An Activity Theory Approach to Fair Assessment Moderation in Transnational Education

Thuraisingam T.[1*], **Kaur P.**[1], **Yeo S.**[2], **Briguglio C.**[2], **Sanderson G.**[3], **Mahmud S.**[3] **& Wallace M.**[4]

[1]Taylor's University, Malaysia, [2]Curtin University, Australia,[3]University of South Australia & [4]Southern Cross University, Australia

Abstract

This paper presents research from an Australian Learning and Teaching Council priority project which focuses on the assessment moderation practices between parent and partner universities in transnational partner universities. This paper addresses the challenges faced by transnational academic staff in ensuring comparable assessment standards. The data illuminates many issues of culture, language, relationships, trust, power and control. Using activity theory and its principles of contradictions, these issues are analysed in terms of Engestrom's expanded mediated triangle. The components of subject, mediating tools, objects, rules, community and division of labour are interconnected and in constant dynamic interaction emphasising the social and contextualised nature of moderation practices and policies. Systemic tensions are bound to emerge between and among these components. This paper sets out to identify these systemic tensions or contradictions for their heuristic value and potential as the driving force for change, indicating points of intervention to improve assessment moderation practices and policies. Among the three indicated contradiction triads, some fundamental contradictions exist between subject-community-object, subject-mediating tools-object and subject-division of labour-object. These help identify the weaknesses in the existing collaborative patterns and lack of efficacy of the mediating tools for ignoring the 'culture of use' of the tools and a clear understanding of roles and responsibilities on the ground.

Key words: Activity theory, assessment moderation, contradiction, transnational education

INTRODUCTION

Over the past two decades, the higher education sector worldwide has undergone tremendous transformation. Increased demand for higher education due to growing marketisation and globalisation has given birth to new forms of higher education activities, namely transnational education. According to UNESCO and the Council of Europe (2001:

1

p.1 cited in McBurnie and Ziguras 2007: p.22), the term 'transnational education' (TNE) is used to refer to programmes in which "learners are located in a country other than the one in which the awarding institution is based." It encompasses different modes of delivery ranging from exclusive online learning and independent distance education to franchising and full-fledged branch campuses. The United Kingdom, Australia and United States remain major players in transnational education and their 'importing' countries are mainly located in the Asian region.

As the number of TNE partners and offshore students in many campuses continues to rise, issues pertaining to quality assurance have emerged and come under serious scrutiny. Quality has a major impact on the reputation of the transnational provider. Hence, one of the major challenges faced by TNE providers in order to maintain quality and sustainability is to ensure equivalence or comparability between parent and partner provision (Connelly, Garton and Olsen, 2006; DEST, 2005, Carroll and Woodhouse 2006; Stella and Liston, 2008). It is therefore in the interest of the national and local governments and individual institutions to ensure consistency in approach and practices in the multiple teaching and learning landscapes. As in the case of Australia, the Australian Universities Quality Agency (AUQA) conducts regular audits in order to evaluate the quality of university education services, facilities, resources and outcomes. The Australian Vice-Chancellors' Committee's Code of Practice and Guidelines in the Provision of Education to International Students serves as a benchmark for university activities and as a public commitment to quality and accountability (AVCC, 1998).

Both the International Education Association of Australia (IEAA, 2006) and AUQA identify and acknowledge assessment moderation processes and activities as key components of quality assurance. This two-year ALTC project entitled 'Moderation for Fair Assessment in Transnational Teaching and Learning' conceptualises assessment moderation as a three phased activity: phase one involves assessment design and development; phase two encompasses assessment implementation, marking and grading and phase three looks into review and evaluation activities. This view of moderation is consistent with Harlen's (1994) conceptualisation of moderation as processes and activities that occur, before (i.e. quality assurance) and after (i.e. quality control) assessment has occurred (p. 6). Moderation of assessment can take various forms such as discussion of assessment tasks with reference to exemplars, double marking, blind marking, co-marking, use of reference or scaling test for statistical moderation, group or consensus moderation.

