

10 SURFING THE TSUNAMI OF CHANGE

Problem-Based Learning in Theological Education in Asia

Alex Tang

Asia is experiencing rapid changes and growth, and the Asian Church needs credible, competent, confident and spiritually mature pastors to lead it in these exciting and challenging times. The traditional content-oriented MDiv curriculum with its dominant instructional-schooling pedagogical approach has been shown not effective in producing graduates who demonstrate these qualities. This article advocates Problem-based learning (PBL), with its track record in medical education, as the pedagogical approach which will better develop such qualities. The development of PBL is described, areas where changed thinking will be needed are highlighted, and suggestions are given for Asian seminaries to implement the PBL model.

Asia is changing rapidly—socially, economically, politically. But is the current approach to theological education producing pastors who are well-equipped to lead churches in Asia in these challenging times?

In North America, Episcopal educator Donn Morgan has observed that theological education has undergone two major, distinct waves in

Tending the Seedbeds

the last forty years: “The first wave dealt primarily with the church’s role in a changing culture, while the second is addressing the shape of ministry in light of a changing church” (Morgan 2008, 256f). The first wave has challenged theological education to adapt to fundamental shifts in contemporary society and culture. The second wave, however, has threatened the very structure of the church and theological education.

Asia has not been spared these waves, and it seems that the first and second waves have arrived together. The resulting tsunami challenges the way theological education is being done in Asia. This article advocates problem-based learning as an effective educational strategy for ‘post-tsunami theological education’.

In this article I limit my focus to evangelical Protestant centres of theological education (referred to in this article as seminaries) which offer at least a Master of Divinity (MDiv) degree—commonly regarded as a basic academic qualification for someone entering a pastoral ministry role. This excludes some seminaries and some church-based entities that offer a form of theological training, but as these centres usually use the same theological curriculum as their higher-educational level counterparts, this discussion may be relevant to them too.

CURRENT ISSUES IN PASTORAL MINISTRY FORMATION

“Does a student’s degree/diploma from a seminary represent a course of study successfully completed, or is it a commendation for ministry?” asked Allan Harkness (2008, 189). Harkness wrote this in the context of assessment instruments and theological values, but this question has important ramifications for the underlying practice of theological education in Asia. In the ‘paper-chase’ culture of Asians, a degree/diploma is often seen as a ‘union card’ to work in a specific

vocation rather than as a mark of competence. Is it possible to integrate these two, as necessary for effective pastors?

The Association of Theological Schools (ATS) in the USA has adopted as its standard an MDiv curriculum which includes four major program content areas (ATS 2003; O’Gorman 2007):

1. *Religious heritage*: this includes the teaching and understanding of theology, traditions, and languages.
2. *Cultural context*: this includes understanding the culture of churches and the local context and cultural realities in which the churches are situated. This is particularly relevant in Asia, in which the Church is struggling to break out of the Western “theological categories shaped by the Greek culture; its educational pattern shaped by the university model; its attitudes influenced by modernity, industrialism, colonialism, and individualism” (Wanak 2000, 3). The Critical Asian Principle (CAP) projects spearheaded by the Association for Theological Education in South East Asia (ATESEA 2008) and the new *Asia Bible Commentaries Series* being published by the Asia Theological Association (ATA) recognises the need to understand the cultural context.
3. *Personal and spiritual formation*: this is intentional development in personal faith, spiritual maturity, moral integrity, and public witness. It is encouraging to see renewed interest in such areas by seminaries, seeking to enhance it in their students both as an academic discipline and as a way of life (Edwards 1980; Jones 1987, 25-28).
4. *Capacity for ministerial and public leadership*: this involves development of skills for leadership and the ability to reflect

Tending the Seedbeds

theologically on ministry. Action/reflection is a vital process for the integration of learning (Schön 1983, 1987). Theological reflection which translates into action is an important attribute of leadership, both inside and outside the Church.

These four areas for theological education are similar to the four domains of ministerial formation identified by Harkness: appropriate knowledge, ministry skills, character development, and empathy/passion. These need to be integrated if seminaries are to produce “credible minister-leaders who are competent, confident and compassionate” (Harkness 2001, 142, 148-149).

