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ISSUE PAPER
***Challenges to Promoting Active-Learning,
Student-Centered Pedagogies***



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INTRODUCTION

Researchers and policy makers around the world have endorsed the use of active-learning, student-centered pedagogies (Darling-Hammond and Bransford, 2005; Hopkins 2002). This model of teaching highlights “minimal teacher lecturing or direct transmission of factual knowledge, multiple small group activities that engage students in discovery learning or problem solving, and frequent student questions and discussion” (Leu and Price-Rom 2006, p. 19).

Despite the endorsements by researchers and policy makers, however, there are many challenges in promoting teachers’ use of active-learning, student-centered pedagogies (e.g., see Alexander 2000; UNESCO 2004).¹ Among the challenges are:

- the *quantity/quality of pre-service preparation* and the effectiveness of in-service professional development that teachers receive
- the *material conditions* (facilities, equipment, and number of students) in classrooms where teachers are asked to implement active-learning, student-centered pedagogies
- the inconsistency between the information-memorization orientation exemplified in the *curriculum and examinations* (focusing on memorization of information) and the constructivist notions of knowledge and understanding associated with active-learning, student-centered pedagogies
- the *cultural appropriateness* of the model of adult-child-knowledge relations on which active-learning, student-centered pedagogies are based

This Issue Paper focuses briefly on the first three challenges, identifying research-based literature that addresses the issues in more depth, and then discusses the latter challenge (i.e., cultural appropriateness) more extensively.

LEVEL OF TEACHERS’ PRIOR EDUCATION AND TRAINING

Research conducted under the EQUIP1 Leader Award indicates that in-service education programs – especially ones which are school- and school cluster-based, extended over a period of time, and actively engage participants in learning and doing – can develop the commitment and knowledge of even less formally educated teachers that is a pre-requisite for implementing active-learning, student centered pedagogies (Abd-El-Khalick et al., 2006; Amare Asgedom et al., 2006; Barrow et al. 2006; Rocha 2006; Van Graan and Leu 2006). Similarly, based on case studies in Bangladesh, Botswana, Guatemala, Namibia, and Pakistan as well as an extensive literature review, Craig et al. (1998, p. 139) report that:

When teachers are actively involved and empowered in the reform of their own classrooms and schools, even those teachers with minimal levels of education and training are capable of changing the classroom environment and improving the achievement of their students.

While the level of teachers’ prior education and training represents a challenge to efforts to promote the use of active-learning, student-centered pedagogies, such challenges can be overcome.

¹ Alexander (2000, p. 546) references the fourth and second challenges, respectively, in discussing “the emerging pedagogic discourse of Indian primary education,” which has been infused with “developmental/progressive imports,” when he states that “it is not yet clear how far an individualistic, enquiry-based ideology is compatible with either the deeply rooted collective orientation of Indian primary teaching or the unassailable fact of very large classrooms.”

MATERIAL CONDITIONS OF CLASSROOMS

It is perhaps commonsense that teaching – especially using active-learning, student-centered pedagogies – is more challenging when one is working in classrooms with large numbers of pupils and/or with poor facilities and limited instructional resources. This commonsense view has been documented in a number of settings, including in nursery and primary schools involved in the Kampala School Improvement Program (SIP) in Uganda (1994-1997). Based on an evaluation study, utilizing quantitative and qualitative data, Siraj-Blatchford et al. (2002) found that “the utilization of child-centered ... pedagogy [was] more sporadically implemented than the teacher questionnaires suggested” (p. 129) both because “the furnishing and equipment in the classroom being inadequate” (p. 129) and because “[l]arge classes undermine the SIP principles and practices” (p. 136). However, such general conclusions flatten out the important inter-individual and inter-school variations in teachers’ practices. As Siraj-Blatchford et al. (2002) discuss:

In general, teachers who showed greatest evidence that they had adopted the SIP approach ... were found in the lower grades of the school, where the same teachers remain in their own classrooms, unlike the subject-specialist teachers of the older children. (p. 129)

