Supporting vocational and career development learning in ACE: Implications for VET teachers and VET teacher educators

Catherine Arden

Senior Lecturer in Adult and Vocational Education

School of Education, Faculty of Business, Education, Law and Arts

University of Southern Queensland, Toowoomba Qld

UNIVERSITY OF SOUTHERN QUEENSLAND AUSTRALIA

Abstract

The ability to successfully navigate career pathways and transitions is a 21st century skill that requires an ongoing engagement in learning to manage change (Field, Gallacher & Ingram, 2009). However it has been argued that "privileged social groups enjoy a seamless integration of different types of learning that is denied to the disadvantaged" (Colley, Hodkinson & Malcolm, 2003 p. 109). These so-called 'disadvantaged' include people who are marginalized due to unemployment, geographic or social isolation, poverty, disability, language and literacy barriers, learning difficulties and cultural differences.

As the education sector firmly located closest to the community and embracing an informal and learner-centred approach, the Adult Community Education sector (ACE) and community-based models such as place-based learning communities and community volunteering and service learning programs are well situated to support delivery of the kinds of vocational and career development learning opportunities that cater for these diverse learners (Arden, 2016a, 2017). But what kinds of pedagogies can teachers and trainers use to facilitate their students' vocational and career development learning? And how can VET teacher educators empower VET teachers to use their influence to help learners make the all-important connections between different learning types and settings in order to successfully navigate their lifelong learning transitions and pathways?

Overview

This presentation highlights the vocational and career development learning experiences of a small group of marginalised young people completing community volunteering placements with a community-based social enterprise called GraniteNet in a small rural town in South-East Queensland. It reports the findings of a phenomenographic study conducted with 20 community volunteers in the organisation exploring their experiences of informal learning in the context of their community volunteering work.

The presentation begins with a brief literature review on informal learning and learning in associational life. The study's methodology and broad findings are then briefly outlined. Key findings revealing the lived experience of vocational and career development learning of the younger community volunteers participating in the study are highlighted.

Some implications for the work of VET teachers and VET teacher educators are then considered.

Learning in community associational life – *la vie associative*

- "[t]he history of adult education has been a history of voluntary activity and voluntary association" (Ilsley, 1989); A "long association between civic engagement and adult learning" (Field, 2005)

- Voluntary associations as "expansive [informal] learning environments" (McGivney, 2006) where people learn on their own terms

- A club or community of interest is a group "engaged in the task of educating itself" (Macalister Brew, 1943, as cited in Smith, 2002, p. 5)

- Participation in "small group democracy" seen to have a significant educative effect (Duguid, Mundel & Schugurensky, 2013; Kavanaugh et al., 2007, 2009) – linked to "participatory democracy theory" (Dewey, 1916 as cited in Duguid et al, 2013)

- Significant and valuable learning is not only learning that is considered significant by scholars because it involves "changes in the self", such as "expansive, transitory and transformative learning" for example (Illeris, 2007, p. 45), but also learning that "furnish[es]...direct increments to the enriching of lives" and/or serves an instrumental purpose for the learner in terms of being a means to a desired or valued end (Dewey, 1916).

- Digital technologies and the internet expand informal learning opportunities even further (Imel, 2003; Candy, 2004; Merriam et al 2007; Sangra & Wheeler, 2013)

Defining informal learning

…a natural way of learning and part of our everyday life and work activities (Cross, 2007)

…structured and/or unstructured, intentional and/or incidental, conscious and/or unconscious, generally learner-controlled and directed

(Wofford, Ellinger & Watkins, 2014)

…learning from others + learning from personal experience

(Eraut, 2010)

…learning to make appropriate context-specific judgements

(Hager & Halliday, 2006)

Researching informal, 'everyday' learning: Making the invisible visible; exploring the hidden dimensions of adult learning

- Informal community learning settings are where much of adult learning takes place (Merriam et al, 2007) and need to be recognised as sites of significant and valuable learning in order to "cultivate the possible" of community learning futures (Bruner, 2012)

- Most respondents in workplace learning studies still equate 'learning' with formal education and training (Eraut, 2011). They lack awareness of their own learning and are reluctant to name activity as 'learning' and have difficulty describing their own learning (Eraut, 2011)

- "Research on the informalisation of learning [in the context of Web 2 and emerging digital technologies] is still in its infancy" (Sangra & Wheeler, 2013, p. 291).

- "More could be done on developing qualitative research methods that might give us a deeper understanding of informal learning...in different contexts..." and help us to understand "what happens in people's heads" (McGivney, 2006, p. 43)

- Enter phenomenography: *"By learning about how the world appears to others, we will learn what the world is like, and what the world could be like"* (Marton & Booth, 1997)

Phenomenography and Variation Theory

- **Knowledge Interest:** How do people (best) learn about the world and phenomena in the world? Traditionally used to investigate the experience of learning from the learner's perspective in formal education settings

- **Premises:**
  - Learning is relational – about the relation between the self and the world (and phenomena in the world)
  - Discerning variation brings about learning
  - Learning is expanding awareness: coming to know and understand the world and phenomena in the world in deeper, more complex, more meaningful ways
  - By learning about how others see the world, we will learn what the world is like and what the world could be like

- **Phenomenography:** researcher/learner discerns variation in respondents' conceptions and experiences (of a phenomenon) and categorises and maps them

- **Variation theory:** theorises about these different conceptions and how learning about [something] is represented and facilitated (e.g. "deep and surface approaches" to learning; "threshold concepts")

Marton, 1988; Marton & Booth, 1997; Bruce, 2006; Pang, 2003

Investigating informal adult learning in Community Informatics: The 'case' of GraniteNet

What is GraniteNet?

- Began in 2006 as a PAR&E [1] partnership between USQ and Stanthorpe community

- Project vision: *a community designed, owned and managed web portal to support development of Stanthorpe as a 'learning community'*

- **Hybrid community learning space:**
- GraniteNet Inc social enterprise + GraniteNet community technology 'hub' + GraniteNet community web portal – www.granitenet.com.au

What is Community Informatics?

- "Enabling communities with ICTs"[2]
- Community Technology Centres, Community (Civic) Networks, Community Portals

What is a 'learning community'?

A geographic community (town, city) that explicitly adopts a "learning-based approach to community development"[3]

[1] Participatory Action Research; [2]Gurstein (2000, p. 1); [3]Faris (2005, p. 31)

Research design

Single site instrumental case study

- Practice problem: (How) does GraniteNet (as a CI-LC Project) support the development of Stanthorpe as a 'learning community'?

- Research Question: How do the members of GraniteNet's various communities of interest and practice experience learning in the context of their involvement in GraniteNet's activities and/or use of the community web portal?

- Sub-questions: What are people learning? What makes learning possible? How is learning experienced by respondents? What difference does 'I.T.' make to people's learning?