The ATS standard is appropriate against which to evaluate the MDiv programs in Asian seminaries. A survey of the websites of several seminaries in Singapore and Malaysia suggests that seminaries offer much in the religious heritage and capacity for leadership areas; and field education and internships contribute to the cultural context area. But while the seminaries state clearly that they are aware of the importance of personal/spiritual formation in their students, this is not reflected in the formal courses of the curriculum. The result is that it is often not given priority, or is treated as an optional add-on. It also means that there is little attempt to evaluate or assess personal/spiritual formation outcomes.

So the impression from my simple survey is that seminary curriculum has a strong focus on cognitive and skills development but is weak in its focus on personal growth and developing relevance for the local churches. It is very much content- rather than outcomes-based. And this has important implications for the type of graduates seminaries produce.

When a large proportion of a curriculum is content-based, students are usually overwhelmed by the requirements of their courses.

Surfing the Tsunami of Change

The content is usually delivered in an ‘instructional-schooling’ mode, as this is (albeit arguably) effective for content transmission. However there is much criticism of this pedagogy, especially when content is not as important as the capability to use the content in creative ways, and when the ability to do critical and reflective thinking is essential (Brookfield 1987, Hill 1985, Schön 1987). In any teaching institution there is inevitably a tension between content and pedagogical process, but content experts, by virtue of their training and interest, rarely give much attention to their pedagogy.

Further concerns about the MDiv curriculum have been expressed. Internationally recognised theological educator Linda Cannell and medically trained Hans Madueme have identified five areas of concern. In so far as most Asian seminaries follow a western model, these concerns may also be relevant for Asian theological education. Madueme and Cannell’s (2007) concerns are these:

1. The fragmentation of the curriculum due to specialisation and sub-specialisation. Students are exposed to many academic content specialists who teach only in their areas of specialty. The result is a lack of integration and congruence of their content base. What this fails to recognise is that fragmentation of our knowledge does violence to our ways of knowing—or “every epistemology becomes an ethic” (Palmer 1993). A fragmented, non-integrated specialist curriculum may be an obstacle to spiritual formation, as it prevents the full integration of all aspects of the person.
2. This fragmentation is enhanced by the MDiv program designed around the traditional fourfold curriculum (biblical studies, systematic theology, Church history and practical theology). Inherent in this is the perception that biblical studies or

Tending the Seedbeds

systematic theology are greater in importance than practical theology. Thus practical (or applied) theology—which is what the students need for pastoral ministry—is given lowest priority.

3. Much of the curriculum content is theoretical rather than practical. The structure of the curriculum makes it difficult to “synthesise knowledge learned *and* make it good for pastoral work” (Madueme and Cannell 2007, 50. Original italics). While it may be argued that developing depth of knowledge is important, it must be acknowledged that students will need only a small fraction of the specific content they learn in seminary to be able to function effectively in their churches.
4. Commonly, there is a mismatched perception of theological education by seminaries and churches. The churches expect seminary graduates to be competent to function as pastors, while seminaries often believe their purpose is much more to increase the knowledge content of the students rather than give them ministry skills and spiritual formation.
5. Theological educators themselves may have different perceptions. Some believe that “content is not a commodity to be delivered” but that “knowledge is a thing in itself” (50). These educators are very concerned about their disciplines and the transfer of content. Another group of theological educators see themselves as “facilitators of learning” and consider that “knowledge is only effective when connected to something else—be it virtue, piety, wisdom, practice, or love for God and neighbor” (50). The former will seek for *status quo* in theological education while the latter will look for a paradigm shift. Concerning the teaching roles of educators as ‘knowledge dispenser’ and

Surfing the Tsunami of Change

‘guide’, Lee Wanak has issued the reminder that “learning how to learn is a more basic knowledge than the specifics of what to learn” (Wanak 2000, 8).

Wanak is concerned for effective pedagogy, and he has suggested that, for an effective theological education paradigm for ministerial training in the Asia-Pacific region in the 21st century, seminary faculty will need to consider their response to these seven questions:

1. Do students have adequate contact with faculty or, because of financial and ministerial pressures, are faculty uninvolved in the lives of students?
2. Are students involved in cooperative learning in courses and extra-curricular activities or are there many solo students uninvolved in the learning community?
3. Do we bore our students with unimaginative lectures or are we using discovery/inquiry methods to create active, self-directed learners?
4. Are we afraid to give feedback either because we fear damaging smooth interpersonal relations or because we do not want to spoil people with praise?
5. Do we spend adequate time on the teaching-learning process or is a good deal of time lost due to lateness and lack of preparation?
6. Do we communicate high (but realistic) expectations regarding what students will learn, or do they see the course as an easy mark?
7. Does our teaching appeal to a variety of learning styles or do we maintain a lecture/test approach to teaching? (16)

Tending the Seedbeds

In the light of the above, there seems to be a clear call for a paradigm shift in Asian theological education. I suggest that, at least for the pedagogical element of this, problem-based learning (PBL) has much to offer.