[T]he best schools, there is evidence that SIP has entirely transformed the environment of classrooms ... Many teachers have developed new skills in making low-cost educational materials. New skills have also been gained by many teachers in more child-centered or [child-]friendly methods of classroom organization. (pp. 132-33)

(IN)CONSISTENCY OF PEDAGOGY, CURRICULUM, AND EXAMINATIONS

There is also considerable evidence that teachers’ sustained use of active-learning, student-centered pedagogies depend on the extent to which they (and other key stakeholders) believe that it is feasible for them to use such an approach given the demands of the curriculum and examinations. As Hopkins (2002, p. 281) observes, “one of the threats to child-centered learning is the narrowing of the definition of effective student learning to ... test scores ... It is evident from the case studies that teachers in Uganda, Kenya, and Tanzania are subject to significant expectations and pressure to ensure student success on national examinations.” For instance, based on an evaluation of the Kisumu School Improvement Program (SIP) in western Kenya during 1990-1996, Capper et al. (2002) report that “although SIP teachers practiced more child-centered teaching behaviors than did control teachers, their use of them was limited” (p. 107):

Although SIP teachers did engage in a more child-centered approach to teaching, their [limited use of such] behaviors did not appear to have a [strong] positive influence on test scores at either grade level tested. Teachers seemed to believe in the value of child-centered teaching strategies but were reluctant to fully adopt these strategies because they felt pressure to cover the [very full] curriculum and ensure that pupils were prepared to take and succeed in the national primary school leaving examinations. They were not able to reconcile these goals. (p. 111)

Nevertheless, in this and other settings some teachers manage to reconcile these goals and, at least for a period of time, implement active-learning, student-centered pedagogies in ways that

enable their students to acquire requisite curriculum knowledge and score well on exams (Hopkins 2002).

CULTURAL APPROPRIATENESS OF MODEL OF ADULT-CHILD-KNOWLEDGE RELATIONS

As noted in the introduction, active-learning, student-centered pedagogies can be contrasted with approaches emphasizing teacher lecturing or direct transmission of factual knowledge. Instead, students interact with teachers by posing questions and participating in discussions as well as engage with other students in small group activities toward discovering conceptual knowledge and solving problems.

Like any teaching-learning approach, active-learning, student-centered pedagogies imply cultural notions of, among other things, adult-youth interactions and knowledge-learner relations. As Alexander (2000, p. 5) argues:

[T]he notion of culture is paramount. ... Though there are undoubted cross-cultural continuities and indeed universals in educational thinking and practice, no decision or action which one observes in a particular classroom, and no educational policy, can be properly understood except by reference to the web of inherited ideas and values, habits and customs, institutions and world views which make one country, or one region, or one group, distinct from another.

The active-learning, student-centered pedagogical approach is built on cultural value of relatively democratic or egalitarian (i.e., less authoritarian and unequal power) relations between adults and youth. Active-learning, student-centered pedagogies also are more in line with conceptions of knowledge as socially constructed or “reflexive” rather than given or “received” (see Berlak and Berlak 1981; Ginsburg 1987; Whitty 1985). As Eggleston (1977, pp. 52-53) explains:

[T]he received perspective is ... the one in which curriculum knowledge ... is accepted as a received body of understanding that is ‘given,’ even ascribed, and is predominantly non-negotiable. ... [T]he reflexive perspective is ... one in which curriculum knowledge ... is seen to be negotiable ... [The] curriculum is an artifact; constructed by teachers and others responsible for determining the experience of students. (In some situations the students themselves may be seen to take part in this construction.)

Here we explore these issues in relation to three cultural contexts, addressing the question of the extent to which active-learning, student-centered pedagogies are congruent with the cultures of: a) working class communities (at least in England and the United States), b) societies strongly influenced by Confucianism, and c) societies strongly influenced by Islam.

