First and Second Order Change in Education and Its Implications for Future Directions
By Peter Zsebik

A new form of dialogue has begun to appear within education - a dialogue that may break the current cyclical nature of playing catch-up to society with which education has found itself entwined (see Zsebik, 2003). It centers on the notion of first order and second order change, a theory that has recently come to light in education that may provide a dialectic for exploring new possible answers to problems that perennially resurface within the educational framework. If it proves systemically beneficial, it may also encourage a lasting transformation to both current and future educational processes that in turn may help to establish a new paradigm for leadership in education.

To begin, we find one definition of first versus second order change voiced by Maier (1987) who concludes the following:

“First order change is incremental, a linear progression to do more or less, better, faster, or with greater accuracy. Practice, reinforcement, and time will be the most likely approaches for facilitating sound developmental change of this kind. Activities are tangible, usually verbal interactions between the caregiver and the young person involved.

Second order change, on the other hand, involves a nonlinear progression, a transformation from one state to another. The aim would be to enable the individual to behave, think, or feel differently. Within the second-order change approach, applicable practice tools might be modeling, confrontation, conflict work, refraining and, most important, the introduction of decisively different personal experience over time. (Maier, 1984). A crucial task of care workers is to be clear as to which order of change they are striving to create.”

It is noteworthy that Maier perceives second order change as the process that creates the most conflict, possibly through the inclusion of personal experience and legitimation of the individual. This is much different then the first order he describes. In a first order change to all intents and purposes the change occurs when the individual changes to conform to the order into which he or she is placed. Second order on the other hand seemingly embraces the individual and his/her talents or experiences and attempts to positively incorporate them into the process without diminishing that person’s input.

If we look further, we see that according to Waters, et al. (2003), first order change can be defined as:

… changes that are consistent with existing values, norms (that) create advantages for individuals or stakeholder groups with similar interests, can be implemented with existing knowledge and resources, and where agreement
exists on what changes are needed and on how the changes should be implemented…

It is apparent that Waters et al. believe first order change to be rooted in what is already known or instituted. Waters et al. then proceed to give examples such as new classroom instructional practices, instructional materials, curriculum programs, or data collection and reporting systems that build on established patterns, knowledge, and practices.

Second order change according to Waters et al. (ibid.) can be defined as when:

… A change … is not obvious (as to) how it will make things better for people with similar interests, (and) it requires individuals and groups of stakeholders to learn new approaches, or it conflicts with prevailing values and norms.

As can be seen from these definitions, the notion of first and second order change primarily relies on the eye of the beholder, and as already observed can be the crux of much conflict, a possibility that always exists whenever a number of reasonably intelligent individuals are working towards a published common goal. As well, when different perceptions about the implications for a change are understood, there is inevitably the result that what one may perceive as a first order change may to another be perceived as a second order change – in other words what one may perceive as a solution may to another be perceived as a problem, and vice versa. From a pedagogical perspective, it seems that this is dichotomy of thought would need to be the focus for any leader willing to take on the process of a second order change.

To continue, Waters et al. (ibid.) then make an admirable comparison between what they believe are the differences that characterize first and second order change as shown in the following table:

<table>
<thead>
<tr>
<th>First Order Change</th>
<th>Second Order Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>An extension of the past</td>
<td>A break with the past</td>
</tr>
<tr>
<td>Within existing paradigms</td>
<td>Outside existing paradigms</td>
</tr>
<tr>
<td>Consistent with prevailing values and norms</td>
<td>Conflicted with prevailing values and norms</td>
</tr>
<tr>
<td>Focused</td>
<td>Emergent</td>
</tr>
<tr>
<td>Bounded</td>
<td>Unbounded</td>
</tr>
<tr>
<td>Incremental</td>
<td>Complex</td>
</tr>
<tr>
<td>Linear</td>
<td>Nonlinear</td>
</tr>
<tr>
<td>Marginal</td>
<td>A disturbance in every element of the system</td>
</tr>
<tr>
<td>Implemented with existing knowledge skills</td>
<td>Requires new knowledge and skills to implement</td>
</tr>
</tbody>
</table>
If we start to explore the different types of relationships existing within the educational environment, it becomes easy to see the types of relationships that exist and perhaps to what specific order of change these relationships belong. The following is a listing of potential relationships that have been discerned as evident within an educational framework:

<table>
<thead>
<tr>
<th>First Order Focus</th>
<th>Second Order Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative decision making</td>
<td>Collaborative teacher/administrative decision making</td>
</tr>
<tr>
<td>Hegemonic curriculum (taught with idea of maintaining the status quo)</td>
<td>Transformative curriculum (taught with change in mind)</td>
</tr>
<tr>
<td>Societal expectations with historical roots</td>
<td>Societal expectations based on prognosis for future needs</td>
</tr>
<tr>
<td>Teacher as information banker</td>
<td>Teacher as information facilitator</td>
</tr>
<tr>
<td>Student as passive recipient of information</td>
<td>Student as active manager of information</td>
</tr>
<tr>
<td>Curriculum focused on first order skill sets</td>
<td>Curriculum focused on second order skill sets</td>
</tr>
<tr>
<td>Parents and family as ‘arm’s length’ participants of child’s education (factory model)</td>
<td>Parents and family as full participants of child’s education (village model)</td>
</tr>
</tbody>
</table>