THE DEVELOPMENT OF PBL

Citing the benefits of PBL, James Rhema, Executive Editor of the National Teaching & Learning Forum in the USA, noted:

Problem-based learning (PBL) ends up orienting students towards meaning-making over fact-collecting. They learn via contextualized problem sets and situations. Because of that, and all that that goes with that, namely the dynamics of group work and independent investigations, they achieve higher levels of comprehension, develop more learning and knowledge-forming skills and more social skills as well. This approach to teaching brings prior knowledge into play more rapidly and ends up fostering learning that adapts to new situations and related domains as quickly and with the same joyous magic as a stone skipped over a body of water. (Rhema 1998, 1-4)

PBL is known especially for its application in medical education. Medical education has always regarded apprenticeship as its underlying pedagogical model. However, it uses instructional-schooling mainly because of the large amount of content that needs to be transmitted. While the pedagogy appears sound, senior doctors have always noted that newly-graduated medical students have problems correlating their content scaffolding with their patients' data, and thus are not competent in their medical management decision making. These problems have become more acute in the last few decades with the increase in content load.

Surfing the Tsunami of Change

In 1969, McMaster University started a new medical school, and in a bold step its medical educators designed a completely new curriculum. Breaking with tradition, this curriculum borrowed heavily from the learning theories of other disciplines—and the result was PBL, a pedagogical strategy that uses specific patient problems as a context for the students to be empowered to learn the basic and medical sciences. Howard Barrows, one of the program's originators, described the approach thus:

The basic outline of the problem based learning process is: encountering the problem first, problem solving with clinical reasoning skills and identifying learning needs in an interactive process, self study, applying newly gained knowledge to the problem, and summarizing what has been learned. (Barrows 1996, 1)

To understand PBL, consider a typical PBL session which I facilitate in the School of Medicine of the University of Monash. A session lasts two hours and is conducted weekly for a semester for a specific course. Our PBL approach includes these elements:

- The process begins with the students being given a short medical history in which is embedded one or more problems. Resources accompanying the printed medical history may include detailed learning objectives, computer picture or video files, Internet links, and recommended reading lists.
- Students come together in pre-assigned groups of up to eight peers. The students remain in the same group for the whole year. Group sessions are moderated by a tutor who may not necessarily be a content expert. At the beginning of each session, the students appoint a leader and a scribe to record the discussion.

Tending the Seedbeds

- The students brainstorm to identify the problem(s) in the scenarios, and to decide on their learning needs to address the problem(s). They divide tasks amongst themselves to obtain information, and later email each other (and the tutor) the results of their research, reviews and comments. They continue to search out more information. Some students start restricted access blogs on the Internet for these discussions. The initial brainstorming, discussion of learning objectives and division of tasks take about one hour; the research and discussion takes place during the week.
- The following week the group meets again for an hour, to discuss the findings and address the problem(s) and its solution(s). Each student presents his/her findings in no more than 10 minutes and needs to be prepared to answer questions and to receive feedback from his/her peers.
- The tutor guides the discussion, when necessary provides more insights, and gives feedback to the students.
- Every quarter students evaluate and provide feedback on themselves, their peers and the tutor.

Aside from the PBL small group sessions, the students are involved in settings such as structured community projects, skill laboratories, workshops, syndicate presentations/seminars, oral and written case presentations, and bedside teaching in hospitals. The students do most of their research online—either by searching the Internet or via access to a well-stocked virtual university library (with links to other databases).

Evaluation and assessment are important components of the curriculum. Both formative and summative assessments are frequently

Surfing the Tsunami of Change

performed on learning activities, the educators, peers, and the students on themselves. This element of the curriculum process has been shown to “encourage effective and self-directed learning, critical thinking, teamwork, understanding rather than memorization, and facility with professional language” (Sefton 2005, 143). In 2008, the Monash University medical curriculum was ranked first among all Australian medical schools (Monash 2009b).