A literature review of research in transnational education indicates that there is still a lack of documented studies in the area of assessment moderation. Research output by the project team prior to this paper have touched on the following areas: Australian and transnational partner academic staff attitudes toward assessment moderation (Wallace *et al.*, 2009) based on preliminary interview data, perceptions of transnational partner academic staff on assessment moderation (Thuraisingam *et al.*, 2009) based on informal conversations with offshore academics prior to the formal data collection process, interpretations of

2

comparability and equivalence by TNE academics around assessment moderation (Sanderson *et al.*, 2010) and collaborative approaches to moderation of assessment in TNE (Mahmud *et al.*, 2010). This paper builds on the project's research by focusing on the challenges (in the form of contradictions) experienced by Australian and partner transnational administrative and academic staff around assessment moderation using the activity theory approach.

ACTIVITY THEORY

The appeal of Activity Theory (AT) is that it makes it possible to take a gestalt view of assessment moderation practices in TNE. It allows us to focus on the dynamic interrelationships between the many components of the activity system. The activity system constitutes of the learners (the subjects whose point of view the researcher adopts), the mediational tools (also referred to as artifacts) used in their activities and the social and contextual relationships, the roles and division of labour that regulate them and the goals, objects or outcomes of those activities.

Engestrom (1987) in expanding on Vygotsky (1978) and Leont'ev's (1981) work presented it diagrammatically as follows.
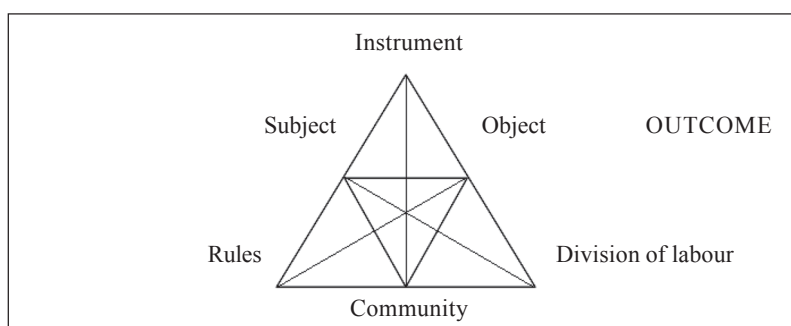

Figure 1. The structure of a human activity system (Engestrom, 1987: p. 78)

AT provides a lens to focus on the complexity of the activity system, its multi-voicedness, sociocultural and historical background of the various components, the mutual interaction between agency and structure of the micro and macro levels, the analysis of which illuminates challenges, changes and transformations. As Basharina (2007) puts it – within an activity system, all elements constantly interact with one another and are always in the process of working through change. This constant interaction between elements can result in a 'misfit within elements, between them and between different activities. The contradictions may be characterised as tensions (Basharina, 2007), or as historically accumulated tensions (Engestrom, 2001). Barab *et al.* (2002) see contradictions as systemic tensions. So whether contradictions are seen as disturbances, disruptions, problems, ruptures or breakdowns; their significance lies in the fact that they can result in change

3

and development (Engestrom, 2001). They become the motive force of change and development. Engestrom (2001) sees the activity system as virtual disturbance and innovation producing machines.

Applying AT to Assessment Moderation in Offshore Programmes of TNE

At the onset, the components of the activity systems need to be defined, and interpreted namely, the subject, object, tools, community, rules and division of labour.

Subject

This study will reflect the perceptions of transnational partner academics. It is essential to understand the subjects, their commonly held beliefs and assumptions (and to remain aware that each subject brings a different history to the activity system).

Object

For Engestrom (1993: p.67), the object refers to the "problem space at which the activity is directed and which is moulded and transformed into outcomes with the help of physical and symbolic, external and internal mediating instruments, including both tools and signs." Identifying the object, thus, illuminates the whole activity system. In this study, the transnational partner lecturers direct their activity at achieving comparable standards in assessment for the offshore students to produce the outcome of improved assessment moderation practices. The researcher must remain sensitive that the object may be interpreted differently by different lecturers and how they perceive their roles in relationship to the object of the system.

Mediating Tools

These are the means with which the subjects perform the activity. The relationship between the subject and object is mediated by tools and the transformation of the object into the outcome is also mediated through tools. The tools would include moderation policies, practices, worksheets, rubrics, exemplars, types and standards of assessment and processes, assessment protocols, communication, language and culture and other resources. Tools are not neutral (Hardman, 2005). They carry with them historical and cultural meaning and the object is acted upon within the affordance and constraints set by the tools. It would be relevant to recall Thorne's (2003) concept of 'cultures of use' of tools to understand how it could facilitate contradictions as tools change over time and new ways get invented. Other considerations about tools are their availability for the subjects and how flexible the use of tools is.

