



Volume x(y): 1-24
www.ejolts.net
ISSN 2009-1788

Educational Journal of Living Theories

How can I produce a digital video artefact to facilitate greater understanding among youth workers of their own learning-to-learn competence?

Shane Crossan

Shane Crossan

Dublin City University
Ireland

Abstract

In Ireland, youth work is delivered largely in marginalised communities and through non-formal and informal learning methods. Youth workers operate in small isolated organisations without many of the resources and structures to improve practice that is afforded to larger formal educational establishments. Fundamental to youth work practice is the ability to identify and construct learning experiences for young people in non-traditional learning environments. It is therefore necessary for youth workers to develop a clear understanding of their own learning capacity in order to facilitate learning experiences for young people.

In the course of this research, I attempted to use technology to enhance and support the awareness among youth workers of their own learning capacity by creating a digital video artifact that explores the concept – learning-to-learn. This study presents my understanding of the learning-to-learn competence as, I sought to improve my practice as a youth service manager and youth work trainer.

This study was conducted using an action research approach. I designed and evaluated the digital media artifact – “[Lenny’s Quest](#)” in collaboration with staff and trainer colleagues in the course of two cycles of action research, and my research was critiqued and validated throughout this process.

Keywords: Learning-to-learn; Competence; Youth work; Action research; Digital video artefact.

Copyright: © 2011 Crossan.

This is an open access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original author and source are credited.

Introduction

Learning is not a product of schooling but the lifelong attempt to acquire it.

Albert Einstein (1879 - 1955) Physicist & Nobel Laureate

I manage a community-based youth service in Dublin City. It is my responsibility to provide training to make youth workers more effective practitioners. As I am positioning myself as both a researcher and a trainer within this study it is important that this is clearly reflected in my ontological approach towards this research. My ontological perspective is that, as an education practitioner working outside the institutions of formal learning, I find that the context and meaning of my work is heavily conditioned by formal learning methods. Youth workers constantly frame the debate what is youth work by stating its relationship to formal education rather than articulating a practice based on stand-alone non-formal learning principles.

[Youth work in Ireland](#) is based on the principle of facilitating young people to engage with their own personal and social development and to support them to stay in education. This can be very difficult as many of the structures and hallmarks of formal learning environments – obligatory attendance, time-tables, set curriculum - are largely absent in a youth-work environment. The lack of a formal learning structure puts more onus on the youth worker to have the capacity to organise, develop and assess the learning within the activities they implement. Without proper skill and training many staff find this difficult and often end up delivering activities for activities sake rather than for any discerned developmental goal. I find it very difficult to challenge this situation, as most of the youth workers whose job is to design and facilitate non-formal learning opportunities for young people rarely experienced it themselves in education (Costello 1984). With the demands of work I have found it hard to develop a culture within the organisation that encourages reflective practice. How can youth workers be effective non-formal educators if they are uncritical of how they learn themselves?

European Union educational agencies have been quite proactive in recognising and bridging this gap. The developments in the [Life Long Learning \(LLL\) Frameworks project](#) (Council of Representatives of the Governments of the Member States 2006) has yielded eight key competences that an individual needs to cultivate to live and participate in the knowledge society. The European Commission youth programme for non-formal learning "[Youth-In-Action](#)" (2007) has incorporated these key competences into a process for the recognition of non-formal learning called "[Youth Pass.](#)" As it becomes embedded in youth work practice over the next few years, it is crucial that youth workers in my organisation develop a more comprehensive understanding of how they learn.

The key competence Learning-to-Learn is considered critical to the understanding of LLL. Glasersfeld (2000) defines learning-to-learn as: "the ability and willingness to adapt to novel tasks, activating one's commitment to thinking and the perspective of hope by means of maintaining one's cognitive and affective self-regulation in and of learning action" (p. 52).

I find the inclusion of phrases like activating one's commitment to thinking and perspective of hope (ibid..) in an academic definition unusual to say the least. My research led me to discover that the learning-to-learn competence was not a learning theory, but a concept that tries to reflect all the disparate qualities, components, attitudes and values that a person needs in order to learn effectively.

In the course of the research carried out for the Masters in Education and Training Management (eLearning) I chose to enhance and support the awareness among youth workers of their own learning capacity by creating a digital video artifact that explores the concept learning-to-learn. I aim to use video as a means of supporting staff to develop greater awareness of their role as non-formal learning practitioners. The production of a digital media artifact to enhance learning can be considered as a tool to aid people in the construction of their own learning by helping them visualise and comprehend concepts that might otherwise remain distant and theoretical (Colven-Clark & Lyons, 2004; Koumi, 2006).

I intended to design and develop a stop-motion animation that explains the learning-to-learn competence within a non-formal environment. I intended to evaluate this media artifact to determine if it is appropriately designed and helps to develop awareness of the learning-to-learn competence. Stop motion is an animation technique to make a physically manipulated object appear to move on its own. The object is moved in small increments between individually photographed frames, creating the illusion of movement when the series of frames is played as a continuous sequence.

Key Competence and Learning to Learn

Life long learning is defined as the: “lifelong, lifewide, voluntary, and self-motivated pursuit of knowledge for either personal or professional reasons” (Commission of the European Communities, 2006, p. 2). Among the measures undertaken by the EU’s LLL Project was the development of a framework to define what is referred to as basic skills, new basic skills, key competencies, central competencies, problem solving abilities and life-skills that come under the category of lifelong learning (Commission of the European Communities, 2000). This framework became known as the [key competencies for lifelong learning](#). Learning-to-learn is considered the gateway competence or meta-competence (Candy, 1990) since it impacts on the selection, acquisition and application of other competences.

In order to understand learning-to-learn as a key competence it is necessary to explore what is a competence first? Key competences are those competences which are necessary throughout life for continuing to gain employment and be integrated in everyday life activities including those of civil society and decision making (Hoskins & Deakin Crick, 2008). Learning to learn is a competence area where apart from understanding and skills, it is about attitudes, values and beliefs that allow people to become more effective, flexible and self organized learners in a variety of contexts (see Figure 1). Learning-to-learn is more than just acquisition of learning skills – it is also about the desire and enthusiasm to learn (Rogers, 1983; Kolb, 1984).

So from a strictly conceptual viewpoint, competence has a broader meaning than skill and many analysts consider a competence to include several skills (Tiana & Rychen, 2004; Brezinka, 1988). If we accept that distinction, then the concept of competence should be considered as broader, more general and a higher level of cognition and complexity than the concept skill. Within the context of Lifelong learning, competence was defined by Rychen and Hersch-Salganik (2003) as “the internal mental structures in the sense of abilities, dispositions or resources embedded in the individual’ and these function in interaction with a specific real world task or demand” (p. 43). Kegan (2002) also defines competence as something beyond skills and knowledge and argues that the great benefit to a concept like competence is that it directs our

attention beneath the observable behavioral surface of skills to inquire into the mental capacity that creates the behavior.