The underlying learning processes of PBL have been well studied. (See Albanese 2007, 21-26 for a comprehensive review.) Representative of some of the perspectives are those of North American medical educator Mark Albanese, who has suggested four theoretical bases to explain the potency of the PBL process: information-processing theory, co-operative theory, self-determination theory, and control theory (14-16). Dolmans et al (2005) have suggested that PBL is made up of four processes:

1. *Constructive process* occurs when the students construct and deconstruct their content/knowledge scaffolding using new content or a new perspective on old content. PBL learning depends on building upon prior content.
2. *Self directing process* is when the student feels motivated to seek answers and then plans and executes avenues to obtain these answers.
3. *Collaborative process* occurs in a small group where there is mutual dependency, shared responsibilities, social interaction, and need the ability to accept a shared consensus.
4. *Contextual process* exposes the student to the fact that there are different perspectives to a single problem and all perspectives need to be considered.

Tending the Seedbeds

What is notable about PBL is that within the short period of thirty years, many medical schools have converted, or are in the process of converting, their preferred pedagogical approach to PBL. The application of PBL has also expanded into a wide variety of other disciplines, for example business studies, sciences, leadership education, engineering, education, and the social sciences (Wilkerson and Gijssels 1996). A notable absence from this list is theological education.

PBL IN ASIAN THEOLOGICAL EDUCATION

There are similarities between medical education and theological education. Both have years of tradition in their educational approaches. They both have a high content load, and commonly students are expected to remember this content load for ready recall, as content/knowledge scaffolding for subsequent decision making in their professional lives. Both disciplines have embedded in their curricula the enculturation of values and character formation. And the graduates of both disciplines have suffered similar criticism about how poorly their training has equipped them professionally. Just as medical education has tended not to produce competent doctors who are equipped to interact with the complexity of modern medical treatment modalities and technologies, so theological education has tended to produce pastors for a church unable to make an impact in societies that are multi-cultural, pluralistic, and often antagonistic to Christianity.

The University of Monash medical curriculum is designed as an integrated five year program incorporating four content areas: 1. Personal and professional development, 2. Population, society, health and illness, 3. The scientific basis of clinical practice, and 4. Clinical skills (Monash 2009a). The focus is outcomes-based, and every educational activity incorporates all four content areas. Note

Surfing the Tsunami of Change

that the ATS four program areas and the domains identified by Harkness above also suggest the need for an outcomes-based rather than content-based curriculum, and how close the University of Monash Medical School content areas are to the ATS MDiv four content areas detailed above: 1. Personal and spiritual formation, 2. Cultural context, 3. Religious heritage, and 4. Capacity for ministerial and public leadership. This alignment is so close because both the medical and theological education programs are designed to produce competent professional practitioners.

Howard Worsley, an Anglican diocesan director of education in the UK, has reflected on how PBL may be used in Anglican residential ministerial theological training for ordination:

Such contextual learning would focus theology onto the task of actioning God's love in the world rather than in merely reflecting on it, away from the situation.... To conclude, it seems that the time is ripe to experiment and try out new ways of learning that empower and engage.
(Worsley 2005, 80)

Worsley echoed the concern of many theological educators that the current theological education process is not producing students with the correct attitudes and aptitudes for ministry. Feedback from churches to seminaries about the ability of their students to do pastoral care is often discouraging. Earlier, John Frame had noted "it seems to me that most seminary graduates are not *spiritually* ready for the challenges of the ministry. Seminaries not only frequently 'refuse to do the work of the church'; they also tend to undo it" (Frame 1984, 371. Original emphasis). The instructional-schooling approach to theological education, with its emphasis on transmitting cognitive content, may be the cause. This is similar to the challenges medical education faced before adopting a PBL-based curriculum.

Tending the Seedbeds

In the context of ministerial training, Worsley suggested two scenarios in which he might use PBL. One, which he terms a 'mission scenario', is worth presenting in detail:

A termly mission scenario might be:

You are a new vicar of an urban priority area anglo-catholic church that is experiencing a loss of Sunday worshippers. Your church hall is in a poor state of repair but is in high demand by the community. The electoral roll is 60, the Sunday attendance is 30 adults and 25 children.

Create a plan of action as to how you develop ministry in this context.