Community

It refers to the community that the subject belongs to and the people brought together by a shared object (Engestrom, 1996). The subject is part of a larger community; work brings them into interaction. Even though people engaged in an activity may be separated by great distances or by differences of many kinds, yet if they act together on a common

4

object with a common motive over time, they form a community. Each of those communities has its own set of norms, explicitly or implicitly stated roles for each of its members. In describing the activity system, it is also important to examine the division of labour that mediates the relationship between community and object. In this case, the academic staff of the parent institution and the administrative staff of both the Australian and partner institution will constitute the community.

Rules
Apart from tools/artifacts, mediators also include formal/informal rules, norms, conventions, social traditions and assumptions that are established by the community to govern its members (Engestrom, 1996) in the way they perform the activity. Rules may be explicit or implicit, unwritten or tacit rules like routine habits and values. In the present study, a large part of the rules which direct how the community satisfies its objective are received from the parent institution. Their instructions are generally followed and they regulate the performance of the activity. These instructions are in turn informed by Australian institution's policies, philosophies and their interests. The transnational partner academics may attempt to negotiate some rules depending on the situation and power relations.

Division of Labour
Besides rule mediation there is also role mediation – who traditionally has assumed the various roles and how does that affect the work group? Division of labour is both vertical and horizontal and refers to the negotiation of responsibilities, tasks and power relations. Division of labour affects the way the community and subject achieve the object.

In a transnational education setting, the horizontal dimension may refer to negotiation of basic tasks and responsibilities but power relations and authority define the vertical dimension. In this landscape, the Australian institution prescribes the curriculum, assessment tasks, outcomes, course material, teaching and learning strategies, working guides, thus establishing a hierarchy in which the partner institution is to essentially implement the decision taken by the Australian institution.

Contradictions
Contradiction in activity theory is the source driving development and change in the central activity under investigation (Engestrom, 2001). Virkkunen and Kuutti (2000: p. 302) define contradiction as "fundamental tensions and misalignments in the structure that typically manifest themselves as problems, ruptures and breakdowns in the functioning of activity systems." Contradictions are bound to exist in every collective activity. Contradictions can emerge between and among any of the elements of the activity system. They indicate emergent opportunity for activity development.

The purpose of this study is therefore to uncover the hidden contradictions faced by the transnational parent and partner staff in relation to assessment moderation.

METHODS
The use of the activity theory framework led to the need for a more subjective and in-depth understanding of both the Australian and transnational partner staffs' views on assessment moderation. Therefore, the adoption of a qualitative data collection approach which lends itself to the interpretivist paradigm was considered more suitable for the purpose of this study. Hence, although this two-year project adopted a mixed method approach (online surveys and semi-structured interviews) of data collection from the anticipating Australian and partner TNE sites, this paper only draws on the qualitative data in the form of semi-structured, face-to-face interviews. The interview data came from three Australian universities and nine transnational partner institutions (three from each parent institution). Upon receiving the ethics approval from the three project partner institutions (University of South Australia, Southern Cross University and Curtin University, an interview protocol comprising nine key questions on the focal areas surrounding the perception of moderation, scope and purpose of moderation, policies & guidelines for moderation, moderation processes as practised, roles and responsibilities for moderation was prepared.

A total of 85 interviews were conducted, recorded electronically and transcribed. Measures were taken to ensure that research participants, universities and partner institutions and their staff who volunteer to participate in data collection did so anonymously and confidentially. Each interviewee signed a consent form prior to the interview. The audio files and transcriptions of the interview data for the project were then uploaded into Nvivo8 at UniSA. Analysis of interview data was conducted using Nvivo8 to identify specific themes. The majority of the interview participants (59%) were transnational partner academic staff from sites located in South East Asia, North Asia and the South Pacific.

RESULTS AND ANALYSIS
The analysis of interview data from the three Australian and 9 partner sites indicate the following three contradictions in the activity system: Contradiction 1 – the subject, community and object sub-triangle; contradiction 2 – the subject, tools and object sub-triangle and contradiction 3 – subject, division of labor and object sub-triangle.