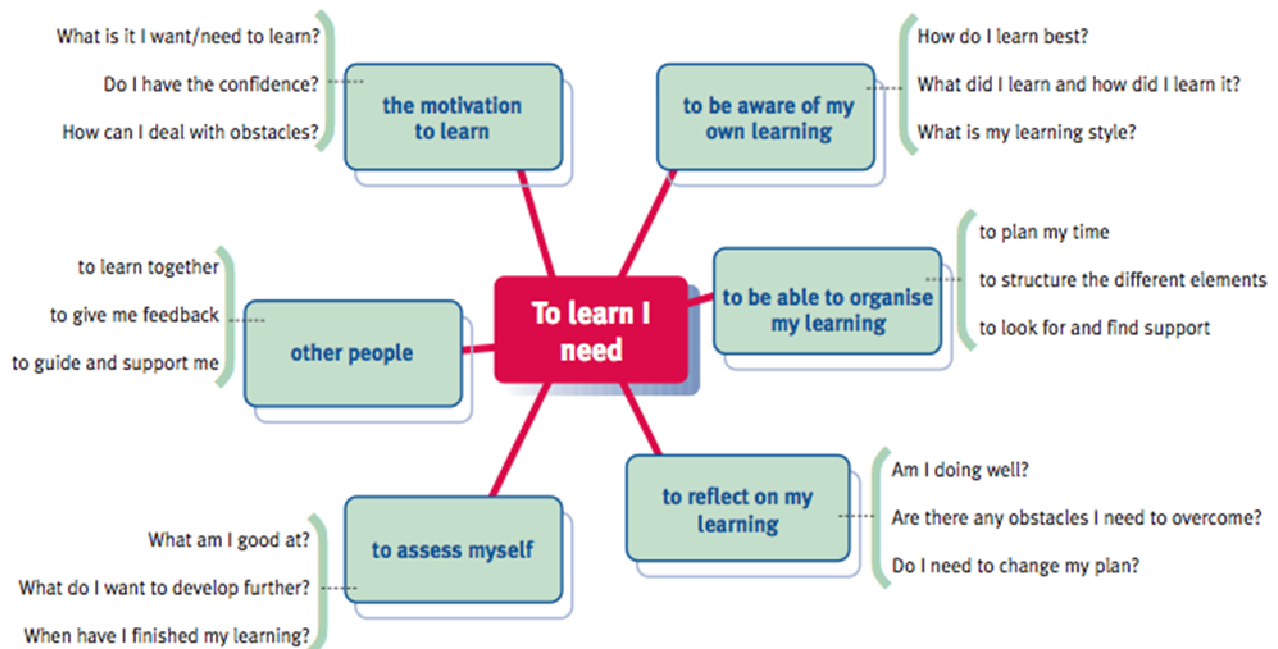


Figure 1. Learning-to-learn model

Although it is important that the learning-to-learn competence should not be considered another name for learning skills and learning processes it also includes non-learning processes such as the ability to organize one's own learning; the ability to identify and overcome learning obstacles; to be able to build on prior learning and life experiences in order to use and apply knowledge and skills at home, at work, in education and training.

Learning-to-learn as a concept is extremely relevant to youth work precisely because of the explicit value it places on attitudes, motivation and desire to learn. The Costello (1984) definition of youth work as adopted by the "[Youth Work Act](#)" clearly sees youth work as a planned programme of education which is complementary to young peoples formal, academic or vocational education and training. And yet over the years, youth work in Ireland has been struggling to develop an identity of its own; an ethos and conceptual framework that is particular to that discipline, as opposed to being seen as an offshoot of social work, probation work or even sport and recreation activities (Jenkinson, 2000). Youthworkers are reluctant to use methods or language that emulate school-based practices as they fear it will alienate service users. Indeed, many youthworkers themselves come from working class backgrounds and have had negative experiences of school, often associating schools with institutional power, conformity, and failure (Smith, 2003). This results in words like teacher, lecture or class being loaded with negative associations that inhibit youthworkers from adopting formal techniques in both their own learning practice or in the learning experiences they facilitate for young people, what Buckingham (2003) refers to as an 'abdication of teaching' (p. 197).

Use of Video as an Educational Tool

While there is much literature on the interpretation of video texts and audience analysis, there is considerably less literature on the production elements of instructional video design (Bates, 1981). Consequently, many instructional videos suffer from a lack of professional competence of the production team (ibid.). More often than not the potential of visuals to increase learning and improve work performance is unrealised (Colven-Clark & Lyons, 2004). Some training materials are a wall of words where visuals are almost non-existent. At the other extreme, some e-learning lessons wrap instructional content in visually rich thematic edutainment treatments to improve motivation. Both of these options defeat learning. Alternatively, many instructional materials in print and on computers, add visuals for merely decorative purposes.

The production of a digital video artifact to enhance learning can be considered as a tool to aid people in the construction of their own learning by helping them visualise and comprehend concepts that might otherwise remain distant and theoretical. Colven-Clark and Lyons (2004) give us insight into how this is possible by exploring how images are cognitively interpreted on different levels. They developed an approach to instructional graphics based on three categories. These are:

- **Surface View:** The Salient features of visuals such as static art (illustration, photo), dynamic art (video, animation) and full virtual reality.
- **Communication function view:** The communication purpose to show motion or to illustrate quantitative relationships.
- **Psychological Function View:** How visuals interact with human learning processes such as attention or retrieval.

(Colven-Clark and Lyons, 2004, p. 8)

Approaches like Colven-Clark and Lyon's make explicit the links between image design and cognitive function by providing a basis to begin developing an instructional video. Clark and Lyons (2003) have developed this idea as a taxonomy of illustration by linking the communicative functions of various visual graphic techniques with cognitive processes. This taxonomy identifies seven ways in which graphics can illustrate and transfer meaning to the viewer:

1. **Decorative:** Add aesthetic appeal or humour.
2. **Representational:** Depict an object in a realistic fashion.
3. **Mnemonic:** Provide retrieval cues for factual information.
4. **Organisational:** Show qualitative relationships among content.
5. **Relational:** Show quantitative relationships among two or more variables.
6. **Transformational:** show changes in objects over space and time.
7. **Interpretative:** illustrate a theory, principle, or cause-and-effect relationships.

To design video successfully for open and flexible learning it is necessary to link theoretical understanding of learning and cognitive processes with the grammar of video production

techniques (Koumi, 2006). The idea of linking cognitive responses to designed images is developed further by Koumi when he links learning processes to actual compositional and visual techniques. Koumi proposes a simple theory that identifies three main areas where instructional video can aid in the learning process:

1. assisting learning and skills development.
2. providing (vicarious) experiences by showing otherwise inaccessible concepts.
3. nurturing (motivations, feeling) broken into two sub areas: (1) determination, motivation, activation and (2) appreciations, feelings and attitudes (Koumi, 2006, p. 10).

Koumi then elaborates on this model by use of a detailed system of techniques that can be used in designing specific images and compositional sequences to address the learners needs. Koumi has developed twenty-nine techniques and teaching functions that he considers add value to instructional video projects (see Table 1). Koumi's techniques provide a valuable tool-kit to help in the design of my video. However he is less explicit in how these techniques can be systematically implemented. [Dick, and Carey's Model](#) (2001) for designing instruction provides a very systematic approach to the implementation of an instructional design process. However, [Kemp, Morrison and Ross's alternative model](#) (2004) is more relevant to my particular research topic - the word instructional needs to be carefully contextualised when referencing this model. My research was focused on facilitating awareness among youth workers of the learning-to-learn competence and not instructing them in how to do so. However, many of the techniques instructional designers use to create educational media resonated strongly with my study. The Kemp-Morrison-Ross model is very flexible and practical means to project manage the production of a digital media artifact. The model has only seven elements but more importantly these elements can be used in any order or disposed of if required.

