Appendix B: Collected Surveys
CfIE TC Survey A

Page #1

Participant Information

We would like to invite you to take part in our project on the potential value of Threshold Concepts in Entrepreneurship Education. Before you decide whether or not to participate, we would like you to understand why your contribution is being sought and what it would involve for you. Talk to others about the study if you wish.

What is the purpose of the survey?

The principle output of our EERPF-funded research is a toolkit for entrepreneurship educators to use to explore the use of Threshold Concepts in Entrepreneurship. We propose to first prototype the use of these methods formally as part of the process of programme review, to develop threshold concepts of entrepreneurship for the Innovation Programmes at CFIE, and to undertake an evalution of student recognition of those concepts across each year group.

The aim of this first survey is to develop a first draft of CFIE threshold concepts in entrepreneurship. We anticipate at least four further rounds of consultation and development of these threshold concepts at CFIE (see process flow in briefing sheet).

Why have I been invited to participate?

Because you are a CFIE colleague.

Do I have to take part?

It is up to you to decide whether you wish to participate in the project. Please read this information before you participate and contact us to answer any questions you might have. If you complete this survey it is assumed you have consented to take part. You are free to withdraw at any time, without giving a reason. If you choose to withdraw having submitted this survey we will be unable to remove your remarks as they are anonymous.

What will happen to me if I take part and what will I have to do?

You will be asked to participate in this and further data gathering rounds as detailed in the process flow chart, possibly including a focus group session which will also be voluntary.

All responses to this survey are anonymous to the researchers.

What are the possible disadvantages and risks involved in taking part in the survey?

There are no perceived risks to participation in this survey.

What are the possible benefits of taking part?

The resulting threshold concepts and toolkit should better reflect your perspectives and needs and wants.

Will my participation in this survey be kept confidential?

We will be keeping all your participant data confidential and secure at all times. The survey data and academic assessments are all held on secure university file systems and any documents created to link and correlate survey participant data with relevant assessments will also be kept secure and password-encrypted on University file systems in compliance with the University's guidance on information security: http://www.bris.ac.uk/infosec/uobdata/research/.

The reports on the data collected will make participants' identities anonymous to prevent any identification of participants. Data collected will be retained securely.

What will happen to the results?

The results of this survey and others associated with the development of entrepreneurship threshold concepts will be made available to CFIE colleagues. The final results of the research and the toolkit will be made available to all EEUK associates and fellows as a condition of the EERPF funding.

Further information and contact details

If you have any concerns related to your participation in this survey or would like further information, please contact us directly.

Dave Jarman (University of Bristol)

Email: dave.jarman@bristol.ac.uk

Dr Lucy Hatt (Newcastle University)

Email: lucy.hatt@newcastle.ac.uk

Please reference the survey title.

Q1. Please confirm you are a CfIE colleague Y/N

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Q2. What is your favourite definition of an entrepreneur?

Q3. What do you consider to be fundamental to a grasp of entrepreneurship?

Q4. What are your main objectives when delivering entrepreneurship education?

Q5. When delivering entrepreneurship education, what do students find difficult to grasp? What don't they "get"?

Q6. When students start to "get" entrepreneurship, how do you know? How can you tell?

Q7. When delivering entrepreneurship education, what do you find hard to teach?

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Thank you for completing this survey. Your answers will be used to develop the first draft of the CfIE Threshold Concepts in Entrepreneurship.

CfIE TC Survey B

Page #1

We would like to invite you to take part in the second stage of our project on the potential value of Threshold Concepts in Entrepreneurship Education. Before you decide whether or not to participate, we would like you to understand why your contribution is being sought and what it would involve for you. Talk to others about the study if you wish.

The information below is the same as the previous survey if you want to step ahead and are familiar with our process and purpose.

What is the purpose of the survey?

The principle output of our EERPF-funded research is a toolkit for entrepreneurship educators to use to explore the use of Threshold Concepts in Entrepreneurship. We propose to first prototype the use of these methods formally as part of the process of programme review, to develop threshold concepts of entrepreneurship for the Innovation Programmes at CFIE, and to undertake an evalution of student recognition of those concepts across each year group.