Qualitative, Interpretive, Phenomenographic

20 (adult) respondents – GraniteNet volunteers

Structured face-to-face interviews (including two mind maps) + two-page questionnaire

- 'Discovering' respondents' conceptions and experiences of learning in the context of their involvement in GraniteNet

- 'Devising' categories of description to illustrate variation (difference)

- 'Mapping' conceptions and experiences of learning in GraniteNet into an 'outcome space'

- Interpreting the "outcome space" and theorising about the nature of informal learning in GraniteNet

Phenomenographic Interview Design: Different forms of knowledge, different ways of thinking, "different reals of experience"[1]

- Association, radiant thinking[2]

  +

- Bloom's (revised) taxonomy[3] (Cognitive and affective domains)

  +

- Critical incident analysis

  +

- Learning metaphors[4] (personal epistemologies – conceptions of learning, knowledge and knowing)

- **Steps 1a and 1b:** **Mind maps** of "*GraniteNet*" and "*Learning in GraniteNet*" - tapping into tacit and experiential knowledge (narrative, affective)

- **Step 2:** **Scenario** (declarative knowledge, imagining)

- **Step 3:** **Critical incident/anecdote** (narrative, reflection, experiential, affective)

- **Step 4:** **Demonstration** (procedural knowledge, problem-solving, practical)

- **Step 5:** **Talking about and evaluating digital and information literacy skills** (interpretation, reflection, evaluation)

- **Step 6:** **Imagining 'my learning space** on GraniteNet' (interpretation, imagination, creation)

[1]Dewey (1905, as cited in Biesta, 2009, p. 65); [2]Buzan & Buzan (2000); [3]Anderson & Krathwohl (2001); [4]Bailey (2003); Candy (2004); Edwards and Bruce (2006); Hager and Halliday (2006); Sfard, (1998)

Phenomenography: Structural and referential components of a conception

Subject =

the members of GraniteNet's various communities of interest and use

(respondents)

Relationship

- Ways of seeing + ways of experiencing

Object = learning in GraniteNet

(content + process + environment)

Includes ways of seeing how others see and experience learning in GraniteNet

Referential Component (what the object means to the subject)

+ Structural Component (the structure of the subject's awareness of the object)

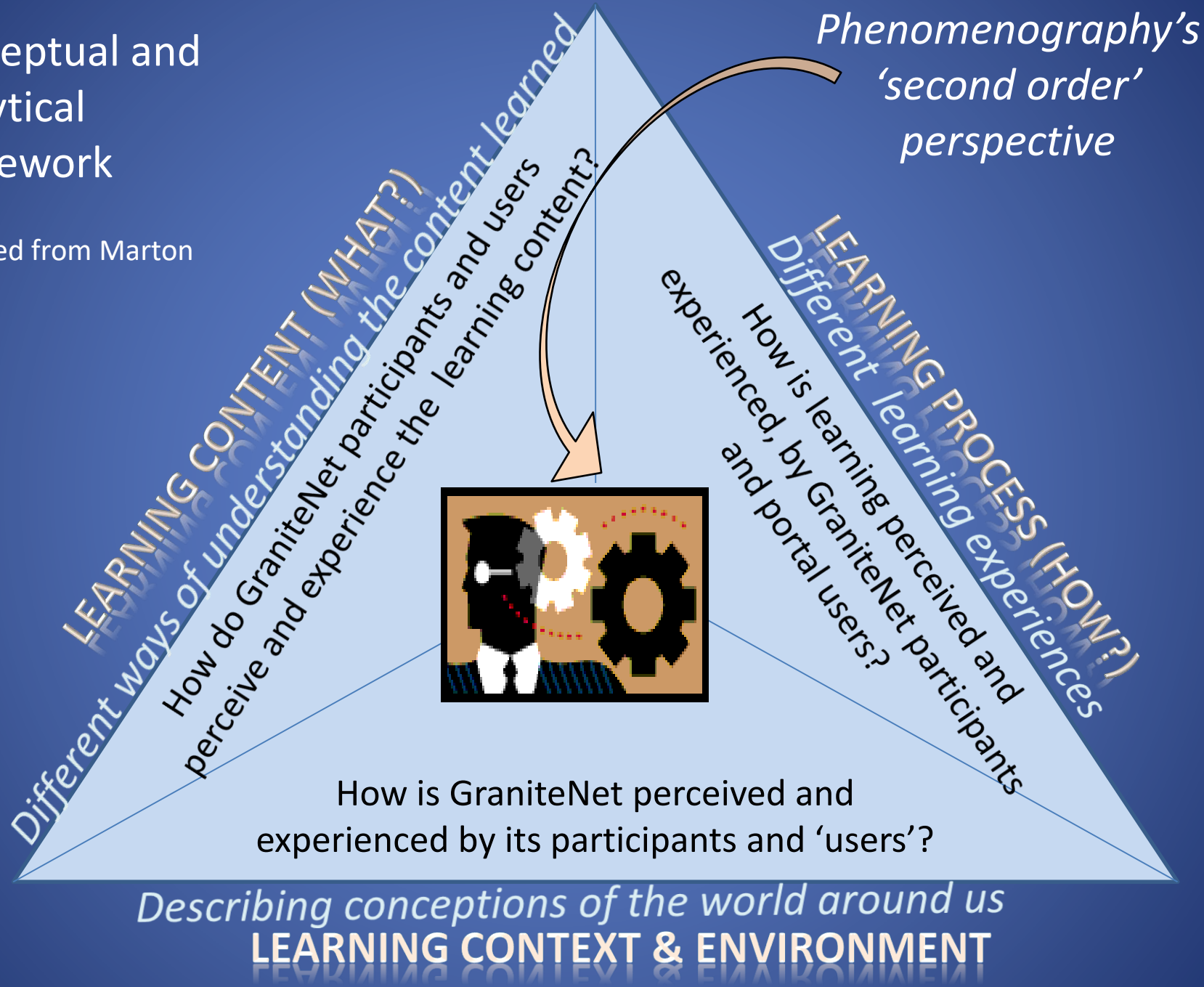what is thematized, focal in awareness?

what is at the margin of awareness, in the 'ground'?

how does the subject delimit the object from its context?

(adapted from Bruce, Pham and Stoodley, 2002)

Conceptual and analytical framework

Adapted from Marton (1988)

Phenomenography's 'second order' perspective

LEARNING CONTENT (WHAT?)
Different ways of understanding the content learned

How do GraniteNet participants and users perceive and experience the learning content?

LEARNING PROCESS (HOW?)
Different learning experiences

How is learning perceived and experienced, by GraniteNet participants and portal users?

How is GraniteNet perceived and experienced by its participants and 'users'?

Describing conceptions of the world around us
LEARNING CONTEXT & ENVIRONMENT

Data Sources - GraniteNet Volunteers and Community Portal Users

(n=20) (P1-P4: Pilot; 2.1- 2.16: Phase 2)
- Structured, face-to-face recorded interview transcripts and mind maps
- Questionnaire responses

Regional Context (2006-2013)

GraniteNet Project History (2006-2011)

Stanthorpe Demographics, Economics, Politics (2006 - 2013)

Description - GraniteNet organisation services web portal (2012)

SOUTHERN DOWNS AND DARLING DOWNS SW QLD

TOWN OF STANTHORPE AND SURROUNDING VILLAGES

PROJECT PARTNERS

CLIENTS AND CUSTOMERS

DRIVERS & MANAGERS

TRAINING AND SUPPORT

BOARD OF GOV.