Koumi's (2006) lists the techniques and teaching functions that exploit video's strengths (p. 3-4).

Distinctive ways to assist LEARNING and SKILLS development:

1. Composite pictures e.g split screen.
2. Animated diagrams exploring processes.
3. Visual metaphor / symbolism / analogy.
4. Modelling a process by a simplification.
5. Illustrating concepts with real examples.
6. Condensing time by editing real life.
7. Juxtaposition of contrasting situations.
8. Narrative strength of TV's rich symbol system.
9. Demonstrations of skills by an expert.

Providing (vicarious) EXPERIENCES by showing otherwise inaccessible:

10. Dynamic pictorial change or movement.
11. Places e.g dangerous / overseas locations.
12. Viewpoints e.g aerial, big close up.
13. Technical processes or equipment.
14. 3D objects, using movement or juxtaposition.
15. slow/fast motion.
16. people/animals interacting, real or drama.
17. one-off or rare events (include archive film).
18. chronological sequence and duration.
19. resource-material for viewers to analyse.
20. staged events, e.g. complex experiments, dramatised enactments.

Nurturing (motivations, feelings):

21. Stimulate appetite to learn, e.g. by revealing the fascination of the subject.
22. Galvanise/spur into action, provoke viewers to get up and do things.
23. Motivate use of a strategy by showing its successes, e.g. exam techniques.
24. Alleviate isolation of the distant learner by showing the teacher or fellow students.
25. Change attitudes, appreciations, gender empathy for people.
26. Reassure, encourage self confidence.
27. Authenticate academic abstractions by showing their use in solving real-life problems.

The concepts of learning-to-learn and competence are particularly relevant to youth work as they recognize the many different forms of learning. They create a language and set of guidelines to help learners reflect and articulate their own experiential learning. Digital video is seen to be a valuable learning tool but the production element of digital video cannot be underestimated.

Action research

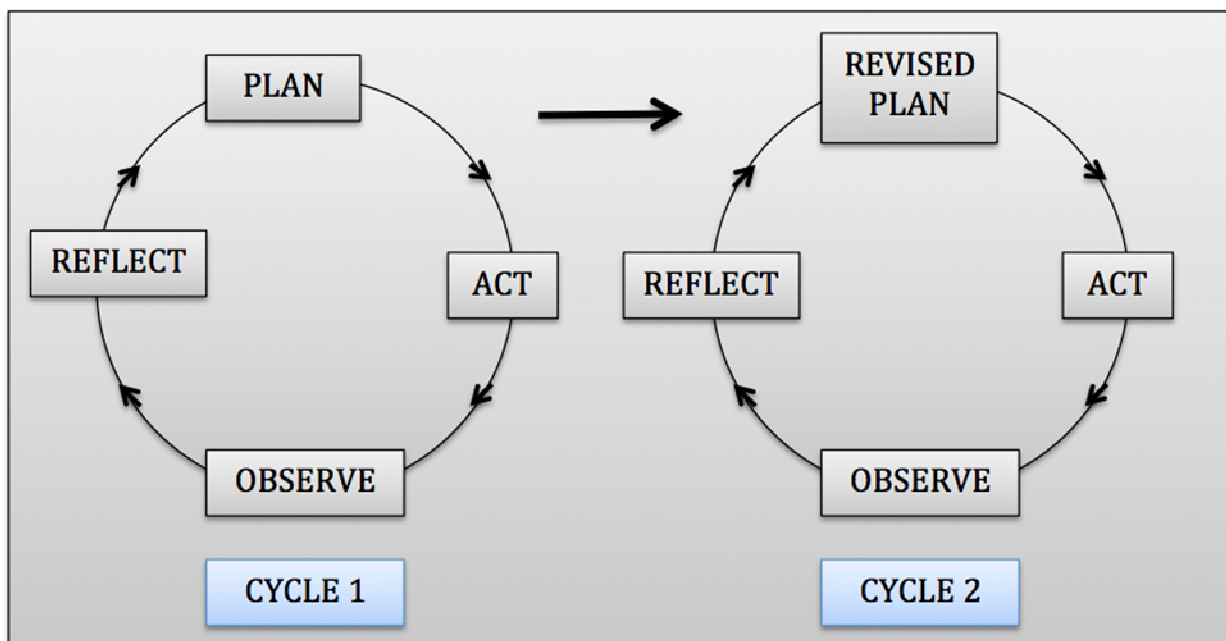


Figure 2. Action Research Protocol after Kemmis (<http://informationr.net/ir/1-1/paper2.html>)

In the case of my research, the direct action of practice was the creation and use of an instructional video artifact that addressed the concept of learning-to-learn within a non-formal context. For my research I adopted the action research model (Figure 2) as articulated by Carr and Kemmis (1986) with its emphasis on a double loop research cycle. I used the first loop of the cycle to research and document my own learning as I constructed the media artifact and planned the session. I took the learning outcomes to assist in the planning of the second loop, which dealt with the implementation of the session and the moderated online forum.

The population consisted of three different stakeholder groups. The first group consisted of two youth workers who work in my organisation. They work directly with young people daily. I also work with this cohort on a regular basis. The second group included two international digital media educationalists. The third group comprised two European based LLL trainers who are considered experts in the field of non-formal learning and have contributed to the formation of the key competences and the European Commission's LLL framework project. Therefore, I hoped to moderate an online discussion with them and encourage their feedback about the video.

The main methods used to collect data included:

Online discussion forums: These provided structured online space for participants to engage in focused dialogue unhindered by time or distance, as many of the contributors were from different countries and different time zones.

Personal learning journal: I maintained an online journal through Dublin City University's Moodle environment. As the purpose of my study was concerned with youth workers reflecting on their own learning it was important that I do also. The journal allowed me to reflect on my work as I progressed through the various stages of the study.

Throughout the duration of the study, I presented my research to my critical friend and my dissertation supervisor, Yvonne Crotty, and a peer group comprising of three non-formal education trainers. The feedback generated from this group gave me insights into my enquiry and ultimately the quality of my conclusions.

Ethical considerations of my study

The main ethical considerations I took on board for this study were:

Confidentiality in implementing and publishing the research

Implications for the relationship I have with the participants especially the participants who I manage directly.

Before conducting the research I approached the Board of Management of my organisation and outlined my research proposal and requested permission to implement it with staff as part of the organisation's training schedule. I outlined the aim of the research to my staff and contributors in the other two groups, reiterating what contribution I was requesting of them with provisional time frames and dates. I stated how I intended to maintain confidentiality around their contribution and details of the credits and publishing. I have not identified the organisations in the research. The names of staff participating in the study have been changed in order to assure their complete anonymity.

Implementation

To provide a graphical view of each cycle, I began my description of each cycle within the framework of Carr and Kemmis (1985) action research cycle (see Figure 3). Themes emerged within these cycles. The first theme emerged as a greater awareness of the challenges in transferring an abstract concept into a tangible non-formal learning tool. A second theme emerged as a greater awareness of the importance of how social construction of meaning can assist in the understanding and improving of learning outcomes.