While there appears to be some obvious features that are apparent once a definition has been brought forward, it is still important to note that these definitions are still only broadly defining an otherwise complex process. In fact this process, while perhaps fruitful, may be full of potentially explosive obstacles and traps if not treated with the utmost care. An example of a negative consequence could be the initiation of a pseudo second order change process that in reality is a first order change process that in turn results in very little beneficial development.

With this in mind, we therefore find that Waters, Marzano and McNulty (2003) make an attempt to demonstrate that in order for second order change to occur, there is the need to balance second order change levels with the needed first order change levels, and the most effective way to encourage this process is through the use of appropriate leadership practices. The authors suggest that to begin from only a second order perspective would probably hamper any benefits that may otherwise be made available from the change. The authors then continue by listing the practices associated with the responsibility the administration have when attempting to change the culture of a school:

1. Promotes cooperation among staff
2. Promotes a sense of well-being
3. Promotes cohesion among staff
4. Develops a shared understanding of purpose
5. Develops a shared vision of what the school could be like.

Following this listing of responsibilities, they then postulate that for first order changes, the first three practices listed above are

“…all that is needed from leadership for successful implementation.

However, for second order changes these first three practices will be insufficient to fulfill this responsibility. Second order changes require leaders to work far more deeply with staff and the community.” (ibid., p.8)

From this vantage it appears likely that second order change will only occur through the willing participation of teachers and those who are in the classroom. The only problem is that teachers today have perhaps focused their teaching efforts towards their own perception of educational needs which (due to no fault of their own) are rooted more often than not in historical tradition and perception of classroom needs. It is also possible that when faced with numerous other challenges facing a teacher in any given academic setting that the idea of second order change, even if it has been recognized and understood by these teachers, would without some proper and inspirational leadership take a backseat to the more everyday pressing issues of classroom management, political intrigues, organizational and bureaucratic tasks, and the responsibilities accompanying daily living in a complex society. In brief there could be so much resistance that the whole process would eventually be scuttled.

It would appear that a change of this magnitude would only occur if there was a leadership paradigm that was not only aware of the current sociopolitical paradigm that currently exists, but a leadership paradigm that also has a clear and unwavering vision of the process necessary to enact or create this needed shift into a more conducive second order paradigm – a paradigm that would address the needs of today’s sociopolitical and therefore socio-educational context.

Marzano (Winter 1995) however postulates that innovations must fit within individuals’ beliefs and perceptions. He believes that to affect such change, the Concern Based Adoption Model or CBAM created by Hall and Loucks (1978) may provide a way forward. This model defines seven stages or phases “individuals progress through as they become aware of, understand and then gradually accept and then apply an innovation.” (Marzano, 1995) These stages are:

Stage 1  
_Awareness:_ participants exhibit little awareness about the innovation

Stage 2  
_Informational:_ participants exhibit an awareness of the innovation and a desire for more information about the innovation

Stage 3  
_Personal:_ participants are uncertain about the demands of the innovation and are concerned about how it will affect their lives
Stage 4  
*Management*: participants have basically “accepted” the innovation as useful and are concerned about accurately and effectively utilizing the innovation.

Stage 5  
*Consequences*: participants are concerned about the impact of the innovation on their clients (i.e., commonly students within education) and their work in general.

Stage 6  
*Collaboration*: participants’ concerns are focused on coordination and cooperation with others regarding the innovation.

Stage 7  
*Refocusing*: participants’ concerns are focused on improving the innovation and identifying other uses of the innovation.


These developmental stages could pose a satisfactory canon from which to attempt a second order change, but with the caveat that before any change can be affected, all involved parties must have the belief and perception that change is necessary to allow full integration of the change. If it is not accepted fully, then the process fails.

As we have seen, the notion of change seems to go hand in hand with education, but what is being voiced in this instance is the idea that the way change may have to occur within this environment is through a much more democratic arrangement, which means that in order to effectively create a second order changed environment all stakeholders within the system must be involved in the process. Still, it may be to all intents that initiation of any such process will need to occur at the administrative level. That means then that if the process is to proceed past the initial stages, then it will be incumbent on the initiators to proceed through all the stages cited above to ensure acceptance of the process via the transference of the necessary beliefs and perceptions. Only then would there be a guarantee of success with the proscribed change.
References


Zsebik, P. (2003), A Comparative Analysis of Four Approaches to Curriculum Offered in International Schools, Ph.D. Thesis, University of Bath, UK (pp. 29, 37, 88).