Contradiction 1: Subject – Community – Object
Several questions inform the understanding of the contradiction that exists between subject, community and object: (1)What beliefs and assumptions of the community impact the collaborative patterns/models? (2) How does the community influence how the subjects achieve the object? (3) What limitations (if any) are placed on the activity by the community?

Transnational education programmes are typically collaborations or partnerships. Activity theory can offer us insights into this process of collaboration and help us to identify collaborative patterns that exist between subject, community and object in making Australian and partner assessment comparable. This is typically achieved through the

6

mediating tools of communication, marking guides, exemplars and post hoc moderation etc. The responses of the transnational partner academic staff point to the lack of real collaboration giving rise to a fundamental systemic contradiction. The Australian and partner collaboration is deficient in 'genuine interdependence' (Salomon, 1992) that is collaboration where the group can achieve more together than individually, as distinct from mere cooperation where the result is merely the sum of individuals efforts – "ganging up on the task" rather than using genuine interdependence to achieve the object (Figure2) (Russell, 2001: p.74).
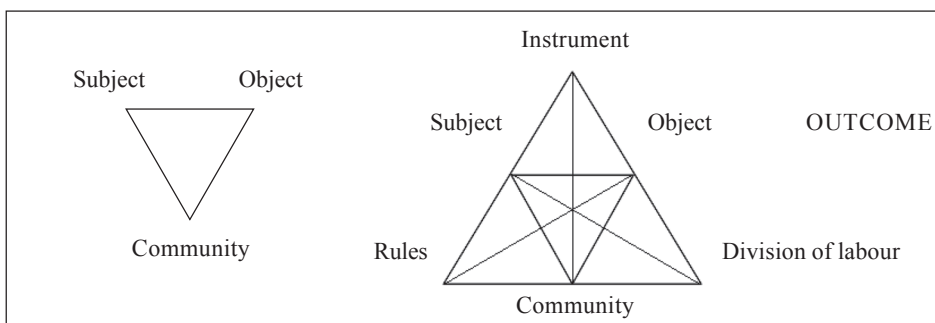

Figure 2. Subject-Object-Community contradiction in the TNE activity system

The lack of such collaboration is evident in the following quotes by Australian and transnational partner academics:

"UA and local staff should be in contact – begin to develop an understanding before teaching starts. From what I know, not many UAs get in touch with local staff early, the beginning of term is too late."

<div align="right">Transnational partner academic</div>

"More informal and structured collegiality between academic staff [is] needed – this involves an investment of time and goodwill and needs to be more structured at times."

<div align="right">Australian academic</div>

"We all need to try to be reasonable and justify the way we are marking. Before introducing a moderation method, the Australians need to talk with local staff ... They need to listen to us first – the moderation process is just imposed."

<div align="right">Transnational partner academic</div>

"There is no institutional relationship because of the sessional nature of the tutors. There is no institutional support for building a relationship with offshore tutors."

<div align="right">Australian academic</div>

Vygotsky (1978), the founding father of activity theory conceives of learning as first social – what appears first in the interpersonal plane is then internalised, appearing on the cognitive or intrapersonal plane. It may then be externalised in future social activity leading to further change and learning. Engestrom (1987) called it "learning by expanding." The aforementioned social relationship necessary for learning to take place seems to be absent in the equation between parent and partner academic staff. The assessment moderation policies and practices are neither co-constructed nor do the parent academic staff manage to create a "zone of proximal development" as outlined by Vygotsky for the professional development of partner staff. Genuine collaboration requires shared information, pooling of roles and joint thinking (Russell, 2001). Such sharing results in common sets of beliefs and assumptions which establishes inter-subjectivity. The presence of inter-subjectivity reduces the possibility of misinterpretations and results in shared understanding of the mediating tools, necessary for achieving the object.

It is tempting to apply Victor and Boynton's (1998) term 'co-configuration' to the multi-professional setting that is emerging in the TNE scene which has changed the character of work in education. Co-configuration is "work orientated towards the production of intelligent, adaptive services or products" (Victor and Boynton, 1998: p.195). This is characterised by continual relationship of mutual exchange, active customer involvement and input into configuration, multiple collaborating producers that operate within or between organisations, mutual learning from interactions between the parties involved in the configuration actions etc. (Engestrom, 2004).

When work is organised under co-configuration, there is real partnership (Victor and Boynton, 1998: p.195). Co-configuration characteristically includes "interdependency between multiple partners who collaboratively produce services or products" (Victor and Boynton, 1998: p.195). It may help to reconceive the character of work being done in TNE instead of casting it in the old mould.