PROJECTS & SERVICES

GraniteNet

COMMUNITY WEB PORTAL

WEB ADMIN & TECH

BLOGGERS & COMMUNITY GROUP

CONTENT EDITORS

WEBSITE USERS AND VISITORS

P1, 2.14, 2.15, 2.2, 2.1, 2.7, 2.9, 2.16, 2.14, 2.5, 2.3, 2.12, P1, P2, 2.3, 2.1, 2.13, 2.6, 2.2, 2.4, 2.10, P3, 2.7, 2.3, 2.16, 2.8, P2, P4, 2.15, 2.11

Data Sources - GraniteNet Artifacts (2011-2013)
- Community web portal design, structure, activity
- Community group webpages and activity
- Analytics data

GraniteNet Case Study Schematic

Respondent sample distribution – maximising diversity (variation)
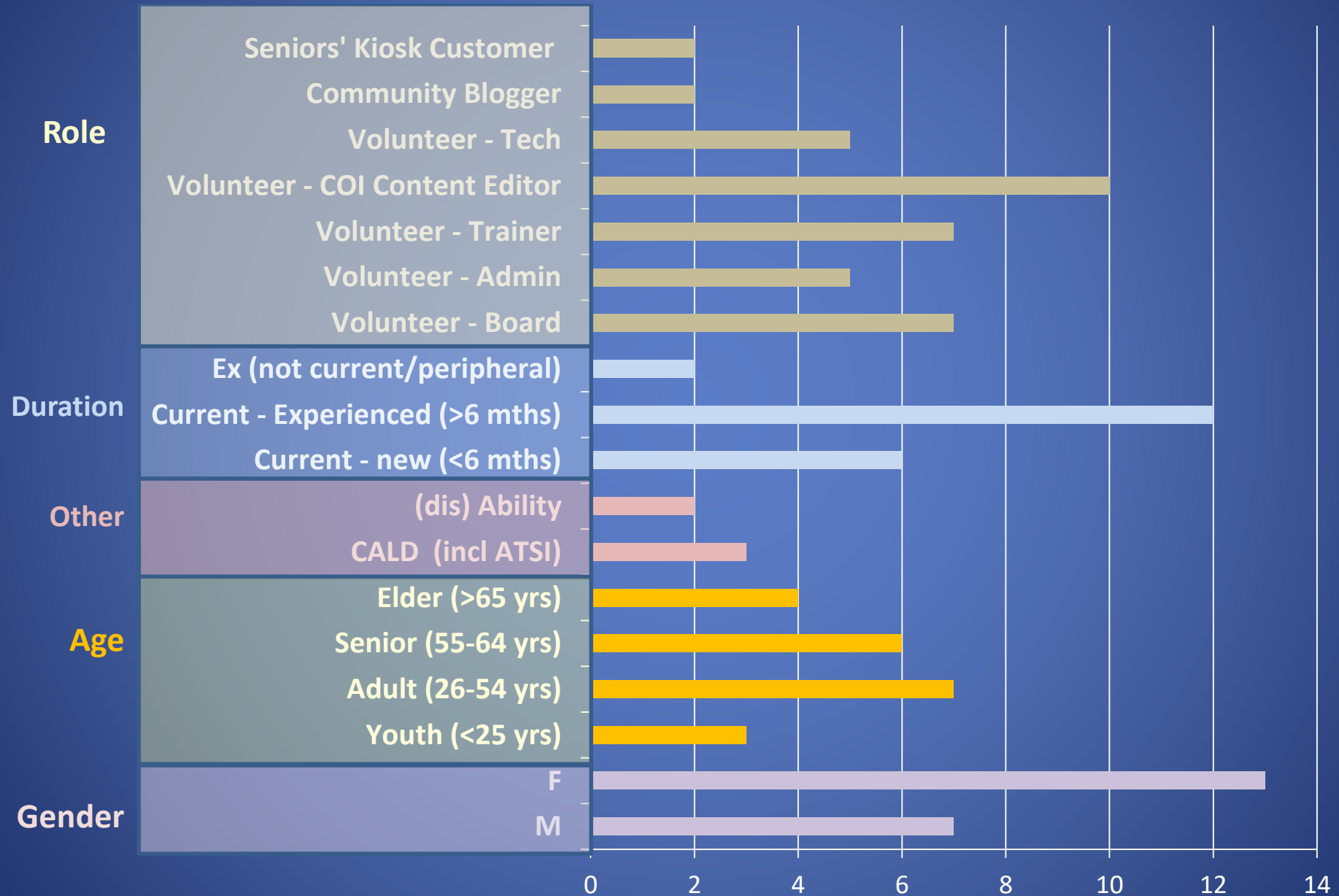
Phenomenographic Data Analysis Procedure

Data sources: interview transcripts + respondents' mind maps

Data analysis process – interpretive, abductive and iterative

➢ **Inspect** transcripts to **'discover'** discrete 'conceptions' of phenomena (identify qualitatively different 'ways of experiencing' reflected in the data)

➢ **Focus** on referential and structural components of awareness to illuminate and differentiate conceptions and dimensions of variation

➢ **Sort** data extracts into 'pools of meaning', moving backwards and forwards between individual transcripts and identified conceptions

➢ **Validate** interpretations of conceptions using mind maps

➢ **Engage** interpretive awareness and reflexivity

➢ **Refine** 'stabilized system of meanings' into (structurally related) categories

➢ **Validate** categories against individual transcripts

➢ **Devise** labels, descriptions and include supporting quotes for each category

➢ **Construct** outcome space in the form of a diagram of the categories of description showing structural relationships

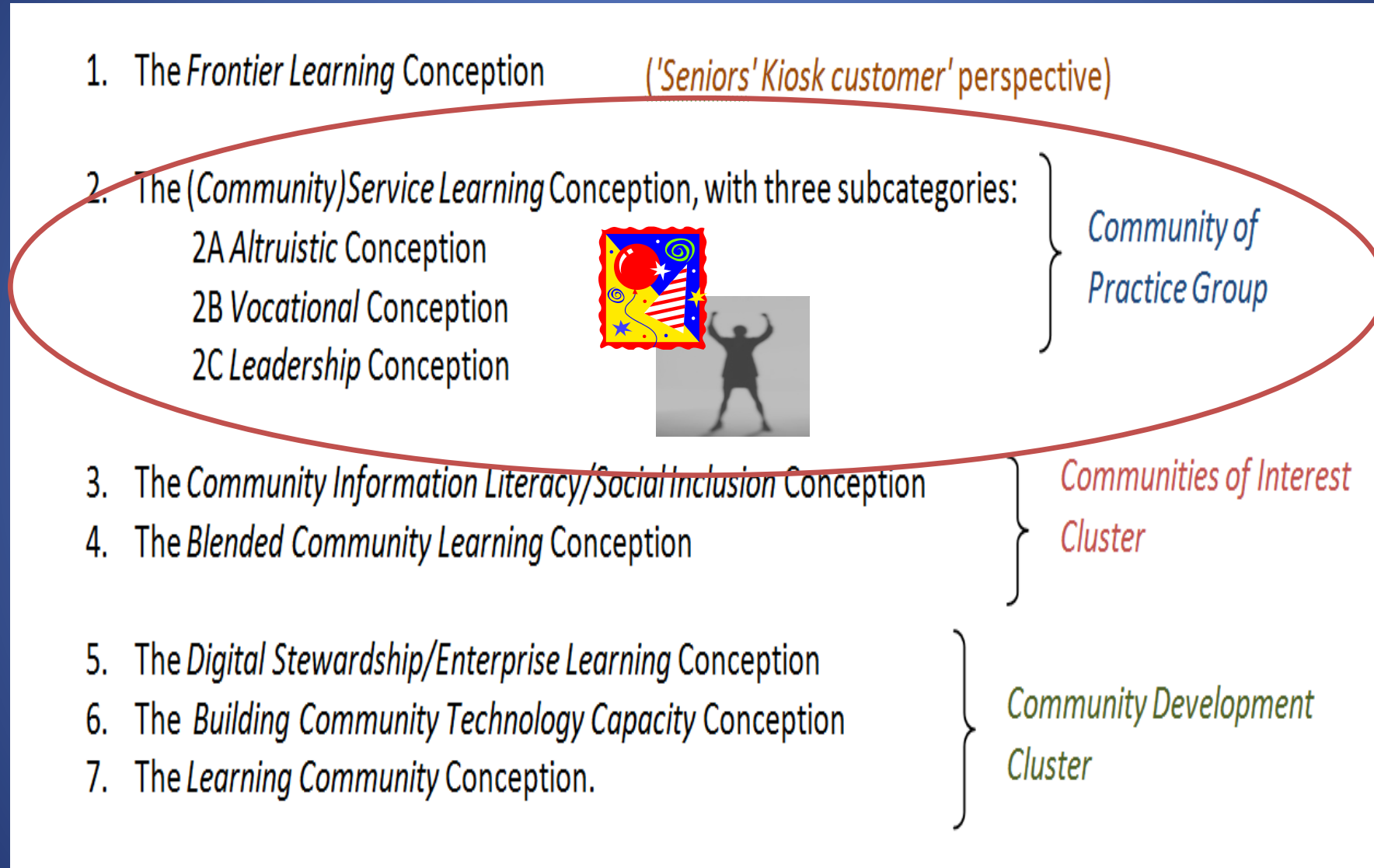➢ **Map** conceptions back to individual respondents