As this scenario is explored, more precise information could be offered, detailing numbers of occasional offices, types of service traditionally offered, other communities within the parish (schools, sheltered accommodation, mosques, temples, and the like) and other network of people (funding agencies, political officers, short term projects, and so forth).

As the scenario is opened further, the issues could be banded into groups of concern that may highlight networking, time management, working with laity, being a priest in a particular tradition, working with young people (child protection issues, developmental issues), working with old people, pastoral care, running church services, working ecumenically, working alongside other faiths, creating a five-year plan and so on. (Worsley 2005, 76)

Other issues may also be developed from this scenario or problem.

The key to PBL is the identified problem. Albanese identified seven qualities of an appropriate PBL problem:

Surfing the Tsunami of Change

1. It is a common problem that graduates would be expected to be able to handle, and be prototypical of that problem.
2. It should be serious or potentially serious—where appropriate management might affect the outcome.
3. It should have implications for prevention.
4. It should provide interdisciplinary input, or cover a broad content area.
5. It should lead to an encounter of faculty members' objectives.
6. It should present an actual (concrete) task.
7. It should have a degree of complexity appropriate for the students' prior knowledge. (Albanese 2007, 3)

Albanese was addressing a medical education context. In medical education, a PBL module is often structured on a case history involving a patient and his/her family. The advantage for the medical curriculum is that many problems are 'organ based'—the organs of the body (e.g. the heart, lungs, or brain) make it easy to design PBL problems.

Other disciplines which have adopted a PBL approach have come up with their own criteria for the problem. Similarly, it should not be difficult for theological educators to formulate appropriate PBL problems. They could be centred on issues in systematic theology, the workings of the church, Asian cultural heritage, postcolonialism, the needs of the congregation, or being church in a multicultural, multi-ethnic and pluralistic society. This latter concern is a very important contemporary challenge in Asia, and pastors need to be equipped to meet this challenge (Foster 2004, 2007; Johnson 1993).

The advantage of a PBL curriculum is that it is easier to structure for the Asian context than the traditional instructional-schooling approach, which is not as flexible in its ability to contextualise. For

Tending the Seedbeds

example, take a discussion on whether a person is a 'Chinese Christian' or 'Christian Chinese'. This lends itself to an exploration of cultural heritage, Confucian influences, filial piety, the culture of shame, worship, worldview, spiritual transformation, evangelism, and the type of church structure suitable for such a person. Further discussion may include whether the ethnically-Chinese person is English- or Chinese-educated, and living in Malaysia, Singapore, Thailand, Japan, Taiwan, or mainland China. A traditional curriculum will be hard pressed to be able to cope with such a contextualised, integrated, and multi-disciplinary discussion.

The Asian Church, in common with the Church elsewhere in the world, needs pastors who are well-developed cognitively and well-versed in theological knowledge content, but also who have the 'soft' skills to deal with their increasingly complex congregations. A meta-analysis of medical students who studied in PBL curriculums has found that these students rated higher than those who have gone through the traditional curriculum in their competence to cope with uncertainty, to appreciate legal and ethical aspects of healthcare, communication skills, and self-directed continuing learning (Koh et al. 2008). These competencies are equally useful in a pastor in Asia.

EMBRACING PBL IN ASIAN THEOLOGICAL EDUCATION

A PBL approach to curriculum for the training of pastors in theological education in Asia will demand a rethink of the nature of education and pedagogy by Asian seminaries. PBL is not a new fad to be dovetailed into the existing traditional curriculum. It demands a loosening of the traditional boundaries of disciplines so that an integrated self-directed way of learning is enhanced. The educators will need to take on the role of facilitator rather than dispenser; and recognise that a

Surfing the Tsunami of Change

good curriculum for adult students will take into account that the students are independent, self-motivated learners (Knowles et al. 2005), with multiple intelligences (Gardner 1999) and learning styles (LeFever 2004), and need to become reflective practitioners (Schön 1987). In other words, the traditional approach to theological education needs to be turned upside down: “PBL is not a replacement curriculum but an alternative design employed for sound reasons” (Madueme and Cannell 2007, 53).

Paradigm shifts are hard work. From his vast experience as a medical educator, Albanese commented, “beginning a PBL curriculum is not for the faint hearted” (Albanese 2007, 25). However, as Wanak has challenged (above), a paradigm shift is needed if theological education in Asia is to meet the needs of a growing, dynamic church.