The aim of this second survey is to refine a second draft of CFIE threshold concepts in entrepreneurship. We anticipate at least three further rounds of consultation and development of these threshold concepts at CFIE (see process flow in briefing sheet).

Why have I been invited to participate?

Because you are a CFIE colleague.

Do I have to take part?
If you have taken part in our Focus Group at this stage you should not complete this survey.

It is up to you to decide whether you wish to participate in the project. Please read this information before you participate and contact us to answer any questions you might have. If you complete this survey it is assumed you have consented to take part. You are free to withdraw at any time, without giving a reason. If you choose to withdraw having submitted this survey we will be unable to remove your remarks as they are anonymous.

What will happen to me if I take part and what will I have to do?

You will be asked to participate in this and further data gathering rounds as detailed in the process flow chart, possibly including a focus group session which will also be voluntary.

All responses to this survey are anonymous to the researchers.

What are the possible disadvantages and risks involved in taking part in the survey?

There are no perceived risks to participation in this survey.

What are the possible benefits of taking part?

The resulting threshold concepts and toolkit should better reflect your perspectives and needs and wants.

Will my participation in this survey be kept confidential?

We will be keeping all your participant data confidential and secure at all times. The survey data and academic assessments are all held on secure university file systems and any documents created to link and correlate survey participant data with relevant assessments will also be kept secure and password-encrypted on University file systems in compliance with the University's guidance on information security: http://www.bris.ac.uk/infosec/uobdata/research/.

The reports on the data collected will make participants' identities anonymous to prevent any identification of participants. Data collected will be retained securely.

What will happen to the results?

The results of this survey and others associated with the development of entrepreneurship threshold concepts will be made available to CFIE colleagues. The final results of the research and the toolkit will be made available to all EEUK associates and fellows as a condition of the EERPF funding.

Further information and contact details

If you have any concerns related to your participation in this survey or would like further information, please contact us directly.

Dave Jarman (University of Bristol)

Email: dave.jarman@bristol.ac.uk

Dr Lucy Hatt (Newcastle University)

Email: lucy.hatt@newcastle.ac.uk

Please reference the survey title.

Q1. Please confirm you are a CfIE colleague Y/N

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In this phase of the research process we want to discuss which of the long-listed concepts might be distinctive to entrepreneurship. This might be a single concept or a bundle, web, network or constellation of linked concepts that take a distinctive form within entrepreneurship.

Please remember that we are exploring these concepts with regard to an entrepreneurship curriculum.

Q2. Having reviewed the list circulated with this survey please identify which of the concepts you would suggest are *threshold concepts* and *distinctive* to entrepreneurship and why? There is no limit on the number of concepts you can select.

Q3. Having reviewed the list circulated with this survey please identify which of the concepts you would suggest are threshold concepts and *in combination distinctive* to entrepreneurship and why? There is no limit on the number of concepts you can select. (It may be that by themselves the concepts are not distinctive to entrepreneurship, but taken together, or given a specific context they might be.)

Q4. Please identify any further candidate Entrepreneurship Threshold Concepts which you believe are missing from our list.

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Thank you for completing this survey. Your answers will be used to develop the second draft of the CfIE Threshold Concepts in Entrepreneurship.

CfIE TC Survey C (external experts)

Page #1

Thanks for taking the time to contribute to this survey.

We have been developing a series of potential entrepreneurship threshold concepts over two previous phases of research with colleagues at the Centre for Innovation and Entrepreneurship (CFIE) and have reached this draft set.

In this survey, we are asking if you think the concepts we've set out are "***threshold***" concepts, how these concepts might described better and if we've missed out any.

There are 7 concepts in total.

We're not looking for a universal list, but something that would be useful in the context of our educational programmes.

We're not trying to collate a definitive list of *everything* students need to understand, in order to understand entrepreneurship, but a list of concepts that are **distinct** to understanding entrepreneurship. For example, creativity could be argued as something that's essential for entrepreneurship, but as it could also be argued to be essential for some other subjects too, it would not be regarded as an entrepreneurship threshold concept.