Abductive analysis:
"moving between empirical data and theoretical concepts to let one illuminate and contribute to the other"
(Limberg, 2008, p 615)
Privileging both *emic* (respondent) and *etic* (researcher) perspectives
(Pike, 1957)

NB: Particular conceptions are not representative of particular individuals; individual respondents may reflect more than one conception of a phenomenon at a given point in time

THE STUDY'S FINDINGS (phenomenographic analysis)
Categories of Description – Conceptions of learning in GraniteNet[1]

1. The *Frontier Learning* Conception   (*'Seniors' Kiosk customer'* perspective)

2. The *(Community)Service Learning* Conception, with three subcategories:
   - 2A *Altruistic* Conception
   - 2B *Vocational* Conception
   - 2C *Leadership* Conception

   } Community of Practice Group

3. The *Community Information Literacy/Social Inclusion* Conception
4. The *Blended Community Learning* Conception

   } Communities of Interest Cluster

5. The *Digital Stewardship/Enterprise Learning* Conception
6. The *Building Community Technology Capacity* Conception
7. The *Learning Community* Conception.

   } Community Development Cluster

[1]Categories presented here without their full descriptions and supporting quotes from the interview transcripts
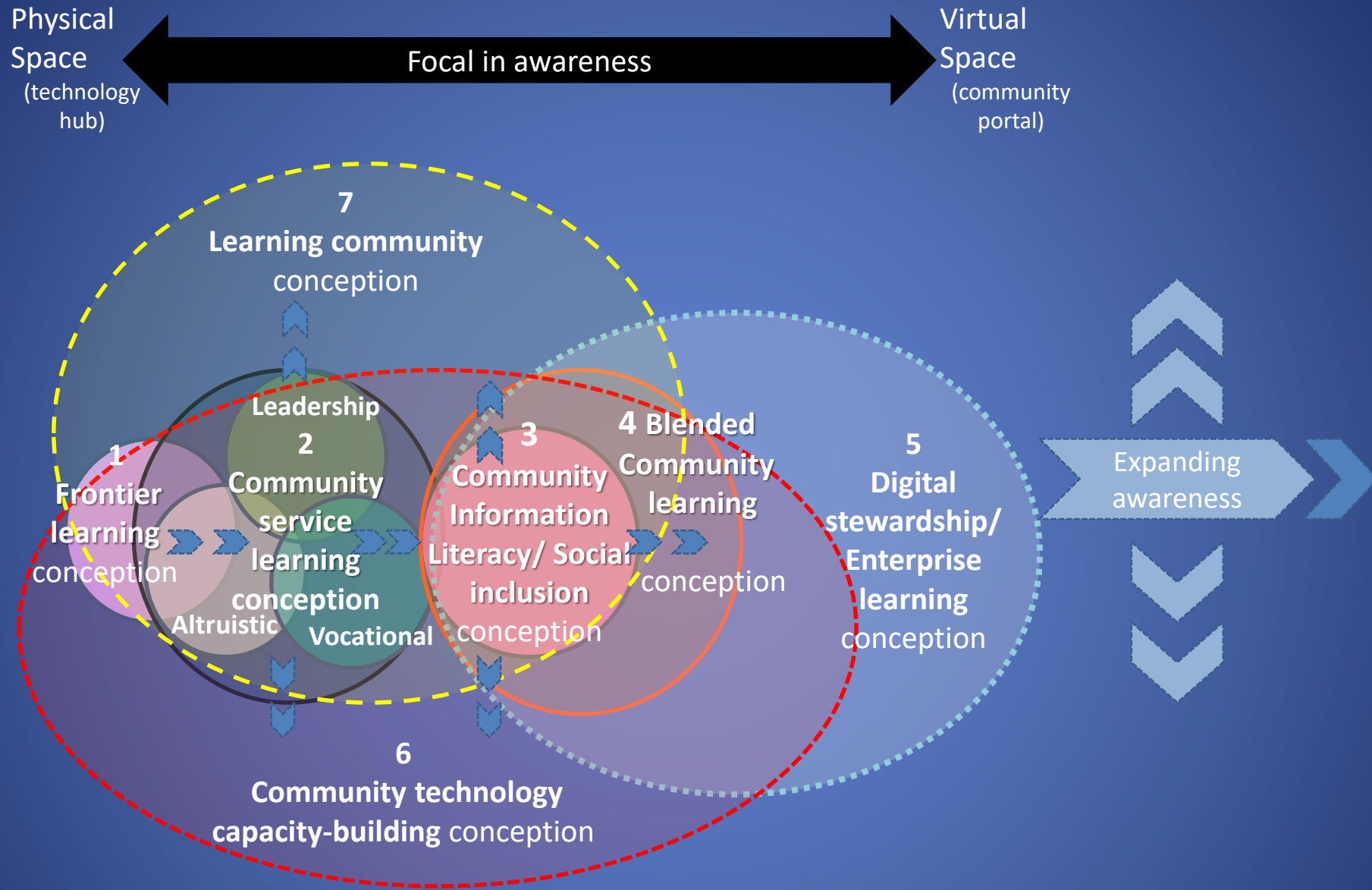
Outcome Space: The "collective learning consciousness" of GraniteNet as a learning ecology

Category 2: (Community) Service Learning Conception

Community of Practice Group

| Conceptions of GraniteNet	Conceptions of digital technologies	Conceptions of learning
Community Service/ Welfare *a family; a social network*	*A frontier/ lifeline*	**2A: Service Learning – Altruistic:** *a two-way street* *Learning frontiers* = digital literacies, organisational knowledge and know-how, facilitation of adult learning of digital literacies, personal development **Key learning questions:** *What's going on here? How can I contribute? How do I do this? How can I help this person?* **Dominant learning metaphors:** *two-way street, conquest, journey, navigation, survival*
Community Service Workplace *a friendly workplace*	Tools, personal equipment - *'gear', 'stuff'* + expanding digital horizons	**2B: Service Learning – Vocational:** *a two-way street with signposts* *Learning frontiers* = vocational training, employment, career **Key learning questions:** *What is my skill level? How am I doing? Is this going to help me get to where I want to go?* **Dominant learning metaphors:** *orientation, measurement, development*
Social Enterprise *a risky business*	Essential commodities tools for living and working in a digital age	**2C: Service Learning – Leadership:** *stepping up* *Learning frontier* = organisational leadership **Key learning questions:** *What can we do? How can we do this?* **Dominant learning metaphors:** *Conquest, becoming, expanding, navigating, survival, construction*

What are people learning?