Working Class versus Middle Class Culture

In his attempt to explain social class-based inequalities in educational achievement, particularly in England, Basil Bernstein (1971) focuses on how parent-child interaction differs across family types, with working class families tending to exhibit “positional” and middle class families tending to exhibit “person-centered” family types. Positional families are characterized by clear, formal definition and separation of roles (e.g., strong differences between what it means to be a

child versus a parent) and unidirectional patterns of socialization (i.e., adult → child). In positional families:

judgments and the decision-making process would be a function of the status of the member rather than a quality of the person. There would be segregation of roles and a formal division of areas of responsibility according to age, sex, and age relation status. ... [S]ocialization ... tends to be unilateral ... [T]he range of alternatives which inhere in the roles ... is relatively limited. ... [S]ocial control will be affected either through power or through referring of behaviour to the universal or particular norms which regulate the status. (Bernstein 1971, pp. 154-56)

In contrast, person-centered families reflect less clear role definitions, weaker role boundaries, and reciprocal patterns of socialization (i.e., parent ↔ child). In person-oriented families:

the limits on the extent to which decision may be open to discussion would be set by the psychological characteristics of the person rather than by his [or her] formal status. ... [T]he parents and the children operate with a greater range of alternatives ... [T]he children would be socializing the parents as much as the parents were socializing the children; for the parents would be very sensitive towards the unique characteristics of the children. ... Social control will be based upon linguistically elaborated meanings rather than upon power. However, ... power in the end is still the ultimate basis of authority. (Bernstein 1971, pp. 153-55)

Bernstein's conceptualization is based on research on parent-child interactions in England and the United States (e.g., Hess and Shipman 1965). Moreover, research in these countries has provided support for Bernstein's argument that such social class-based differences in parent-child interactions contribute to lower achievement of working class (compared to middle class) youth in schools using what he terms "invisible" – read active-learning, student-centered – pedagogies (e.g., Sharp and Green 1975). More relevant to our discussion here is the observation that teacher-student interaction patterns tend to reflect the dominant pattern of parent-child relations of the families served by particular educational institutions (Miller and Ginsburg, 1989). Thus, because of issues of cultural (dis)continuity between home and school, it may be easier to implement active-learning, student-centered pedagogies for teachers serving working class families than it is for teachers serving middle class families.

Nevertheless, we should note that positional families may help prepare children for active-learning pedagogies in one important respect, because in such families children and youth have relatively more independent-of-adult experience of learning with/from peers. In person-oriented families "parents would closely regulate [through negotiation] the child's relationships with peers," while in positional families "the child's relationship with his [or her] peers would be relatively independent of the parents' regulation ... The children's communication might be 'open' only in relation to their age mates who would then become a major source of learning" (Bernstein 1971, pp. 153-54).

Confucian-Influenced versus Other Societies

In the People's Republic of China, Singapore, and other societies where the political and more general culture has had sustained influence by Confucian ideas, notions of authority relations (e.g., between government officials and citizens and between adults and children) tend to differ

from other contexts (e.g., the United States) (e.g., see Nehrer 1999). Employing Wilson's (1992, p. 89) concept of "compliance ideologies,"² we can say that Confucian-influenced cultures tend to be dominated by a *positional* compliance ideology, which stresses "forms of control that emanate ... from the community" and relationships in which "duties are matched against rights in terms of one's place in society." For example, Lucian Pye states that the traditional "hierarchical order of a Confucian society" (1985, p. 205), which is reflected in modern China, emphasizes "displays of deference by subordinates and grace in asserting command by superiors" (1998, p. 32). And Herbert Yee (1999, p. 4) calls attention to the parallel between the polity and the family when he argues that a fundamental element of the political culture of China is an emphasis on "paternalistic-dependency" relations between leaders and their followers. Yee (1999, p. 4; quoting Pye 1985, p. 205) also suggests that Hong Kong exhibits an important aspect of Confucian culture, that "the government should treat the people like a father treats his children."