It's important to consider the concepts as a web, with the relationships between the concepts being just as important to an understanding of entrepreneurship as the individual concepts.

Only by considering the concepts as members of a group or interconnect web that relate to each other, is entrepreneurship defined.

The threshold concept framework posits that in any academic discipline there are concepts that have a particularly transformative effect on student learning. We believe entrepreneurship is no different.

According to the scholarly community of those conducting research using the threshold concept framework (Flanagan, 2019) a threshold concept is likely to be characterised by its transformative nature and some or all of the other following features:

- Troublesome: Threshold concepts are likely to be troublesome for the student.
- Irreversible: Given their transformative potential, threshold concepts are also likely to be irreversible, i.e. they are difficult to unlearn.
- Integrative: Threshold concepts, once learned, are likely to bring together different aspects of the subject that previously did not appear, to the student, to be related.
- Necessitates a state of liminality in the learner: The crossing of the threshold has been compared to a 'rite of passage' in which a transitional or liminal space has to be traversed.

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For each of the proposed CFIE Entrepreneurship concepts below:

Rate the extent to which it might be considered an Entrepreneurship threshold concept in your experience of entrepreneurship.

Please add your comments on how the concept has been described, and how that description might be improved.

Your Context is Your Opportunity

In Practice: Entrepreneurial practitioners habitually and constantly create and recognise opportunities within their own context. Practitioners are habitually resourceful and make use of

what they find to realise and exploit opportunity. Practitioners are endlessly curious about the world and passionate about what interests them.

Examples of students "getting it" Coming up with lots of ideas. Seeing how just about anything could be improved. Constantly "collecting" contacts and expanding their networks and knowledge base. Interested in and curious about everything. Finding new and creating ways of doing things, turning situations to their advantage. Dissatisfaction with the status quo.

Examples of students "not quite getting it" Lots of ideas but instantly followed by reasons why they "can't" work. Dreaming, fantasising about opportunities that are disconnected from themselves "pie in the sky" – or would only be possible if unchangeable factors were changed

- This is a CFIE Entrepreneurship Threshold Concept
- This probably is a CFIE Entrepreneurship Threshold Concept
- This might be a CFIE Entrepreneurship Threshold Concept
- This probably isn't a CFIE Entrepreneurship Threshold Concept
- This is not a CFIE Entrepreneurship Threshold Concept

- What improvements would you make to the description of this concept?

Success is Defined by Others

In practice: Entrepreneurial practitioners are aware of their positionality and habitually put themselves in the positions of others. Only other people can define success and they demonstrate the value they place on what is being offered by being prepared to give something tangible or intangible in exchange for it (money, time, goodwill etc)

Examples of Students "getting it": Constantly creating opportunities to interact with potential customers to seek opinion, ideas and build partnership relationships. Not putting much weight on your own opinion or idea - without testing it with others, automatically wants to test ideas out with others. Sees beyond data to insight – knows what customers want before the customer can articulate it themselves. Understanding that the consumer decides - whether they knew they wanted it or you believed they did.

Examples of Students not "getting it": Working in isolation from the target beneficiary because that's a preferred way of working – wanting to do it all themselves – be a lone hero. Being reluctant to share ideas or test them out for fear of rejection or imitation. Rejecting feedback that is in opposition to their personal viewpoint.

- This is a CFIE Entrepreneurship Threshold Concept
- This probably is a CFIE Entrepreneurship Threshold Concept
- This might be a CFIE Entrepreneurship Threshold Concept
- This probably isn't a CFIE Entrepreneurship Threshold Concept
- This is not a CFIE Entrepreneurship Threshold Concept

- What improvements would you make to the description of this concept?