Content domains	Examples of learning content
1. Technology/ Socio-technical	Basic and more advanced digital literacies, from using email and photo imaging to web browsing to web page content editing to programming to tech stewarding
2. Learning	Facilitating others' digital literacy learning ('teaching'), learning about one's own and others digital information needs, learning to learn (meta-learning)
3. Community	Local community knowledge, Civic engagement, Community Information Literacy, Community Informatics
4. Special Interest	Knowledge and skills in the specialised domain of the Community of Interest – e.g. camera club
5. Vocational	Vocational competencies, career development learning, enterprise learning
6. Personal/Relational	Leadership, self-efficacy, personal development learning, interpersonal skills, empathy
7. Organisation/ Associational	Organisational knowledge and 'know-how', participatory democracy, organisational development

Learning outcomes for younger community volunteers

Content domains	Learning outcomes
Organisational Tech/Socio-technical Special Interest	• Organisational knowledge, know-how • Participatory democracy • Sociotechnical literacies • Practical work skills, technical skills
Personal/Relational	• Self-esteem, self-efficacy, confidence, personal agency • Communication and interpersonal skills • General work skills, values
Vocational	• Specific vocational competencies • Career development learning[1]
Community	• Community Information Literacy[2] • Networking skills • Civic engagement • Technology Stewardship[3]
Learning	• Lifelong learning skills, literacies • Learning to learn (meta-learning) • Teaching others (digital literacies) • Transversal[4] and integrative[5] learning

[1] McIlveen et al (2011); [2,5] Bruce (2008); [3] Wenger et al (2009); [4] Illeris (2006); [5] Eraut (2004)
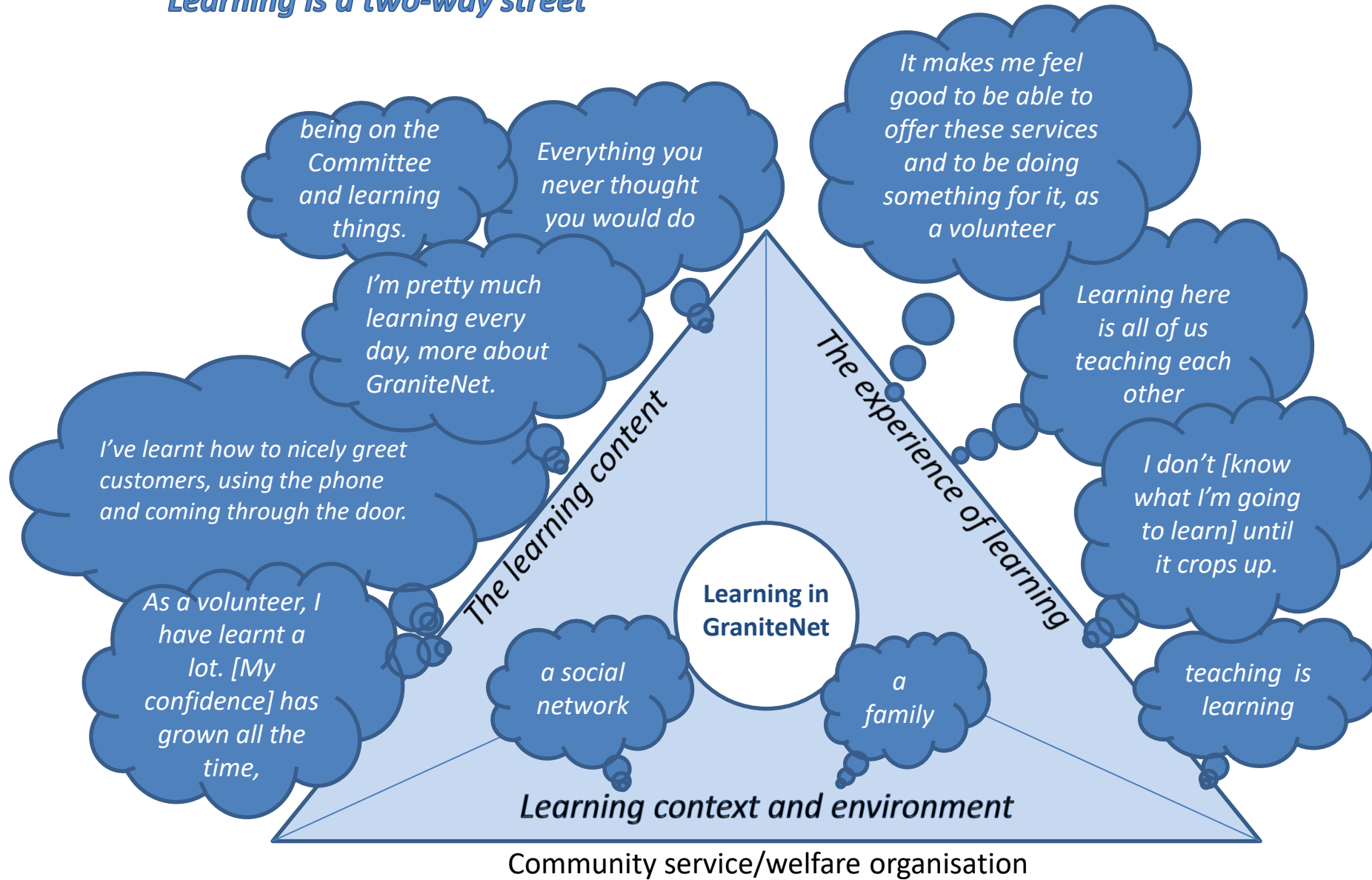
Category 2A: *(Community) Service Learning* **Conception – Altruistic emphasis**
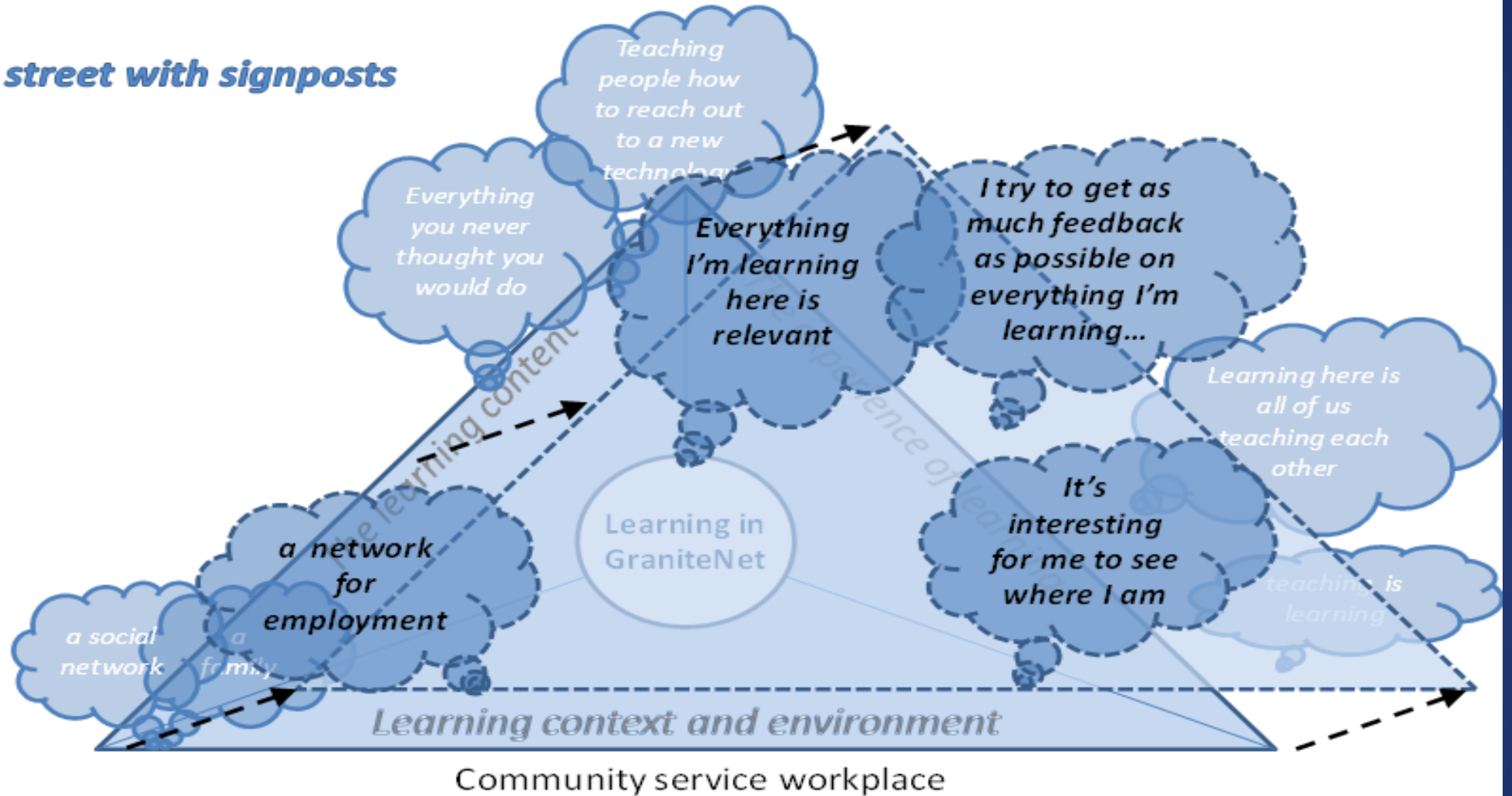
Category 2B: *(Community) Service Learning* **Conception – Vocational emphasis**
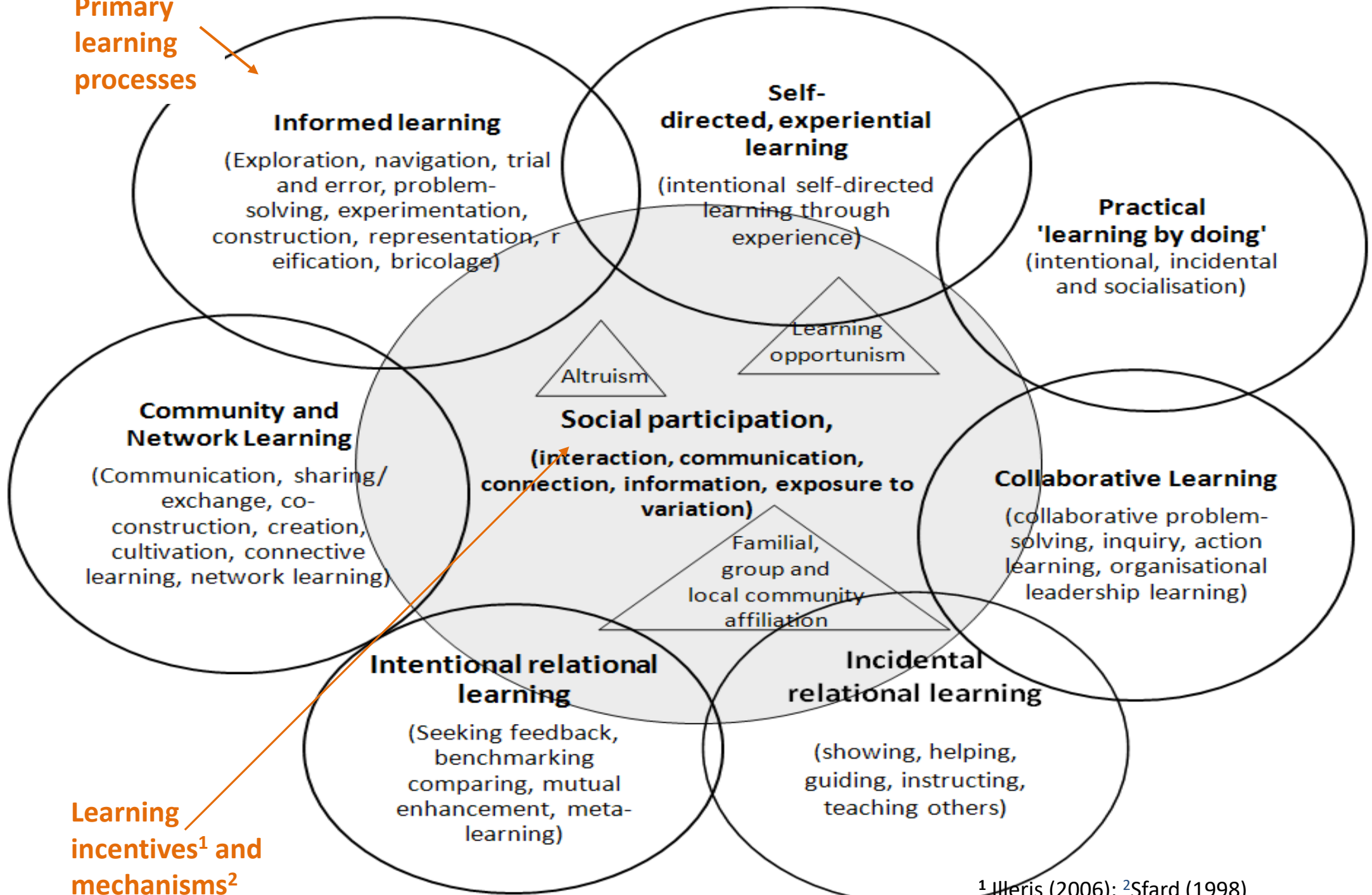
Individual and collective learning