Contradiction 2: Subject – Tools – Object
The questions which guide the second contradiction are as follows: (1) What tools do subjects use in doing their tasks and how well do they use them? (2) Do the tools used help create a community of practice? (3) How do the tools support the collaborative tasks?

The second contradiction to emerge is between three nodes on the upper sub-activity triangle that of subject-tool-object. Vygotsky conceived of learning as a mediated activity within a cultural-historical milieu. In order to maintain comparable or equivalent standards of assessment, the transnational partner academic staff use tools like rubrics, marking guides, similar types of assessment and practices other moderating policies and practices developed in the Australian educational context. The different 'culture of use' (Thorne, 2003) of the tools creates a tension when it is applied in a novel context. A difference in cultural context limits efficacy of the tools as illustrated by the following quotes:

8

"Asian countries weighted towards exams not assignment, for some students the whole concept of an assignment is new….."

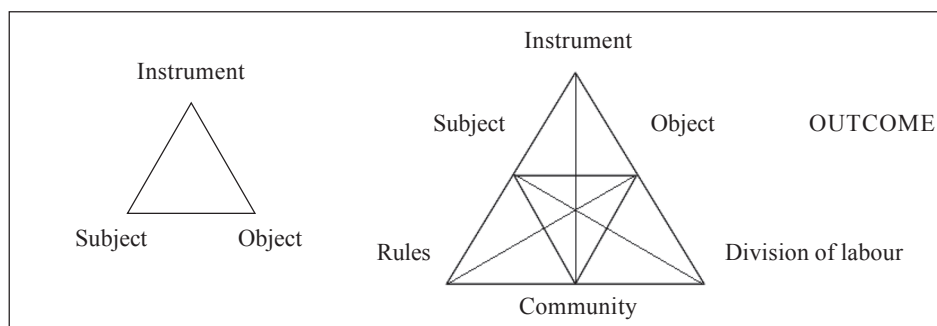<div align="right">Transnational partner academic</div>

Figure 3. Subject-Tools-Object contradiction in the TNE activity system

The transnational partner academics seem to have multiple interpretations with regard to the rubrics or cirteria used to evaluate assignments.

"Issues with assessment – Chinese lecturers have a different understanding of criteria. This is also a weakness, for exam-marking it is then an issue."

<div align="right">Transnational partner academic</div>

"In the Asian collectivist cultures, plagiarism loses its sting, "We might call it plagiarism and they may say it's loosely referenced."

<div align="right">Australian academic</div>

The presence of moderating tools is no guarantee of their valid application as has been evidenced in many research studies. The implicit is more significant than explicit articulation of assessment criteria and standards because participating in academic socialisation is imperative if the two partners are to arrive at a shared understanding of meaningful knowledge especially tacit knowledge. By involving themselves, the transnational partner academic staff actively constructs meaning within their cultural-historical context giving them ownership of the tools they use – a feeling which generates a sense of motivation in the staff who may then feel they belong to a community of practice. There are many challenges to the formation of such a community of practice because the rate of turnover of academic staff is very high as several Australian academics put it:

"In six years I have been here, it has been a different person every single time."

<div align="right">Australian academic</div>

9

"It keeps changing, because the staff they have a hard time keeping the [local] staff, so they keep resigning…"

Australian academic

"Likewise, the partner universities also lament about the constant change of coordinators."
Transnational partner academic

Engestrom, Engeström and Vähääho, (1999: 345) acknowledge this changing characteristic of work in his concept of co-configuration because co-configuration accommodates the "constantly changing combination of people and artifacts over lengthy trajectories of time and widely distributed in space." The rapid turnover of staff requires continual reconfiguration of groups. In such work settings (co-configurations) Engestrom *et al*. (1999) advocate the need to go beyond organising workers in teams or (through) network and proposes knotworkings. The notion of knotworking refers to "rapidly pulsating, distributed and partially improvised orchestration of collaborative performance between otherwise loosely connected actors and activity system" (Engestrom *et al*., 1999: p.346). In knotworking there is no single actor who has the sole, fixed authority, the centre does not hold. Knotworking is a historically significant new form of organising and performing work activity (Engestrom *et al*. 1999: p.346). They depict knotworking as emerging out of the contradictions inherent in co-configuration models. In co-configuration services, products there is constant change and this necessitates a dynamic, dialogic relationship between multiple partners, it is a relationship marked by mutual learning and by collaborative and discursive construction of tasks and tools in order to progress through the contradictions between subjects and tools making it relevant to trasnational education programmes.