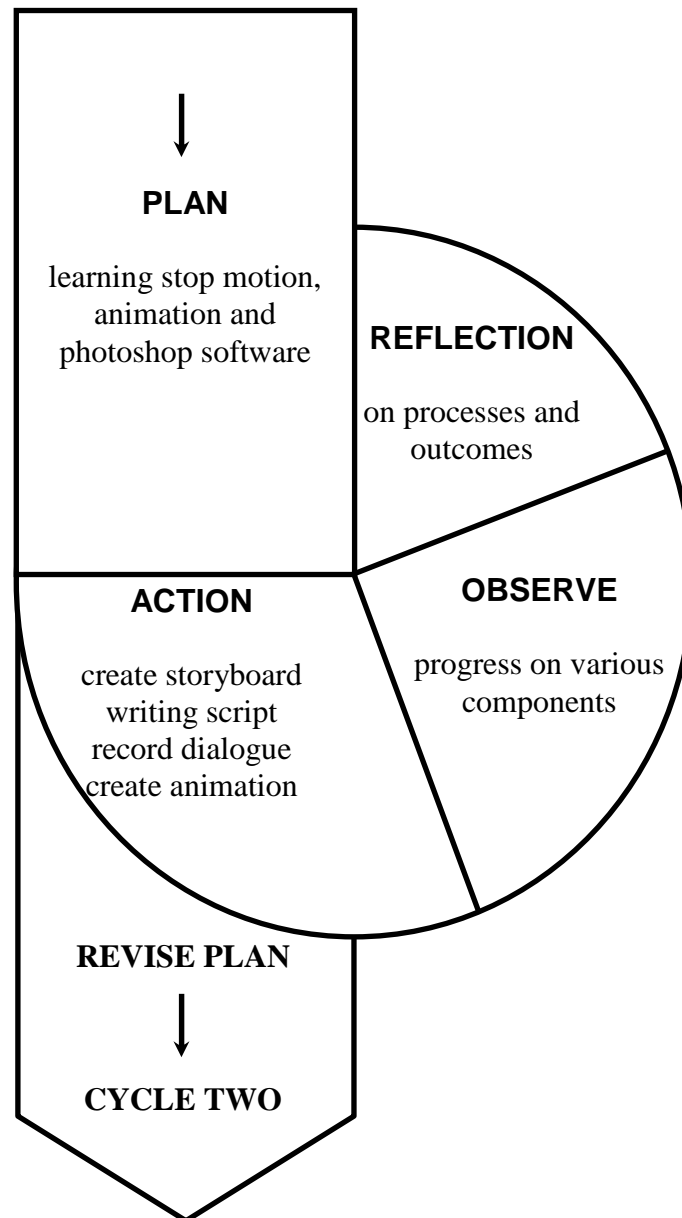


Figure 3. Action research double loop cycle (Carr & Kemmis, 1986, p. 27)

Cycle One: Production

The production cycle involved two considerable challenges for me. The first was the challenge of taking an abstract and multi-faceted concept - the learning-to-learn competence and transforming it into a linear digital media narrative. The second challenge was learning how to use stop-motion animation and use its capacity to create rich visual imagery.

A number of critical production decisions had to be made in the planning stage of the first cycle. I chose a number of software applications to produce the various elements of the project. This was largely an experimental phase, where I sought advice from my supervisor and other media practitioners. I knew I had some experience of animation and I started using [Celtx](#) for the

story-boarding phase but I found the program too large and complicated for my requirements. In the end, the use of powerpoint was just as effective and a lot simpler. I also used Adobe [Photoshop](#) and Apple [Garageband](#) a lot to develop the characters I needed for the animation sequences. While I was somewhat acquainted with both of these applications, it was the first time I had used them extensively. I found instructional videos on Youtube very helpful in skilling up on specific [Photoshop](#) functions quickly.



Figure 4. My DIY stop-motion studio

I chose an entry level software program called [iStopMotion](#) to construct the animation sequences. I chose this because of its simple interface and useful features such as onion-layering (the creation of shadows of previous captured images in the viewer screen) and stock of handy background images. I also had to create an animation studio at home to prepare for the production phase. This involved creating a character canvas platform, lighting and a rostrum stills camera. This took quite a while and was very much a learn-as-you-go experience (Figures 4 & 5). As any stop-motion project requires the capturing of hundreds of images, it is important to have a good set up. Most important is to have your camera set up in a secure position to provide consistency for all photo capturing.

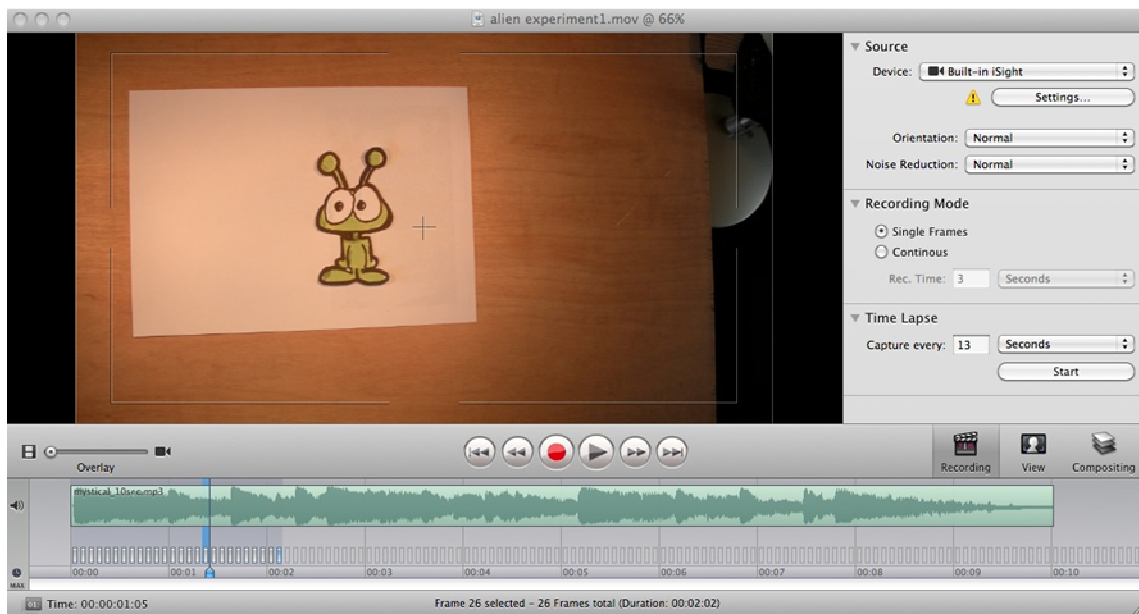


Figure 5. Setting up and learning how to use iStopMotion

Learning-to-learn competence: Breaking down the competence and constituent elements into a linear narrative

It was my intention to create a piece of media that relied on rich visual composition to convey meaning. I also chose conversational dialogue rather than monologue. I did this to try and avoid mimicking the formal learning scenario of creating an expert character that explains to a passive learner that listens and absorbs. This was in keeping with my approach to learning, which I consider to be heavily influenced by social constructivism. This is the theory that groups construct knowledge for one another in collaborative, social settings, creating a small culture of shared artifacts with shared meanings and best exemplified by the work of Lev Vygotsky (Cole & Wertsch, 1996). I also believed it was important that the compositional framework I chose avoided conventional learning environment scenarios such as schools or training environments. This reflected my belief that it is important to use non-formal environments to practice non-formal learning rather than relying on formal means to do so. For this reason I chose a linear narrative structure to progress and elucidate the aspects of the learning-to-learn competence.