Individual Learning Processes

- **Practical learning-by-doing** (incidental and intentional)

- **Intentional, self-directed, deliberative learning** (involving experimentation, trialling, reflection in and on action)

- **Incidental relational learning** - learning through instructing, guiding, showing and mentoring others (teaching)

- **Intentional relational learning -** learning through observing others, benchmarking, appraisal, seeking feedback, evaluating, meta-learning

- **Informed learning - seeking, using and sharing information for learning in socio-technical environments**

Collective Learning Processes

- Collaborative problem-solving, inquiry and action learning (face-to-face environment)

- **Blended community and network learning (hybrid online + offline space)**

Primary learning processes

Informed learning

(Exploration, navigation, trial and error, problem-solving, experimentation, construction, representation, r eification, bricolage)

Self-directed, experiential learning

(intentional self-directed learning through experience)

Practical 'learning by doing'

(intentional, incidental and socialisation)

Community and Network Learning

(Communication, sharing/ exchange, co-construction, creation, cultivation, connective learning, network learning)

Learning opportunism

Altruism

Social participation,

(interaction, communication, connection, information, exposure to variation)

Familial, group and local community affiliation

Collaborative Learning

(collaborative problem-solving, inquiry, action learning, organisational leadership learning)

Intentional relational learning

(Seeking feedback, benchmarking comparing, mutual enhancement, meta-learning)

Incidental relational learning

(showing, helping, guiding, instructing, teaching others)

Learning incentives[1] and mechanisms[2]

[1] Illeris (2006); [2] Sfard (1998)

The power of incidental relational learning

"I learn more doing it for somebody else rather [than] doing it for myself. It doesn't stick, up here in my brain, when I'm doing it for myself, but if I'm helping someone else out, then it sticks with me longer, if that makes sense...I wouldn't get much satisfaction if I'd done it for myself"

"Just watching the people here that have been at GraniteNet before, observe what they are doing and how they have done it and give it a go, see my chance. At the moment, I'm still waiting for my turn – once my confidence is up..."