Contradiction 3: Subject – Division of Labour – Object
The third contradiction of subject, division of labor and object became apparent as a response to the following general but connected questions: (1) How does the division of labour influence the way the subjects achieve their object? (2). How are tasks divided or shared among the participants. (3) How do the subjects perceive their roles and responsibilities and that of their (onshore) counterparts.
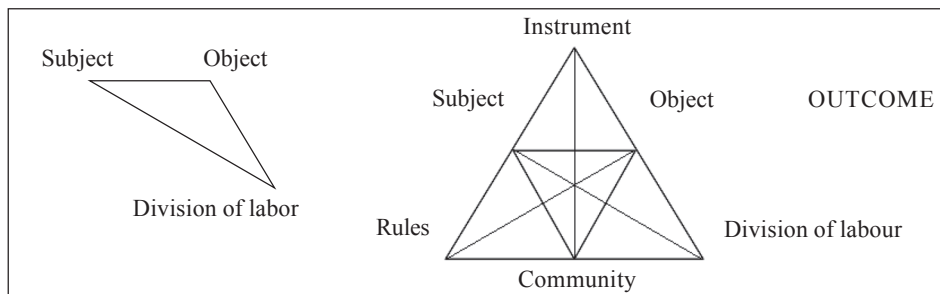

Figure 4. Subject-Object-Division of Labor contradiction in the TNE activity system

10

Analysis of the data to address the above questions pointed out areas of contradiction as well as conflict and opportunity for intervention. At least dualistic if not triadic perceptions of roles and responsibilities emerged indicative of other related systemic tensions. This contradiction points to three nodes: subject, division of labour and object or more specifically subjects, rules and responsibilities and object. Looking into this sub triangle affords us the opportunity to explore roles as a variable which influences how the object of comparable assessment is achieved. This necessitates a study of whether roles are well defined, how they are acquired, learnt and negotiated, what are the processes through which role differentiation takes place, do subjects experience role ambiguity and role conflict etc.?

A role is a set of behaviours expected of a person who occupies a particular position in the organisation (Levy, 2006). The process by which an organisation establishes distinct roles for various members of the organisation is called role differentiation. This is accomplished through job descriptions, roles and task requirement by supervisor, subordinates and colleagues communicate expectations and beliefs to individual employees," (Levy, 2006). When the administrators were asked if roles and responsibilities for Australian and transnational partner academic staff in relation to assessment moderation are clearly defined, the responses were as follows:

"Yes there are. We have a whole list of roles and responsibilities. Job descriptions of what you are expected to do etc. for the offshore coordinator."

Transnational partner administrator

Yet when the academic staff were asked about roles and responsibilities and whether they have been communicated to all academics and administrative staff concerned the response was time and again similar to the ones below.

"There is no clear job description. There is no black and white job description."

Transnational partner academic

"No, not at all clearly defined."

Transnational partner academic

This perceptual contradiction reflects how theoretical manuals do not get translated into practice. It is not enough to just spell it out in the job description and other formal organisational documents. It is defined through discussion and interaction with superiors, subordinates and colleagues. It is through these interactions that roles get not only defined but negotiated and meaningfully experienced to become real for the staff, which has not happened in this case.

Role differentiation is followed by role acquisition. There is a need to train people for new roles and since moderation is a process, the partner university academics need to be

11

socialised into it. Most transnational partner academic staff have not undergone 'on the job training' for professional development. The following are sentiments expressed by these lecturers:

"There is no training given. But any new staff has training – 'Teaching at UniSA' – a half day training."

<div align="right">Transnational partner academic</div>

"They need the training, This definitely can be looked into."

<div align="right">Transnational partner academic</div>

"Teacherly behaviour that people need to know. Not easy to practise those without a reasonable amount of mentoring, modeling, induction package."

<div align="right">Transnational partner academic</div>

Role is an important variable in this equation because role ambiguity (when staff do not know what is expected of them) and role conflict (when role expectations are inconsistent) can result in work stress and systemic tensions. Role ambiguity is very common among novice lecturers.