If Asian seminaries are to adopt a PBL curriculum, a paradigm shift will need to occur in four areas:

1. The paradigm shift must start with theological educators. The key to a successful implementation of a PBL curriculum is that the policy-makers catch the vision of an integrated outcomes-based curriculum (Barrows 1996, 8). Without the support of the president, board of directors and academic deans of seminaries, it will be very difficult to change the *status quo*. A PBL curriculum will require theological educators who have trained and developed in their careers as ‘knowledge dispensers’ to be willing to be transformed to become ‘knowledge guides/facilitators’. They will need training as PBL facilitators. Sometimes, they may be expected to teach outside their field of expertise. Theological content experts who are used to teaching in a compartmentalised, specialised ‘box’ will be asked to work in a more nebulous ‘boxless’ integrated outcomes-based setting,

Tending the Seedbeds

as they develop PBL problems that are multidisciplinary and require interactions with experts from other disciplines. The nature of the PBL curriculum will require more evaluation and assessment, which many content experts may not initially be comfortable with.

2. There will be a paradigm shift in curriculum planning. PBL curriculum planning has to be done with an outcomes-based perspective. The 3-4 years of the MDiv curriculum will have to be designed as an integrated whole using as a guide, perhaps, the four content areas of the ATS standard (religious legacy, cultural context, personal and spiritual formation, and capacity for ministerial and public leadership). PBL question modules will have to be written, taking into consideration the level of the students' content base. Complementary learning activities will need to be planned: for example, structured community projects, ministerial skill laboratories, linguistic workshops, directed activities, syndicate presentations/seminars, and attachment/internship in churches and Christian organisations. The challenge will be for theological educators to resist giving too much content; instead they will need to focus much more on training the students to find, assimilate and develop contents of their own. This will involve the learning processes of construction, self directed learning, collaboration and contextualisation (Dolmans et al 2005—see above).

Access to resources is an important consideration in a PBL curriculum. Students often need access to more resources than are available in a traditional print-based seminary library. An increasing number of creditable resources are available online. Asian seminaries may be able to come together to jointly develop and share a virtual online theological library with an

Surfing the Tsunami of Change

extensive collection of digital books, multimedia, journal collections and access to other databases. Thus, with an Internet connection any student, even one from a very small seminary, will have access to this extensive theological resource.

3. The paradigm shift will involve the students and their churches, as stakeholders in theological education. They will need to modify how they perceive theological education. The dominant mode of national education in Asia has always been instructional-schooling, which is mainly content transmission. This is especially true where the Confucian ethos is prevalent, in which content is the goal of education. Students expect to be spoon-fed content, and so find themselves lost and confused when they are encouraged to be self-directed learners. But once students get over the 'shock' of self-directed learning, most enjoy the PBL experience. One reason is that they have more personal contact with their professors/lecturers. Studies show that student contact hours are 3-4 times greater for educators in the PBL curriculum compared to the traditional curriculum (Koh et al. 2008). This increased contact may reduce the fears that block students from effective learning (Shults 1999). Churches whose leaders have been trained in the traditional theological education curriculum will also need convincing that they will benefit from having as their pastors graduates of a PBL curriculum. But it is anticipated that the value of the PBL approach will be seen in the graduates.
4. Spiritual formation will come to the forefront of theological education. Spiritual formation—persons growing into the character of Christ in the context of a community of faith—is often an unstructured component, and receives little time in the traditional curriculum. While seminaries are expected to

Tending the Seedbeds

be centres for Christian spiritual formation and transformation, in the traditional curriculum students are usually so overloaded with content work that they have little time for spiritual formation. Graham Cheesman has reported that some educators think of the traditional curriculum as a “‘frenetic paper chase’ we set our students rather than ‘cultivation of spiritually sensitive souls’” (Cheesman, n.d., 5). In a PBL curriculum, spiritual formation will receive greater priority as one of the four major content areas.

Madeume and Cannell (2007, 54) have given suggestions for implementing PBL in an MDiv program. While their focus is North American seminaries, these points may be considered by Asian seminaries also:

1. Develop two parallel tracks for the MDiv: the conventional program and a PBL track. In some cases PBL experiences could overlap with traditional classes.
2. Develop one class that runs throughout the MDiv curriculum in both semesters.
3. Create one or more prerequisite classes that present the technical information and/or content required for particular PBL experiences.
4. Develop PBL problems that lead students through content acquisition and conceptual understanding.
5. Design an experimental PBL course that parallels the MDiv internship experience.
6. Organise a cohort that moves through one or two years of the MDiv program together using PBL as their primary experience.