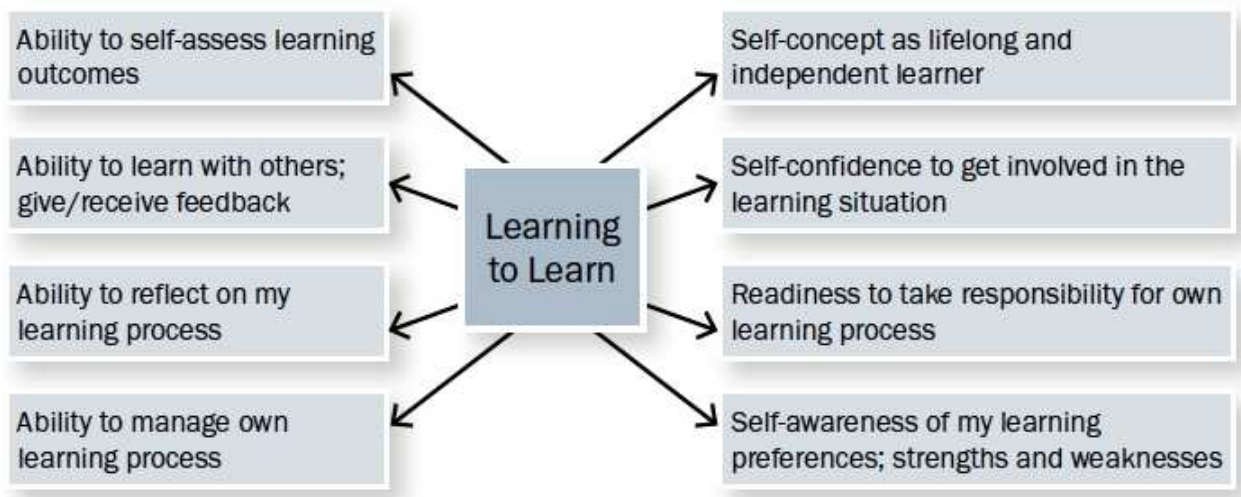


Figure 6. Learning-to-learn Competence diagram (Marković & Mitter-Škulj, 2009, p. 76)

It was also necessary for me to review the constituent elements of the learning to learn competence in order that it would fit into a linear narrative. The definition and explanations of the competence described (Rogers, 1983; Kolb 1984; von Glasersfeld, 2000) cover a wide variety of components including attitudes, values, skills and conditions. I had to find a way of modifying my understanding of the learning-to-learn competence into separate elements that could be threaded into a linear story narrative. I found a simple model designed by Marković and Mitter-Škulj (2009) to explain the competence as eight distinct elements or aspects of the learningtolearn competence (Figure 6). I used this idea to divide the competence into sections that could be conceived of as different but connected scenes of a narrative sequence.

Competence: Developing Compositional Framework and Narrative Sequence to explain Concept

To develop the compositional framework for the animation sequence I needed to have a story treatment. I was also advised by my critical friend to record the dialogue before I start to animate. By doing this, I would be able to time and synchronise the animation efficiently. In the action phase of the project I developed a script and recorded it on Apples' Garageband application with the help of some family friends and a youth work colleague.

After much thought and experimenting I decided on a narrative that revolved around an alien character travelling on a quest to earth. The quest would involve him engaging with the learning-to-learn competence as part of his quest. His quest would resemble a tour through a small town guided by a human character who uses unremarkable, common-place examples of life to demonstrate the constituent elements of the leaning-to-learn competence. Shaping the narrative around an alien character was used to address a specific challenge of presenting the competence visually (see Figure 7). The creation of a naive character (the alien) who could plausibly ask any question, allowed me to include material and dialogue that would otherwise seem didactic and possibly patronising.

Another aspect that I had to address in the planning and action phases of the first cycle was the requirement to base the narrative clearly within a youth work context. I wanted to develop a media artifact aimed at youth workers. It was important that the vocabulary, locations and images used would clearly resonate with anyone working with young people in a non-formal/informal environment. I chose internationally ubiquitous locations like a classroom, an internet room, a fishing pier, a cafe, a newsagents and a bus-stop. I also based the story in a small town, as most youth workers work in specific and small geographical regions where they are familiar with the main establishments that young people frequent.

Use of Instructional and Design Models

The visual narrative I created identifies with Colven-Clark and Lyons' (2004) interpretation of instructional graphics. The surface view was represented by the static storyboard illustrations and animation sequences. The communication function view was represented by the illustration of quantitative relationships (particularly the relationship between Lenny the alien and Gus the fisherman throughout most of the narrative). The psychological function view was made explicit by highlighting and demonstrating how the visuals interacted with explicit human learning processes in the unfolding of the learning-to-learn concept (such as Gus' difficulty in learning how to fly-fish properly).

While drafting the treatment, script and storyboards I frequently reviewed Koumi's (2006) work on techniques and teaching functions that exploit video's strengths. While Koumi refers to video, most of the techniques he lists apply equally to animation. Many of Koumi's listed techniques are used in my production process:

The use of an alien as the main character is a visual metaphor for the viewer. By being a naive and unknowing alien being, the character asks questions to progress the narrative along for the viewer. The Alien's quest represents the viewer's curiosity.

This character is simply portrayed as the little green alien to establish the context and motivation of the main character quickly and easily.

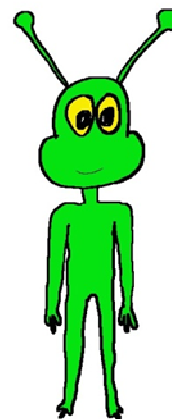


Figure 7. Visual metaphor/symbolism/analogy

The animation represents a breaking down of the learning-to-learn competence into a set of simple unit scenarios that makes the understanding of the competence more explicit and accessible.

For example this image identifies a library (an international symbol of learning) as the back drop to a scene.

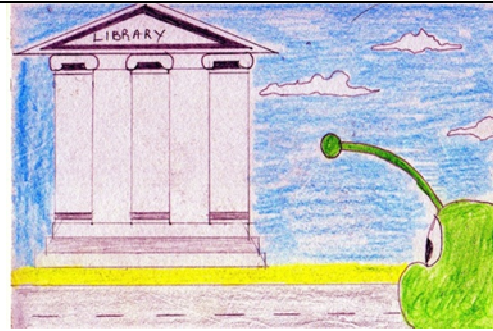


Figure 8. Modeling a process by a simplification.

Each scene of the animation was based on a real life example. For example, the ability to learn with others and give/receive feedback is explained in a scene involving football coaching.



Figure 9. Illustrating concepts with real examples.

There is precise control over what the learner experiences in pictures, speech, sound effects, motion, pacing and sequence, which enables a tightly structured educational narrative. Use of this symbol system allowed me to maintain the viewer's focus on the alien's quest - exploring the learning-to-learn competence.

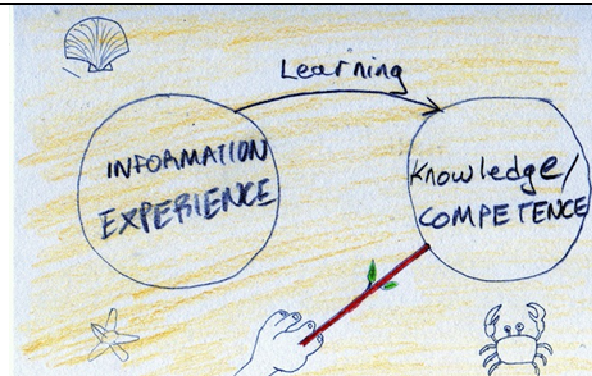


Figure 10. Narrative strength of TV's rich symbol system.