"Once I got to know how everything works, and we have the meetings every Friday with the volunteers and [Glen] or [Shirley]. It was when I started putting my opinions forward...then, for me, I think. Because up until then, everye else is – I was just there...it was just a good feeling like that you had a voice"

"When you are a volunteer and when you are helping somebody on the computer, believe it or not, you are the teacher... you are teaching that person and that person is learning...

Vocational and career development learning as intentional relational learning

"I would eventually like to continue on to Certificate Four, but I think Certificate Three is probably enough... but I find now that I have started learning in the last couple of years, I really like it. I'm not sure that it is something that I will end up using, because I am quite happy in an admin position...but I just like learning"

Because I'm also in a business admin course, so everything that I learn in that also relates to what we do here. I try and get as much feedback as possible in every aspect that I think I need to learn"

"Since GraniteNet I've been referred to so many different people who need websites. So every since my first involvement with GraniteNet I haven't stopped working on websites...Of course, I learning things when I'm trying to do other things..."

"Being at GraniteNet has made me see in myself, compared to what is where I am on in the region of computers. I'm learning all the admin stuff which is what I am trying to do"

Individual factors

- **Broad perspective of learning context (GraniteNet):**
  - Customer, Provider, dual Customer-Provider, Developer linked to motivation for and orientation to volunteering activity

- **Situation of volunteering activity on the real-virtual continuum:**
  - face-to-face organisational setting, blended ("combination of digital interactions with offline encounters"[1]) or exclusively virtual

- **Age:**
  - linked to motivation for and orientation to volunteering activity[2], orientation to learning and also to digital native/digital immigrant[3] or "third age learner"[3] 'status'

- **Access:**
  - to accurate and complete information and equal opportunity to participate in the various roles of discourse[4] (as community and digital information literacy and participatory democracy)

Organisational/cultural factors

- **Characteristics of the voluntary organisation:**
  - Commitment to using technology for local community development, digital inclusion and to 'social' or 'caring' objectives[5] (social inclusion)
  - Informed by lifelong learning principles
  - Extent to which the organisation supports the learning of its members[6](CoP)
  - Nature of organisational leadership
  - Link between level of organisational wellbeing and quality of individual learning[7]

[1]Field (2005, p. 140); [2]Livingstone & Scholz (2010); Schugurensky et al, (2010); [3]Prensky, (2001); Hazzlewood (2003) ; [4]Mezirow (2009); [5]Elsdon (1995); [6]Wenger, White & Smith (2009); [7] Elsdon (1995)

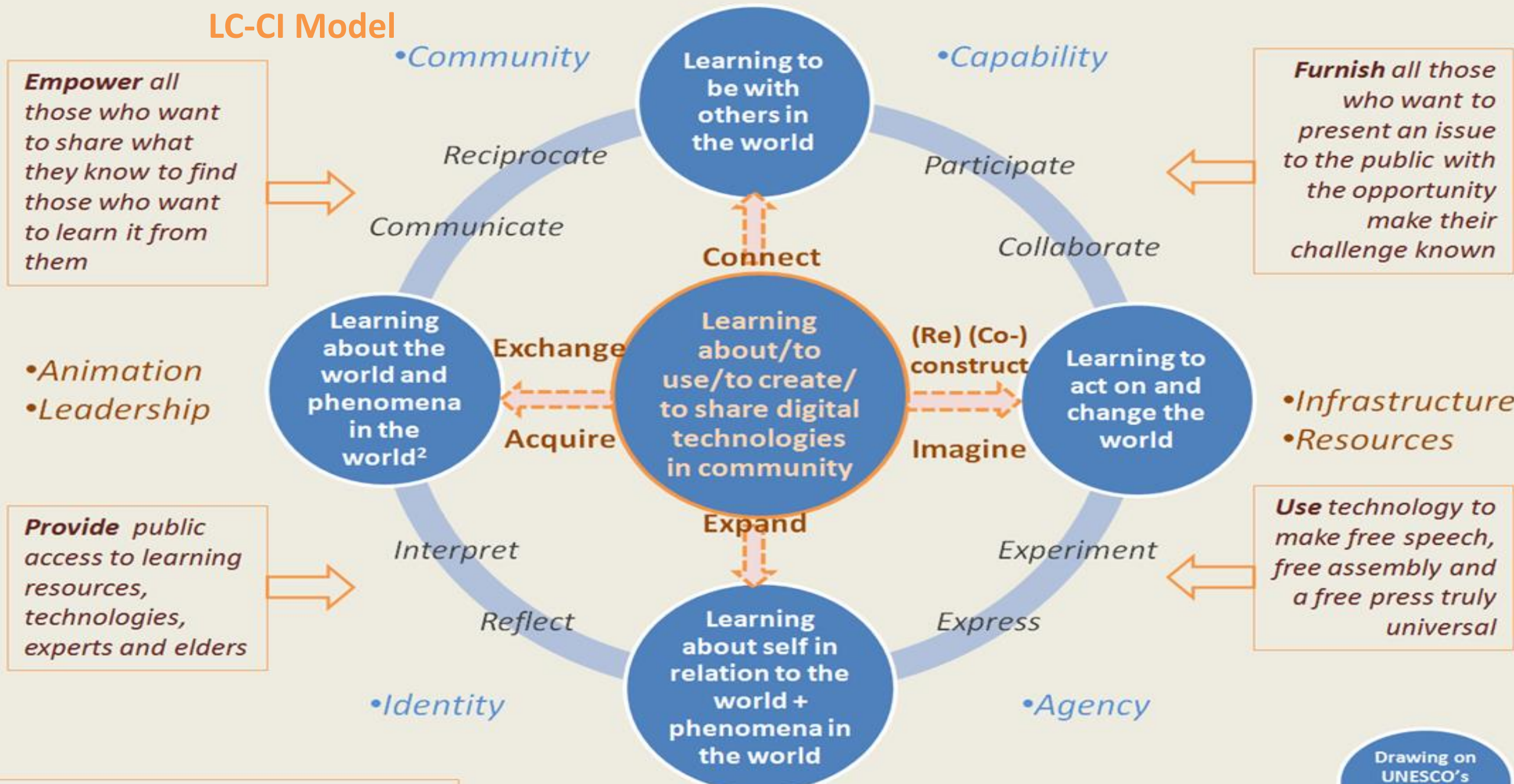# Towards a typology of informal community learning for a digital era
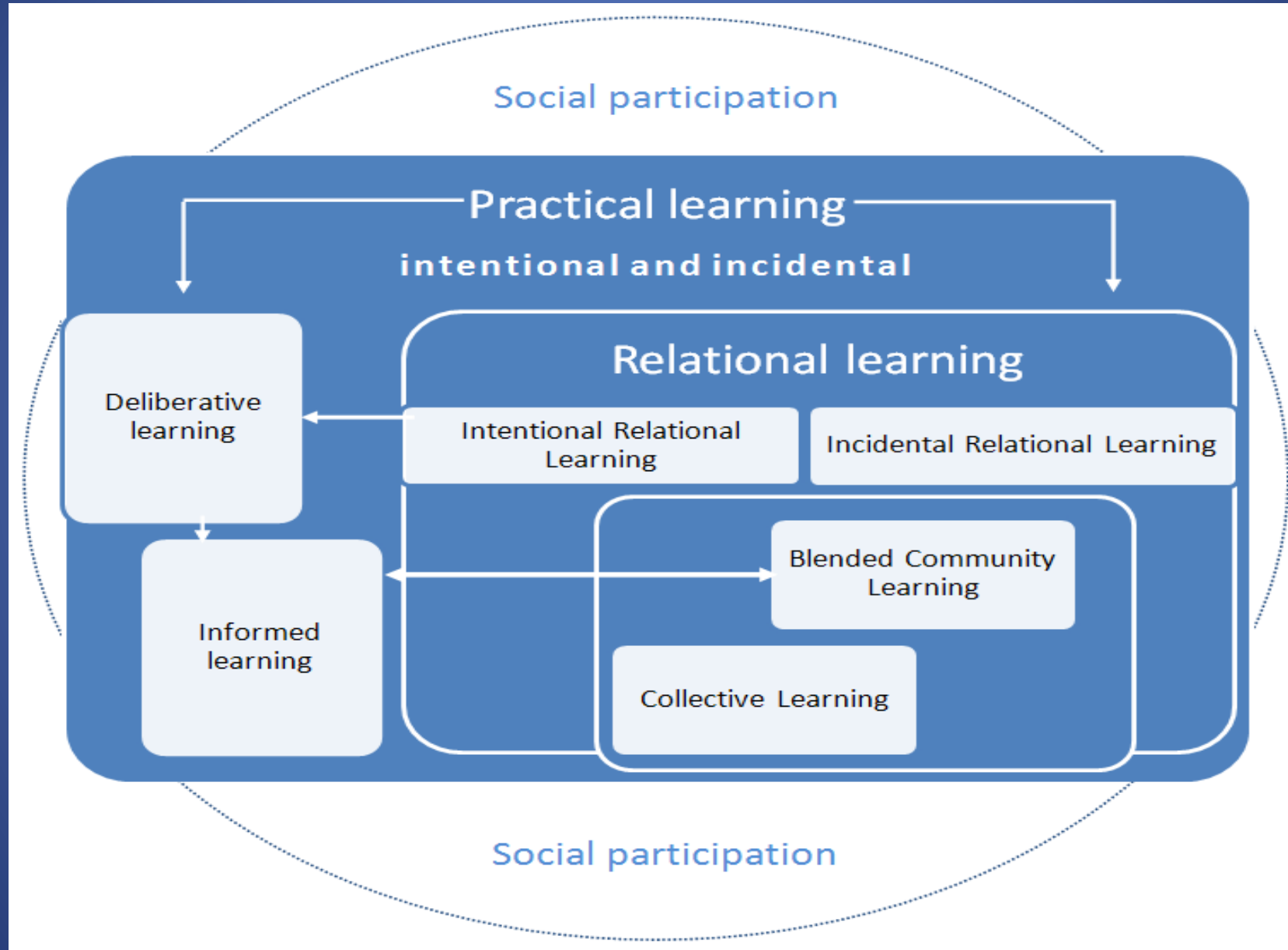
Theorising about vocational and career development learning as **intentional and incidental relational learning**