"New staff member – develop good rapport with [coordinator] should initiate contact. One has no idea of who to talk to – confusion. More written communication."

<div align="right">Transnational partner academic</div>

Many transnational partner academic university staff express conflict and frustration because they are made to expect instruction and support in the form of marking guides and exemplars etc. and often the expectations do not materialise.

"There are some subjects where I have never had a model solution and when I ask. It is Ok mate, you are experienced I know that you are alright. The university is reneging on its contractual and policy obligation – four – day turnaround – marking guideline should be sent out and the same academic do not do it. Some provide it, some do not."

<div align="right">Transnational partner academic</div>

"Issues – not receiving marking guidelines, one of the issues that I face is that we get young novice lecturers telling people who are the equivalent to a VC how to mark."

<div align="right">Transnational partner academic</div>

At other times, the transnational partner academic does not get timely feedback but has to respond to the local situation – resulting in a conflict of whether to wait or proceed.

"What I was not supposed to do but I find that her response was slow and I had to go ahead with what I wanted."

<div align="right">Transnational partner academic</div>

12

Ambiguity and conflict make you feel very uncomfortable especially with respect to the expectations associated with one's job often resulting in stress and depersonalisation – a cynical view of others and the work role that often results in detachment (Levy, 2006).

This contradiction points to areas of intervention in relation to roles so that all players have a unified commitment to the shared beliefs and goals giving rise to a cohesive group.

CONCLUSIONS

The above discussion of contradictions indicates a focus on structures in the transnational education programme – the roles and responsibilities are in place in the manuals and other organisational documents, the tools of assessments exist; however, the focus on the agency of the academics has not been foregrounded. The system needs to acknowledge and highlight how the academics construct their activities, their work and social worlds and negotiate their roles and responsibilities. The academics, their discursive interactions, their creation of their inter-subjective worlds and their interdependency to achieve the object of comparable assessment need to be capitalised on for both research and practice. The academics and their teams are the agents of opening up the zone of proximal development in the activity system to keep the 'object' expanding in co-configuration settings.

ACKNOWLEDGEMENT

REFERENCES

Australian Vice Chancellor's Committee(AVCC)(1998). *A*VCC Code of Practice for Maintaining and Monitoring Academic Quality and Standards in Higher Education. Australian Universities*.* Retrieved August 10, 2010 from *http://www.avcc.edu.au/ avcc/pubs/code.htm*

Barab, S., A., Barnett, M., Yamagata-Lynch, L., Squire, K., & Keating, T. (2002). Using activity theory to understand the contradictions characterizing a technology-rich introductory astronomy course. *Mind, Culture, and Activity, 9* (2), 76-107.

Basharina, O. K. (2007). An activity theory perspective on student-reported contradictions in international telecollaboration. *Language Learning & Technology*, *11*(2), 82-103. Retrieved March 19, 2010 from *http://llt.msu.edu/vol11num2/basharina/default.html*

Carroll, M., & Woodhouse, D. (2006). Quality assurance issues in transnational higher education – developing theory by reflecting on thematic findings from AUQA Audits. In J. Baird (Ed.) *Quality audit and assurance for transnational higher education.* Canberra, Australian Universities Quality Agency.

13

Connelly, S., Garton, J., & Olsen, A. (2006). *Models and types: guidelines for good practice in transnational education*. London: The Observatory on Borderless Higher Education.

DEST (2005) A national quality strategy for australian transnational education and training: A Discussion Paper of the Department of Education, S. A. T. (Ed.). Canberra, Commonwealth of Australia.

Engeström, Y. (1987). *Learning by expanding: An activity-theoretical approach to developmental research*. Helsinki: Orienta-Konsultit.

Engeström, Y. (1993). Developmental studies of work as a testbench of activity theory: The case of primary care medical practice. In S. Chaiklin & J. Lave (Eds.), *Understanding practice: Perspectives on activity and context* (p. 64-103). Cambridge: Cambridge University Press.

Engeström, Y. (1996). Interobjectivity, ideality, and dialectics. *Mind, Culture and Activity*, *3,* 259-265.

Engeström, Y. (2001). Expansive learning at work: Toward an activity-theoretical conceptualization. *Journal of Education and Work*, *14*(1), 133-156.