This is an effective way to explain dynamic processes that are not possible to represent in real life scenarios. For example, the last scene of the animation project sees the alien character review his learning represented by thought bubbles. These thought bubbles act as animated diagrams to represent the eight aspects of the learning-to-learn competence that have been integrated in the preceding narrative.

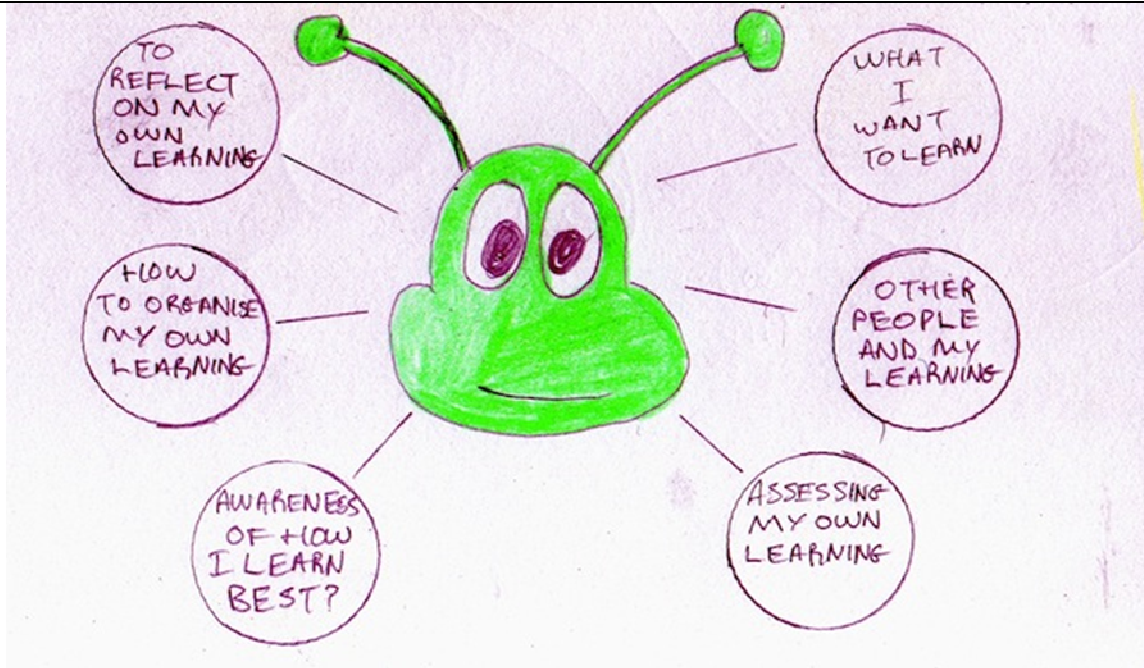


Figure 11. Animated diagrams to explore processes

Authenticate academic abstractions by showing their use in solving real-life problems. This is done by showing how the learning-to-learn competence can be applied to real youth work scenarios. Showing the application of an abstract concept like learning-to-learn is likely to help in their understanding of their own learning development and illustrate why it is relevant to the development of the young people they work with. However, a stronger and more direct influence of showing such application is effective. That is, when the animation demonstrates that a concept can be applied to solving a real problem, this gives authenticity to the concept. The viewer now appreciates the point of all the learning-to-learn competence.

Use of Kemp, Morrison and Ross' Model to Implement Video

Throughout the planning, implementation and observation phases of the first action research cycle it was difficult to structure my thinking and reflection on the various aspects of the project. I used the Kemp, Morrison and Ross' (2004, p. 29) [Instructional design model](#) to support this process. I found it a practical tool to help navigate my way through the cycle. I inserted project details and requirements under the relevant headings and reviewed them regularly to ensure that I had not deviated substantially from my project objectives. Because the Kemp-Morrison-Ross model is not a linear-consecutive instructional model it gave me the flexibility to manage different aspects of the project simultaneously.

Reflection on Cycle One

In my evaluation of this cycle, I discovered how challenging it was to transfer an abstract concept (learning to learn competence) to a sequence of visual images and dialogue. The decisions to use a story narrative and to make the main character an alien were significant in overcoming this challenge. Both of these decisions, which are essentially elements of creative storytelling were unintended. I had originally avoided creative narratives as I felt it was amateurish and at odds with the academic rigour I wanted to apply to the project. On reflection and in discussion with my supervisor, I had underestimated how important it was to engage creatively with the project - as it was eventually these creative decisions that moved the project significantly towards my objectives.

I became so focused on what I considered was the necessity to acquire the skills of stopmotion animation that I almost forgot my purpose in designing the media artifact. In being focused on getting the technical aspects, the image scaling and digital detail working properly, I had overlooked the potential of my storyboards. I had put much effort into my storyboards, drawing them to scale and using full colour. A practicing artist and actor who I used to record dialogue commented on the storyboards and said that there was “charm, atmosphere and humour” – in the simple drawings. But such was my lack of confidence in my own drawing ability I did not consider developing the storyboards further.



Figure 12. Storyboards: Hand drawn illustrations

However, delays in the stop-motion production meant I was considerably behind with my time-frame and needed to present my media artefact to validation group for feed-back. I was quickly coming to the realisation that the stop-motion phase would take considerably longer than I had imagined and that it would not be possible for me to complete it in the original time-frame. So instead, I created an [iMovie](#) – of the story-boards complete with edited dialogue (see Figure 12). I was able to publish this online and share it with my validation group within a reasonable timeframe.