In contrast, the United States tends to be dominated by what Wilson (1992, p. 89) labels a *contractual* compliance ideology, which emphasizes "defined limits of authority, the intrinsic value of the individual, and legal guarantees regarding negotiating processes." As Gabriel Almond and Sidney Verba (1989, p. 36) explain in their often-cited book, *The Civic Culture*, "the general pattern of authority in American social systems, including the family, tended to stress political competence and participation rather than obedience to legitimate authority." Relatedly, Alexander (2000, pp. 536 and 549) reports that in contrast to:

[c]lassroom life ... in Russia, France and India ... [rules and] routines ... were much more up for negotiation in the ... classrooms [in the United States. This pattern was related to] ... the degree to which teachers in each country see **curriculum ... as problematic**. Broadly, in Russia, France and India, teachers took the prescribed curriculum as given and talked about how to implement it; those in [the United States] were much more inclined to contest it."

Particularly relevant to our discussion here is that classrooms in Confucian-influenced societies tend to reflect the authoritarian relations of the family and community, with clear role distinctions for teachers (in charge and the source of important knowledge) and students (subordinates who respect and do not expect to raise questions or engage in dialogue with teachers) (Brimer 1988; Dong 1988; Li and Ginsburg 1996; Thomas 1988). Thus, it is more than a technical challenge for teachers in such contexts to move toward using more active-learning, student-centered pedagogies; they would have to confront their own and significant others' cultural understandings of how teachers/adults/leaders and students/children/followers should behave. At the same time, the culture in Confucian-influenced societies may enhance youth's experience in interacting and learning from peers – for similar reasons as discussed above with regard to positional families in working class culture, and thus there may be opportunities for teachers to move toward active-learning, student-centered pedagogical approaches.

² Note that Wilson's (1992) conception of positional versus contractual "compliance ideologies" or forms of authority associated with different political cultures is paralleled by Bernstein's (1971) conception of positional versus personal forms of authority associated with family and classroom cultures of different social classes (working versus middle, respectively), which was discussed above.

Islam and the Koranic School Tradition

Various scholars and policy makers have questioned whether active-learning, student-centered pedagogies are appropriate and feasible in schools in which many students (and their teachers) have been socialized in Muslim families and Koranic schools (see Boyle 2006). This is based on a conception of the Islamic culture and, particularly, the “tradition” of Koranic schooling as emphasizing memorization and rote learning. In a recently published article, Sebastian Günther (2006) documents historically this focus on memorization in the philosophical and practical pedagogical discourses of Muslim scholars. For example, he reports on the writings of:

the 9th century Arab jurist and chief judge (*qadi*) of the Malikites, Muhammad ibn Sahnun ... [who] was born and lived most of his life in Kairouan (al-Qayrawan), a town in north-central Tunisia ... [In his] book on education ... entitled *Rules of Conduct for Teachers (Adab al-mu'allimin)* ... Ibn Sahnun [1406/1986] cites maxims attributed to the Prophet Muhammad that highlight the crucial significance which religiously oriented schooling in Islam grants to the learning and memorization of the Koran (just like medieval Europe stressed the study of the Bible): ‘The best of you is the one who learns the Koran and teaches it.’ ‘For he who learns the Koran in his youth, the Koran will mix with his flesh and blood. [However,] he who learns it in old age and does not give up on it, even when it escapes [his memory], will receive double the reward.’ (Günther 2006, pp. 369-70)

However, Günther (2006) describes other Muslim scholars who contributed to the debates about education and pedagogy during this important historical period. For instance, he refers to a “book about teachers ... written by al-Jahiz [776-868], a celebrated man of letters and Mu‘tazili theologian ... [who] was born in Basra, Iraq (Günther 2006, p.371): In this book al-Jahiz (1980) argues that:

The leading sages, masters of the art of deductive reasoning and [independent] thinking, were averse to excellence in memorization, because of [one’s] dependence on it and [its rendering] the mind negligent of rational judgment, so [much so] that they said: “Memorization inhibits the intellect.” [They were averse to it] because the one engaged in memorization is only an imitator, whereas deductive reasoning is that which brings the one engaged in it to calculated certainty and great confidence. The true proposition and the praiseworthy judgment is that, when [a student] learns only by memorization, this harms deductive reasoning; and when he uses only deductive reasoning, this harms learning by memorization—even if memorization has a more honorable rank than [deductive reasoning]. (Günther 2006, p. 372)

He also explores the writings of Abu Nasr al-Farabi, who is “considered to be one of the most influential philosophers ... in Islam ... Al-Farabi was of Turkish origin. He was born in Turkestan, but lived many years in Baghdad, Iraq, and in Aleppo, Syria. He died in Damascus [in 950] at the age of eighty years or more” (Günther 2006, p. 373). In his volume on the *Philosophy of Plato and Aristotle [Tahsil al-sa‘ada]*, al-Farabi elaborates a view of:

instruction [that] is expressly conceived of ... as an interactive process that involves both the teacher and the student. While it is the teacher’s responsibility to introduce new knowledge to the student in ways that he [or

she] can understand, it is the student's responsibility to work actively with new facts until he can use them in contexts different to those demonstrated to him. Furthermore, an effective method of instruction ensures that both teacher and student participate actively in the process. This interactive element in the learning process allows the instruction to be student-centered since the aim is for the teacher to facilitate the student's own voyage of discovery. (Günther 2006, pp. 375-76)

While many contemporary Koranic schools and many secular, government schools in Muslim-majority societies tend to stress memorization (rather than active-learning, student-centered instruction), it is clear that both pedagogical approaches have long and important roots in discourses among Islamic scholars and educators. This is important for efforts to promote active-learning, student-centered pedagogies in such societies, in that the philosophical underpinnings of such approaches cannot solely be considered as "foreign" or "western" ideas.

CONCLUSION

The purpose of this Issue Paper is to stimulate reflection on the challenges as a step forward to overcoming them in efforts to promote active-learning, student-centered pedagogies. We have considered the challenges faced by government officials, educators, international aid organizations, and international education project staff to promote the use of active-learning, student-centered pedagogies. We categorized these challenges in terms of: a) the quantity/quality of teachers' pre-service preparation and training, b) the material conditions in classrooms, c) the learning demands of curriculum and examinations, and d) the cultural appropriateness of the implied adult-child-knowledge relations. Then we briefly discussed the first three challenges and devoted more space to discussing the issue of cultural appropriateness, referring to cultural elements of working class communities, Confucian-influenced societies, and Muslim-majority countries.

There are two points to be mentioned in concluding our discussion. First, it is important to notice that challenges, when recognized as such, can be transformed into opportunities. For example, understanding the curriculum/examination or cultural challenges in a particular context means that one can engage policy makers and practitioners in a dialogue about these, with the potential outcome that people may become committed to curriculum/examination or cultural change or they may help identify other elements of their school system or of their culture that support a pedagogical approach that they favor. Certainly, not recognizing the challenges or not focusing stakeholders' attention on them are strategies that are likely to undermine efforts to promote active-learning, student-centered pedagogies.

Second, the discussion above illuminates that it is possible to overcome each of the various challenges with some teachers in some settings. However, there is a need to consider – and seek to address – all of the challenges. It may be that in cases where a reform initiative was not uniformly implemented, despite efforts aiding teachers to overcome a particular set of challenges (e.g., their limited pre-service and in-service training or the material conditions of classrooms), that other challenges blocked the positive outcomes for some teachers. By focusing on the various challenges, and by documenting how they are experienced and (sometimes) overcome, we should be in a better position to enhance our efforts to promote active-learning, student-centered pedagogies.

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