- **Learning as social participation** "processes of being active participants in the practices of social communities and constructing identities in relation to these communities" (Wenger 2009, p. 210)

- **Benchmarking, "metacognitive monitoring" and "mutual enhancement"** (Eraut 2004, p. 67):
  - benchmarking of one's own skills against those of co-workers and against codified vocational competencies and
  - ascertaining the relevance and usefulness of workplace learning in terms of supporting the achievement of career-related goals and vice-versa

- **Negotiating and traversing different learning spaces**: "transversal learning" where "targeted learning efforts [that] aim at creating firm connections between the different learning spaces and sub-spaces" (Illeris 2006, pp. 230-1)

- **Exposure to variation** brings about learning (variation theory): works for learning different things (e.g. technical skills; interpersonal skills as well as vocational and career development learning)

Conclusions

- Significant and valuable learning for younger and older adults in a variety of content domains is afforded via social participation in collective, collaborative activity in communities and networks of interest and practice with a social mission

- Targeted community volunteering and service learning opportunities linked to formal education can afford significant and valuable personal, vocational, career development and civic engagement learning for younger volunteers, thus empowering them to envision and create their preferred futures

- Adopting a learning-based approach Community Informatics can help build the capacity of rural communities through:

  - learning about the affordances of digital technologies and the internet for supporting lifelong learning;

  - learning that social change is possible (Rogers & Haggerty, 2013)

  - learning to collaborate with others to generate and test these possibilities for change (Bruner, 2012).

- As third sector, "place-based communities of practice" (Somerville & McIlwee, 2011) with a digital inclusion mission and whole-of-community development agenda, local learning-based Community Informatics projects (LC-CI) present unique community learning opportunities for both younger and older adults alike that can facilitate "new learning" (Kalantzis & Cope, 2001) for a digital era

LC-CI Model

Empower all those who want to share what they know to find those who want to learn it from them

• *Community*

Reciprocate

Communicate

Connect

Learning to be with others in the world

• *Capability*

Participate

Collaborate

Furnish all those who want to present an issue to the public with the opportunity make their challenge known

• *Animation*
• *Leadership*

Learning about the world and phenomena in the world²

Exchange

Acquire

Learning about/to use/to create/to share digital technologies in community

(Re) (Co-) construct

Imagine

Learning to act on and change the world

• *Infrastructure*
• *Resources*

Provide public access to learning resources, technologies, experts and elders

Interpret

Reflect

Expand

Learning about self in relation to the world + phenomena in the world

Experiment

Express

Use technology to make free speech, free assembly and a free press truly universal

• *Identity*

• *Agency*

Drawing on UNESCO's Four Pillars of Education

INTERVENTIONS *(Illich,1971)*

¹Gurstein (2003) ²Marton (1998); Marton & Booth (1997)

Implications for VET teachers and trainers?

- Build longer term partnerships with ACE, community-based groups and organisations to support vocational and career development learning through targeted, strategic volunteering (**service learning**) opportunities for students in vocational programs:

  - *"create firm connections between different learning spaces and sub-spaces"* and help students to do the same

  - Provide opportunities for learning through social participation (intentional and incidental relational learning) in communities of practice

  - Build in regular opportunities for structured, critical reflections on "workplace" learning experiences (benchmarking, mutual enhancement, metacognitive monitoring, transversal learning, reframing)

  - Ongoing reflection on personal learning experiences in light of career-related goals

  - Provide opportunities for hard and soft skill development through exposure to variation linked to vocational competencies (variation in experiences, contexts, 'things', processes, procedures) in supportive environments (e.g. exposure to a range of different kinds of digital technologies over time and in different contexts)

Implications for VET teacher educators?

- VET teacher educators are learning experts who are able to provide their learners (VET teachers and trainers) with access to:

  - "general, principled" (Wheelahan, 2009, p. 202) theoretical knowledge about learning as a content domain (including learning theory)

  - opportunities for reframing (Williamson, 2006) of their practical knowledge through processes of dialogue, reflection, "deliberation and interpretation" involving "hermeneutic understanding" (Usher & Bryant, 1989, pp. 74-75).

- VET teacher education curriculum should be derived from adult educators' "practice problems" (Usher, 1987, p. 86) – practice problems are the starting point for deconstructing, reframing and theorising about teaching and learning

- Focus on teaching students about different learning spaces and sub-spaces and "learning opportunism" (seeing different social spaces as learning opportunities and how these can be leveraged to support their own and their students' learning

- Social learning theory, communities of practice, career development learning...

Thank you for listening!

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