Cycle Two: Testing & Feedback

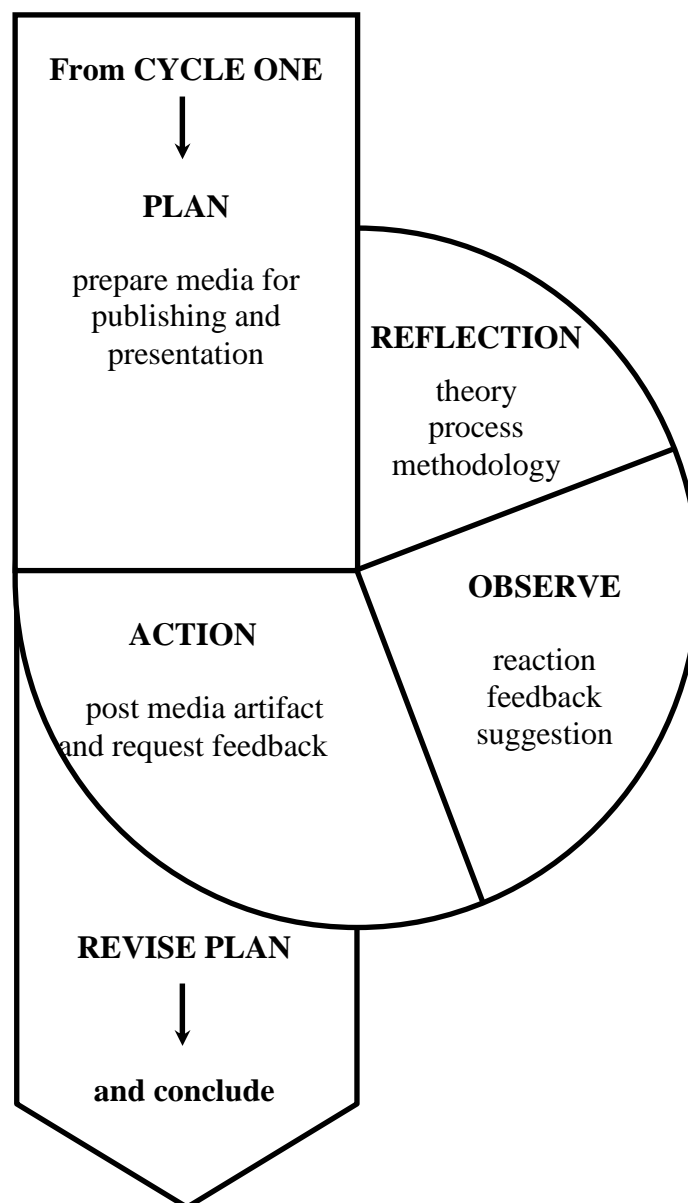


Figure 13. Carr & Kemmis Cycle 2: Feedback

To provide a graphical view of each cycle, I will begin my description of each cycle within the framework of Carr and Kemmis (1986) action research cycle (see Figure 13). The peer group comprised of two staff members from my organisation, three international trainers from the EU

youth training agency SALTO and two digital media educationalists based in Belgium and California. I posted the movie with the working title “Lenny learns how to learn.” I decided to give a very basic explanation for the posting and a simple request to give me feedback. I did this because I felt that despite their likely interest in such a posting - I could not presume that they would be inclined or have adequate time to send me detailed feedback. I clearly wrote that this was simply a storyboard of a more substantial animation sequence that I would be undertaking. The feedback I got back was very positive:

I must tell you that I really enjoyed watching the ppt storyboard and think it is a nice way to bring this abstract concept down to earth. (D. M. - SALTO trainer, personal communication, April 5, 2010)

I am impressed with all the work you have put into the sketches. Will you animate those illustrations? (B. M. - digital media educationalist, personal communication, April 11, 2010)

Learning to learn is explained very well and would give anyone a good understanding of what it is meant just by watching this. I love the example using football, thought this was very clever and well put. (D. O’C. – youth worker, April 11, 2010)

I think that the concept is very visual and an excellent way to communicate to a wider audience. The stop motion animation is a great idea, fun and informative. I think that the overview at the end really enhances the piece. (M. O’C. – youth worker, April 11, 2010)

This feedback was a great relief to me as I had been working in a social vacuum until that point. But I wanted to move beyond well meaning platitudes and get some specific feedback on ways of improving the animation. I followed up their response with an email that asked for feedback on the posting. In particular I asked two specific questions:

Question 1: Are the main aspects of learning-to-learn are being addressed?

All my peers felt I had responded well to the brief and that the main aspects of the learning-to-learn competence were evidenced within the storyboard. Darko however, who was quite specific in his feedback mentioned three other aspects of the competency he thought I could include:

Regarding your question, it seems to me all most important aspects of learning-to-learn are there. I would perhaps also think about:

- a. seeing yourself as lifelong learner
- b. being positive/passionate about learning and
- c. being open to learn from the unexpected situations (not only through planning of your learning). (D.M. - SALTO trainer, personal communication, April 5, 2010)

Question 2: The narrative is plausible?

B.M. answered the question specifically:

I don't think it is distracting to incorporate you concepts for learning to learn into a story. There is a lot of exposition from gus about different concepts related to learning to

learn. I think it generally works as a dialogue back and forth. (B.M. - digital media Educationalist, personal communication, April 11, 2010)

All respondents remarked that the duration of the story was too long (running at 16 minutes 28 seconds). M.T suggested that I could break the story up into shorter episodes. A

technical criticism made by both M.T. and D.M. (both international trainers) was that the sound was hard to hear at times and should be improved if possible. I had designed the media artifact to be accessible to non-native English speakers, and so this was a significant piece of feedback. Other criticism also pointed out that some of the scenes were too wordy: "You'll need to be aware of not giving Gus too much to talk about, otherwise you'll end up with Gus delivering a formal lecture on non-formal learning" (B.M. - digital media Educationalist, personal communication, April 11, 2010)

Improvements and Modifications

On reflection there are a number of modifications I will make to the final media artifact as a result of the feedback from my supervisor and peer group that was emailed to me.

- **Clip duration:** The piece is too long and would only retain the most committed of viewers to the fourteenth-minute. I will reduce the clip to a nine-minute sequence.
- **Dialogue:** I need to shorten the amount of dialogue in each scene. This will be to help reduce the overall video length but also to reduce the amount of dialogue used to describe each learning-to-learn component in particular Gus the fisherman, who has a number of large descriptive monologues. I will do this by creating more dialogue between Gus and Lenny.
- **Re-cycling images:** B.M pointed out that I could re-use and develop further some image metaphors rather than creating new ones that take precious seconds to establish and contextualise for the viewer. An example of this is replacing the use of the bus-stop sign in a later scene with a return to the football scene from earlier in the story.
- **Cleaning up voices:** I treated many of the voices with filters to make them sound alien. I realise now that this makes the voices hard to understand, especially to a non-native English speaker. I have decided to maintain and improve the static i-movie illustration I have developed from my storyboards for my final thesis rather than progress to the stop-motion production phase. This is perhaps the most significant change I am making based on the reflection of cycle 1 and 2. I am doing this because the feedback I have received leads me to believe that the story-board movie is adequate on its own to meet my thesis objectives.

Reflections

During the process of undertaking my research, I formally presented my work on two occasions to participants in the M.Sc Education and Training Management (eLearning) class in DCU (19th December 2009 and 15th May 2010). I corresponded by Skype with my critical friend (4th April and 17th April 2010) and corresponded with my dissertation review group frequently by email. I engaged with my dissertation supervisor throughout the research process.

I have addressed my contradiction-in-practice (Whitehead, 1989) by recognizing and engaging the challenge of providing meaning and context for non-formal learning outside of formal learning institutions. I understand Winter's (1989) idea of risk by recognizing the need to trust my own capacity for creativity and value it. I have worked in collaboration with colleagues, peers and mentors and acknowledge their contribution and positive influence on my thinking and research. This research was undertaken through a process that involved the use of collaborative dialogue, critical thinking, the use of media and online technologies, application of theory to practice and imagination. This has resulted in a transformation of my understanding of non-formal learning and its relationship to formal learning and digital media technology.

Two clear themes emerged through reflection on my research enquiry. The first one is based on the challenges of demonstrating abstract ideas within a non-formal learning environment. My objective was to take an abstract theoretical concept and present it in a non formal accessible medium (an animated video artifact). However, I became so focused on what I considered were acceptable skill thresholds (quality of the animation) and acceptable formats (stop-motion) that I almost lost sight of the objective – to create awareness of the learning to learn competence. In conversations with my supervisor, it was brought home to me that it was my own creative inputs that were the most significant aspects of the process (creating the narrative, creating the storyboards) and not the skilling-up and application of specific software programs or video techniques.

The second theme relates to my belief in the socially constructed nature of learning. Much of my significant learning came in the second cycle when I had the opportunity to receive feedback from other people. If I had engaged these people earlier in the process it is likely that their feedback and input would have helped me progress much quicker. On reflection, I found it particularly difficult working in a social vacuum.