Engeström, Y. (2004). New forms of learning in co-configuration work. Paper presented to the Department of Information Systems *'ICTz in the Contemporary World'* seminar, LSE, January 2004.

Engeström, Y., Engeström, R., & Vähääho, T. (1999) When the center does not hold: the importance of knotworking, In S. Chaiklin *et al.* (eds.) *Activity theory and social practice* (pp.345-374). Aarhus: Aarhus University Press.

Hardman, J.C. (2005). An exploratory case study of computer use in a primary school mathematics classroom: New technology, new pedagogy? *Perspectives in Education*, *23*(4), 99-111.

Harlen, W. (1994). Concepts of quality in student assessment. Paper presented at the *Annual Meeting of the American Educational Research Association*, New Orleans, 4-8 April

IEAA (International Education Association of Australia). (2006). *Outcomes of universities' transnational good practice projects.* Canberra: Department of Education, Science and Training (DEST).

Leont'ev, A. N. (1981). *Problems of the development of mind*. Moscow: Progress.

Levy P.E. (2006). *Industrial/organizational psychology: understanding the workplace* (2nd ed.). Boston, MA: Houghton Mifflin.

Mahmud, S., Yeo, S., Sanderson, G., Thuraisingam, T., Briguglio, C., Kaur, P. , & Wallace, M. (2010). Collaborative approaches to moderation of assessment in transnational education. Refereed paper presented at the *Australian International Education Conference (AIEC)*, Sydney 12-15 Oct 2010.

14

McBurnie, G., & Ziguras, C. (2007) *Transnational education: Issues and trends in offshore higher education.* Milton Park, Oxon, Routledge.

Murphy, E., & RodriGuez-Manzanares, M. (2008). Using activity theory and its principle of contradictions to guide research in educational technology. *Australasian Journal of Educational Technology*, *24*(4), 442-457.

Russell, D.R. (2001). Looking beyond the interface: Activity theory and distributed learning. In M.Lea, (Ed.) *Understanding distributed learning* (p.64-82). London: Routledge.

Salomon, G. (1992). What does the design of effective CSCL require and how do we study its effects? *SIGCUE Outlook 21*(3), 62-68.

Sanderson, G., Yeo, S., Thuraisingam, T., Briguglio, C., Kaur, P., & Wallace, M. (2010) Equivalence and comparability: implications for TNE assessment practices. Refereed paper presented at the *Australian Quality Forum: Higher Education (AuQF) Conference*, Gold Coast, 30 Jun-2 Jul 2010.

Stella, A., & Liston, C. (2008). Internationalisation of Australian Universities: Learning from Cycle 1 Audits, AUQA Occasional Publication series. Retrieved Aug 30, 2010 from *http://www.auqa.edu.au/qualityenhancement/publications/occasional/publications.*

Thorne, S. L. (2003). Artifacts and cultures-of-use in intercultural communication. *Language, Learning and Technology, 7* (2), 38-67. Retrieved August 23, 2010 from *http://llt.msu.edu/vol7num2/thorne/*

Thuraisingam, T., Kaur, P., Briguglio, C., Wallace, M., Mahmud, S., Yeo, S., & Sanderson, G. (2009). Perspectives of offshore academics on assessment moderation in a transnational education program. Paper presented at the *Observatory on Borderless Higher Education's (OBHE) Global Forum - 'Global Connections and Local Impacts: Best Practices, Models and Policies for Cross-Border Higher Education* ,Kuala Lumpur, Malaysia, 21-24 Oct 2009.

UNESCO and Council of Europe (2001). Code of Good Practice in the Provision of Transnational Education. Bucharest: UNESCO-CEPES. Retrieved from *http://www.cepes.ro/hed/recogn/groups/transnat/code.htm*

Victor, B., & Boynton, A. (1998) *Invented here: Maximizing your organization's internal growth and profitability.* Boston: Harvard Business School Press.

Virkkunen, J., & Kuutti, K. (2000). Understanding organizational learning by focusing on activity systems. *Accounting Management and Information Technologies*, *10*, 291-319.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.

Wallace, M., Sanderson, G., Yeo, S., Thuraisingam, T., Briguglio, C., & Kaur, P. (2009). Moderation of assessment in transnational higher education. Refereed paper presented at the *Australian International Education Conference (AIEC)*, Sydney, 13-16 Oct. 2009.