7. Organise cohorts that change each semester and that are involved in PBL for at least two semesters of their program.

These suggestions point to the possibility of developing a hybrid process, in which some lectures are delivered to complement the group problem-solving process. The usefulness of hybridisation comes from studies which show that not all students are independent learners, and they may need help to build up a content base faster (Albanese 2007, 21-25; Kirschner 2006; Wilkerson and Gijssels 1996). An hybrid curriculum may be ideal for Asia seminaries, as lecture and didactic teaching are part of the Asian cultural heritage. It allows the theological educators and students to feel comfortable with the curriculum while building a content base. But the main thrust is still the self-directed learning and small group dynamics. So a hybrid approach may still qualify as an integrated outcomes-based curriculum, as long as lectures are kept to a predetermined minimum.

I raise one caveat about these suggestions, however. While they are worth considering, PBL as a pedagogical approach will not be fully effective if it is married to a traditional curriculum. Ideally, the PBL curriculum needs to be the whole MDiv program.

CONCLUSION

Asia is experiencing rapid changes and growth. The Asian Church needs credible, competent, confident and spiritually mature pastors to lead it in these exciting and challenging times. The traditional content-oriented MDiv curriculum is not able to produce graduates with the essential qualities for spiritual leadership at this time—leaders who are capable decision makers, creative thinkers, reflective practitioners and life-long learners. Problem-based learning offers a pedagogical approach to develop these qualities much more effectively.

Tending the Seedbeds

Hence, Asian seminaries would do well to seriously consider adopting a PBL paradigm for their MDiv programs for effective ‘post-tsunami’ theological education.

Dr Alex Tang is a senior consultant paediatrician in Johor Bahru, Malaysia. He is an adjunct faculty member of the Monash University (Australia) School of Medicine, Nursing and Health Sciences, teaching at its Johor Bahru campus. Alex teaches biomedical ethics and spiritual formation in seminaries and churches; is the director of the Spiritual Formation Institute, Holy Light Church (English); and is the director of Kairos Spiritual Formation Ministries. Alex is completing his PhD(Education) through Asia Graduate School of Theology (Malaysia–Singapore–Thailand).

Alex may be contacted at <draltang@gmail.com>.

REFERENCES

- Albanese, M. A. (2007). *Problem-Based Learning*. Edinburgh: Association for the Study of Medical Education (ASME).
- [ATESEA] Association for Theological Education in South East Asia. (2008). Guidelines for Doing Theology in Asia. *International Bulletin of Missionary Research*, 32(2), 77-80.
- [ATS] Association of Theological Schools. (2003). *Master of Divinity Curriculum Revision Folio*. Pittsburgh, PA: Association of Theological Schools.
- Barrows, H. (1996). Problem-Based Learning in Medicine and Beyond: A Brief Overview. In L. Wilkerson & W. H. Gijselaers (Eds.), *Bring Problem-Based Learning to Higher Education: Theory and Practice* (pp. 3-12). San Francisco, CA: Jossey-Bass Publishers.
- Brookfield, S. D. (1987). *Developing Critical Thinkers: Challenging Adults to Explore Alternative Ways of Thinking and Acting*. San Francisco, CA: Jossey-Bass Publishers.
- Cheesman, G. (n.d.). *Spiritual Formation as a Goal of Theological Education*. <http://www.theologicaleducation.org/docs/resource2.pdf>. Accessed 12 June 2008.
- Dolmans, D. H., De Grave, W., Wolfhagen, E. H. & van der Vleuten, C. P. (2005). Problem-Based Learning: Future Challenges for Educational Practice and Research. *Medical Education*, 39, 732-741.
- Edwards, T. H. (1980). Spiritual formation in theological schools: Ferment and challenge. *Theological Education*, 17(1), 7-45.
- Farley, E. (2001). *Theologia: The Fragmentation and Unity of Theological Education*. Eugene, OR: Wipf & Stock Publishers.
- Foster, C. R. (2004). Religious Education at the Edge of History. *Religious Education*, 99(1), 72-78.
- _____. (2007). Cultures Matter. *Religious Education*, 102(2), 120-123.