My Learning

The research study provided me with an opportunity to explore a fundamental aspect of youth work practice (how youth workers learn how to learn) and contribute to the understanding of learning in my own organisation (creation of educational media artifact). The feedback I received through consultation with my supervisor and peer group was very positive and has allowed me to improve the final media artifact in order to make it more focused, clear and accessible. It has also given me the confidence to share my research outcome within the wider youth work community.

Conducting the research challenged my understanding and attitude towards learning in many ways. Perhaps my greatest learning took place with the realisation of the importance that creativity had in my research. The focus of the multimedia element of the Masters programme

was on the production of digital narratives of learning to stimulate creative enquiry, reflection and innovation in practice (Crotty, 2009a, 2009b, 2010). At crucial stages in the planning and production of the digital media artifact it was my own capacity to be creative that led to solutions. The development of an imaginative story narrative and the decision to use the hand-drawn story board illustrations in the final media artifact were both creative acts that moved the research forward and overcame the challenges of acquiring technical skills in stop-motion. The significance of my own creative input came to me when I thought about something D.M. had said in one of his emails when we were discussing the constitutive elements of the learning-to-learn competence: “Being open to learn from the unexpected situations (not only through planning of your learning)”

(D.M., personal communication, April 5, 2010). I had been so focused on evaluating what I had planned to do, that I had almost neglected to evaluate and reflect on what was unplanned.

Conducting the research and creating the animation required me to use several new digital technologies that I was unaccustomed to using. Also very significant was the engagement I had with the course online communication application tool – Moodle throughout the course of my study at DCU. The research experience also reinforced for me the social interactive process of learning and use of online communications forum as each individual develop their own sense of being as they learn in relation with others (Farren, 2006).

I had made most progress on my research when I was able to share it with others. This happened throughout the year through Moodle and also occasionally with fellow students and through lectures, presentations or informally over coffee. Feedback from my dissertation review group and my supervisor in Cycle Two was crucial to unblocking many of the problems I had in moving my research forward.

References

- Bates, A.W. (1981). Towards a better research framework for evaluating the effectiveness of educational media. *British Journal of Educational Technology*, 12(3), 215-233.
- Brezinka, C. (1988). Competence as an aim of education. In B. Spiecker and R. Straughan (Eds.), *Philosophical issues in moral education and development*. Milton Keynes: Open University Press.
- Buckingham, D. (2003). *Media education: Literacy, Learning and Contemporary Culture*. Cambridge: Polity Press.
- Carr, W. & Kemmis, S. (1986). *Becoming Critical: Education, knowledge and action research*. London: Falmer Press.
- Clark, R. & Lyons, C. (2003). More than Just Eye Candy: Graphics for e-Learning: Part 1. Retrieved February 20, 2010, from <http://www.learningsolutionsmag.com/articles/332/more-than-just-eye-candy-graphics-for-e-learning-part-1/printnder>
- Cole, M. & Wertsch, J. (1996). *Contemporary Implications of Vygotsky and Luria*. Worcester, MA: Clark University Press.
- Colvin-Clark, R., & Lyons, C. (2004). *Graphics for Learning*. San Francisco: Pfeiffer.
- Commission of the European Communities. (2000). A memorandum on lifelong learning (Commission Staff Working Paper). Retrieved February 18, 2010, from <http://www.bologna-berlin2003.de/pdf/MemorandumEng.pdf>
- Commission of the European Communities. (2006). *Adult learning: It's Never too late to Learn*. Brussels: Commission of the European Communities.
- Costello, J. (1984). *The Costello Report into Youth Work Policy in Ireland*. Dublin: Government Publication.
- Council of Representatives of the Governments of the Member States (2006). *On the recognition of the value of non-formal and informal learning within the European youth field*. Brussels: Official Journal of the European Union.
- Crotty, Y. (2009a). *Having a Vision for your own Learning by Creatively using Digital Technologies in a Research based Masters programme*. Paper presented at the Educational Studies of Ireland (ESAI) Conference, Kilkenny, Ireland.
- Crotty, Y. (2009b). *The Importance of Assessment for Learning when Creatively using Digital Technology and Web 2.0 Technologies in a Research based Masters programme*. Paper presented at the International Diverse Conference. Aberystwyth University, Wales.
- Crotty, Y. (2010). *Should we Judge a Book by its Cover? Addressing Visual Literacy and Creativity at Third Level*. Paper presented at the International Diverse Conference. Portland, Maine, USA. Retrieved November 28 2011, from <http://diverse2011.dcu.ie/diversepublications.html>

- Dick, W., Carey, L., & Carey, J. (2001). *The Systematic Design of Instruction* (5th ed.). New York: Addison-Wesely/Longman.
- Farren, M. (2006). How am I Creating a Pedagogy of the Unique through a Web of Betweenness? (Doctoral dissertation, University of Bath, 2006). Retrieved May 2011, from <http://www.actionresearch.net/farren.shtml>
- Hoskins, B., & Deakin Crick, R. (2008). *Learning to Learn and Civic Competences: Different Currencies or Two sides of the Same Coin?* Luxembourg: Office for Official Publications of the European Communities.
- Jenkinson, H., (2000). Youth Work in Ireland: The struggle for identity. *Irish Journal of Applied Social Studies*, 2(2). Retrived January 27, 2010, from <http://arrow.dit.ie/ijass/vol2/iss2/6/>
- Kegan, P. (2002). *Mental Demands of Modern Life: Implications for Defining Competencies*. Cambridge, Mass: Harvard University Press.
- Kemp, J. E., Morrison, G. R., & Ross, S. V. (2004). *Design Effective Instruction* (4th Ed.). New York: John Wiley & Sons.
- Kolb, D.A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. New Jersey: Prentice-Hall.
- Koumi, J. (2006). *Designing Video and Multimedia*. London: Routledge.
- Marković, D. & Mitter-Škulj, S. (2009). Hopscotch to quality in EVS. Ljubljana: SALTO South East Europe Resource Centre.
- Morrison, G.R., Ross, S.M., & Kemp, J.E. (2004). *Designing Effective Instruction* (4th ed.) New York: Wiley.
- Rogers, C. (1983). *Freedom to Learn. A View of what Education might Become*. Ohio: Charles Merrill.
- Rychen D.S., & Hersch-Salganik, L. (Eds.) (2003). *Key Competencies for a Successful Life and a Well-functioning Society*. Göttingen: Hogrefe & Huber.
- Smith, M.K. (2003). From Youth Work to Youth Development: The new Government Framework for English Youth Services. *Youth and Policy*, 79. Retrieved January 27, 2010, from http://www.infed.org/archives/jeffs_and_smith/smith_youth_work_to_youth_development.htm
- Tiana, A., & Rychen, S.D. (Eds.) (2004). *Developing Key Competencies in Education: Some Lessons from International and National Experience*. Genève: UNESCO, IBE.
- von Glasersfeld, E. (2000). Scheme Theory as a Key to the Learning Paradox. In: A. Tryphon, & J. Vonèche (Eds.). *Working with Piaget*. Hove: Psychology Press.
- Whitehead, J. (1989). Creating a Living Educational Theory from Questions of the Kind, "How Do I Improve my Practice?" *Cambridge Journal of Education*, 19(1), 41-52.
- Winter, R. (1989). *Learning from Experience*. London: Routledge-Falmer.