Iterative Experimentation

In practice: Iterative experimentation is a way of understanding a fundamental entrepreneurial process of trial and error, maximising opportunities to learn from mistakes and failure as well as success. Similar to the process of scientific experimentation where an experiment generates data, is less emotive and is not deemed necessarily to be a "success" or a "failure". Any outcome of a well-designed experiment is useful to a scientist. Entrepreneurial practitioners never risk what they are not prepared to lose, so they can lose little but more often. Flexible and adaptable approach – quick to change direction when customer feedback indicates that's what's needed.

Examples of students "getting it": Constantly looking to put things into practice and try things out, well before they are "ready". Sees all outcomes (positive and negative) as useful. Reflective and reflexive approach, high levels of self awareness, willingness to review actions and actively seeks feedback from others. Does not get disheartened when plans don't work out. Quickly moves on to the next thing, always thinking "What next? What next? What next?" Learns easily from experience, doesn't make the same mistake twice. Loves learning, is aware of what and when they are learning. Embarks on new experiences sometimes purely to learn from them.

Examples of students not "getting it": Planning one big bang launch, ploughing lots of personal resource into something before testing it out. Persisting with a complex plan that is evidently not working. Trying, failing and giving up. Repeating an unsuccessful process, being "deaf" to feedback. Demonstrable lack of self-awareness and reluctance to reflect or take on feedback. Disinterest, lack of curiosity.

- This is a CFIE Entrepreneurship Threshold Concept
- This probably is a CFIE Entrepreneurship Threshold Concept
- This might be a CFIE Entrepreneurship Threshold Concept
- This probably isn't a CFIE Entrepreneurship Threshold Concept
- This is not a CFIE Entrepreneurship Threshold Concept

- What improvements would you make to the description of this concept?

You have the power to change how things are

In practice: Entrepreneurial practitioners recognise that they always have agency. Practitioners know that their intention must be translated into action, but that can be small steps towards a distant goal – a journey of a thousand miles begins with a single step.

Examples of students "getting it": Being willing to think big and act small. Not being deterred by the size or scale of the task, willing to make small steps and gather resource and information to start the work. Using systems approaches to unpick big and complex challenges.

Examples of students not "getting it": Giving up in the face of big or complex challenges. Seeking excuses such as the scale of the challenge or the lack of resource available for not attempting or completing the challenges. Complaining that others had easier tasks or better or more resource. Needing a lot of reassurance.

- This is a CFIE Entrepreneurship Threshold Concept
- This probably is a CFIE Entrepreneurship Threshold Concept
- This might be a CFIE Entrepreneurship Threshold Concept
- This probably isn't a CFIE Entrepreneurship Threshold Concept
- This is not a CFIE Entrepreneurship Threshold Concept

- What improvements would you make to the description of this concept?

Entrepreneurship is a Practice

In practice: Entrepreneurial practitioners know that entrepreneurship is not a badge or a status or a goal, it's not something you 'achieve' or an exclusive club to join. Practitioners understand that it is a process or practice that anyone can use in any context, it's a collection of ways of thinking and practising. Practitioners understand that things can be approached or completed in 'more' or 'less' entrepreneurial ways and that these ways can be learnt, developed, and enhanced through use and practice.

Examples of students "getting it": Willing to apply an entrepreneurial approach or an enterprising mindset to any/all tasks and contexts rather than specific venture-creation tasks. Willing to self-identify as an entrepreneur in manner that is neither arrogant nor naïve. Seeking and finding examples of entrepreneurship well beyond the 'business' or 'startup' context from whom they can draw inspiration and examples of practice. Taking a reflective approach to their own practice and seeking to evolve their own practice through conscious thought and action.

Examples of students not "getting it": Being overly status- or output-focused in discussions of entrepreneurship. Only seeing 'business' or 'start-up' examples and exemplars as legitimate sources of guidance, feedback, or inspiration. Only using entrepreneurial approaches in specific venture-creation-type contexts.

- This is a CFIE Entrepreneurship Threshold Concept
- This probably is a CFIE Entrepreneurship Threshold Concept
- This might be a CFIE Entrepreneurship Threshold Concept
- This probably isn't a CFIE Entrepreneurship Threshold Concept
- This is not a CFIE Entrepreneurship Threshold Concept

- What improvements would you make to the description of this concept?

