, private companies, formal learning offer,...
List and describe any additional Indicators that should be Included. The indicators are appropriate, but as with the KSF maybe it will be interesting to put them in order. In this way it will be more easy to see the whole process.
Has an appropriate form of measurement been adapted for each indicator? Suggest any changes you feel appropriate in the measuring of indicators. It is ok
Is the scale provided for the measurement of the Indicators clear and appropriate? Suggest any improvements you would make to the scale. It is appropriate.
Do you have any additional comments regarding Key Success Factors or Indicators? There are different practices and projects developed related to VET quality that work in a theoretical way and them not very easy to put them into practice (lack of resources, time, ..). So it will be very important to have a simple and easy tool to manage the product lifecycle.