Tending the Seedbeds

- Frame, J. (1984). Case Studies: Proposals for a New North American Mode. In H. Conn & S. Rowen (Eds.), *Missions and Theological Education in World Perspective* (pp. 369-386). Farmington, MI: Associates of Urbansu.
- Gardner, H. (1999). *Intelligence Reframed: Multiple Intelligences for the 21st Century*. New York: Basic Books.
- Harkness, A. G. (2001). De-schooling the Theological Seminary: an Appropriate Paradigm for Effective Ministerial Formation. *Teaching Theology and Religion*, 4(3), 141-154.
- _____, (2008). Assessment in Theological Education: Do Our Theological Values Matter? *Journal of Adult Theological Education*, 5(2), 183-201.
- Hill, B. V. (1985). *The Greening of Christian Education*. Homebush West, NSW: Lancer Books.
- Johnson, S. (1993). Reshaping Religious and Theological Education in the 90s: Towards a Critical Pluralism. *Religious Education*, 88(3), 335-349.
- Jones, A. (1987). Are We Lovers Anymore? (Spiritual Formation in Seminaries). *Theological Education*, 21(1), 9-40.
- Kirschner, P. A. (2006). Why Minimal Guidance During Instruction Does Not Work: An Analysis of the Failure of Constructivist, Discovery, Problem-Based, Experiential, and Inquiry-Based Teaching. *Educational Psychologist*, 4(2), 75-86.
- Knowles, M. S., Holton, E. F. III, Swanson, R. A. (2005). *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development*. London: Elsevier.
- Koh, G. C.-H., Khoo, H. E., Wong, M. L., & Koh, D. (2008). The Effects of Problem-Based Learning During Medical School on Physician Competency: A Systematic Review. *Canadian Medical Association Journal*, 178(1), 34-41.
- LeFever, M. D. (2004). *Learning Styles: Reaching Everyone God Gave You to Teach*. Eastbourne, England: NexGen.

Surfing the Tsunami of Change

- Madueme, H. & Cannell, L. (2007). Problem-Based Learning and the Master of Divinity Program. *Theological Education*, 43(1), 47-60.
- Monash, University of. (2009a). *Bachelor of Medicine/Bachelor of Surgery*. <http://www.monash.edu.my/advancement/study/undergraduate/medicine/medicine-surgery.html>. Accessed 18 November 2009.
- _____. (2009b). *Teaching and Learning Performance*. <http://www.med.monash.edu.au/performance.html>. Accessed 18 November 2009.
- Morgan, D. (2008). As Through a Glass Darkly: Defining Theological Education in the Twenty-First Century. *Anglican Theological Review*, 90(2, Spring), 255-265.
- O’Gorman, R. T. (2007). Reflections of an “Investigative Journalist” on the Four Content Areas of the MDiv. *Theological Education*, 43(1), 1-6.
- Palmer, P. J. (1993). The Violence of Our Knowledge: Towards a Spirituality of Higher Education. *The Michael Keenan Memorial Lecture*, Berea College, KY: Lecture.
- Rhema, J. (1998). Problem-Based Learning: An Introduction. *The National Teaching & Learning Forum*, 8(1), 1-4.
- Schön, D. (1983). *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.
- _____. (1987). *Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions*. San Francisco, CA: Jossey-Bass.
- Sefton, A. (2005). Problem-Based Learning. In J. A. Dent & R. M. Harden (Eds.), *A Practical Guide for Medical Teachers* (pp. 143-150). London: Elsevier Limited.
- Shults, F. L. (1999). Pedagogy of the Repressed: What Keeps Seminarians from Transformational Learning? *Theological Education*, 36(1), 157-169.
- Wanak, L. C. (2000). Theological Education and the Role of Teachers in the 21st Century: A Look at the Asia Pacific Region. *Journal of Asian Mission*, 2(1), 3-24.

Tending the Seedbeds

Wilkerson, L. & Gijssels, W. H. (Eds.). (1996). *Bringing Problem-Based Learning to Higher Education: Theory and practice*. San Francisco, CA: Jossey-Bass Publishers.

Worsley, H. (2005). Problem-Based Learning (PBL) and the Future of Theological Education: A Reflection Based on Recent PBL Practice in Medical Training Compared to Emerging Trends in Residential Ministerial Training for Ordination. *The Journal of Adult Theological Education*, 2(1), 71-81.