Taking Action

In practice: Entrepreneurial practitioners know that intention must be translated into action for value to be created. Intention PLUS Will is all-important to create or exploit an opportunity for value. Practitioners act. Inaction is understood as a risk. Changes are demonstrable. Practitioners know that actions need not be big, even small steps can be cumulative and can result in value creation.

Examples of students "getting it": Students take steps (small or big) towards distant goals. Trying things as a means to discover things. Engaging in research, validation, prototyping with the intention of discovering something.

Examples of students not "getting it": Getting stuck in a process of generating but never testing ideas. Being reluctant to research, to validate or invalidate their ideas, resisting prototyping. Deferring activity or creating excuses for why activity has not or cannot take place. Lots of talking, little doing, displacement activities.

- This is a CFIE Entrepreneurship Threshold Concept
- This probably is a CFIE Entrepreneurship Threshold Concept
- This might be a CFIE Entrepreneurship Threshold Concept
- This probably isn't a CFIE Entrepreneurship Threshold Concept
- This is not a CFIE Entrepreneurship Threshold Concept

- What improvements would you make to the description of this concept?

Knowledge is always partial and often ambiguous

In practice: Entrepreneurial practitioners accept that they do not, and likely cannot, have all the data they would like to make decisions and they are always working with an incomplete picture. Practitioners understand that situations are not perfect, ideal, or even favourable – but that the process of taking action is likely to lead to new situations, learnings, and ultimately opportunities. Entrepreneurs are likely to regard ambiguity and the risk of failure as a barrier to others and thus an opportunity to themselves to break new ground. Seeking progress not perfection.

Examples of students "getting it": Constantly looking to put things into practice and try things out, well before they are "ready". Sees all outcomes (positive and negative) as useful. Does not get disheartened when plans don't work out, seeks to 'learn' rather than to 'know'.

Examples of students not "getting it": Seeking perfect circumstances/knowledge before committing to action. Creating excuses of imperfect circumstances or knowledge as a means to defer action or explain inaction. Being reluctant to accept responsibility for failing to engage in activity that might lead to ideas being invalidated.

- This is a CFIE Entrepreneurship Threshold Concept
- This probably is a CFIE Entrepreneurship Threshold Concept
- This might be a CFIE Entrepreneurship Threshold Concept
- This probably isn't a CFIE Entrepreneurship Threshold Concept
- This is not a CFIE Entrepreneurship Threshold Concept

- What improvements would you make to the description of this concept?

By way of a summary, we've asked for your views on seven possible entrepreneurship threshold concepts. These are:

- Your context is your opportunity
- Success is defined by others
- Iterative experimentation
- You have the power to change how things are
- Entrepreneurship is a practice
- Taking action
- Knowledge is always partial and often ambiguous

What have we missed out? Are there any concepts missing from this list? Please tell us what you think is missing and why...

Thank you very much for taking the time to answer these questions.

CfIE TCs Survey D (internal panel)

This survey is almost exactly identical to Survey C above except for a revised opening paragraph:

Thanks for taking the time to contribute to this survey.

We have taken and collated the responses from the 1st survey and the focus group to develop a further draft list of CFIE Entrepreneurship Threshold Concepts.

In this survey, we are asking if you think the concepts we've set out are "*threshold*" concepts, how these concepts might described better and if we've missed out any.

There are 7 concepts in total.

We're not looking for a universal list, but something that would be useful in the context of CFIE programmes.

We're not trying to collate a definitive list of *everything* students need to understand, in order to understand entrepreneurship, but a list of concepts that are **distinct** to understanding entrepreneurship. For example, creativity could be argued as something that's essential for entrepreneurship, but as it could also be argued to be essential for some other subjects too, it would not be regarded as an entrepreneurship threshold concept.

It's important to consider the concepts as a web, with the relationships between the concepts being just as important to an understanding of entrepreneurship as the individual concepts.

Only by considering the concepts as members of a group or interconnect web that relate to each other, is entrepreneurship defined.