

## Exploring Innovation Processes in a Public University in Central Mexico<sup>1</sup>

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### **Abstract**

This article presents a critical analysis performed on six curriculum innovations at a public university in central Mexico. The purpose of this article is to evaluate these innovations based on a framework developed by Markee (2003) in order to determine the likely success/failure of the diffusion of innovation processes. The findings show that successful innovations in this public university context follow a "top-down" tendency where innovations are attempted at the "micro-level" whereas unsuccessful innovations also follow a top-down tendency, yet are attempted at the "macro-level" of the larger institutional context. The article concludes by suggesting that a more socio-culturally sensitive approach to innovation is necessary in order to facilitate lasting qualitative change.

### **Introduction**

Innovation is part of professional development as a continuous and on-going process of exploration and experimentation which allows language teachers to change and grow in meaningful new directions. These innovative practices can have a wider impact on the institutions in which they occur when innovation diffuses among other professionals within their context (Kennedy, Doyle & Goh, 1999). However, the innovation/change process can be extremely challenging; therefore, a systematic framework which assists innovators to evaluate the likely success of a given innovation is necessary.

The purpose of the current article is to critically examine six curriculum innovations that took place at a public university in central Mexico while comparing and contrasting them according to an evaluative framework developed by Markee (2003). This is done in order to focus on what Markee defines as two key issues in determining the likely success of 'diffusion-of-innovation' which include: 1) the extent to which participants actually use new materials and

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approaches and 2) 'the degree to which participants actually reconstruct their pedagogical values' (p. 125). As Brindley and Hood (1990) comment:

*A better understanding of how curriculum implementation happens 'on the ground' through systematic exploration and documentation of the adoption process would help to put language curriculum development on a more rational footing and allow curriculum developers to plan more effectively for changes that follow innovation (p. 232).*

Keeping this in mind, it is hoped that by examining these six innovations that have happened "on the ground" at this university, the authors of this paper will be able to contribute to the understanding of what factors seem to contribute to "successful" and "unsuccessful" innovation within this context.

### **1. Markee's framework: 'who adopts what, where, when, why and how?'**

Markee's framework was chosen for this work because it is specifically designed to evaluate the different facets that define innovation in the specific context of language teaching (Markee 2003). Furthermore, it is encompassing enough to account for most innovations that might take place in relation to language education, and includes elements of planning, implementation and evaluation as suggested by Kennedy and Kennedy (1998). Markee focuses on the institutional, personal, pedagogical and socio-political factors that affect curriculum innovation in language teaching and creates a classification of those issues into specific questions of 'who adopts what, where, when, why and how?' (p. 118). These classifications are then further subdivided as can be seen in the summary of the framework in Table 1 below.

**Table 1- Markee's Framework: 'Who adopts what, where, when, why and how?'**

Element	Subdivision	Description										
Who	Adopters Implementers Clients Suppliers Entrepreneurs/Change Agent Resisters	Those with decision-making power to initiate a change or adopt an innovation. Those who put an innovation into practice. Those who are potentially benefited by or receive the service of an innovation. Those who provide knowledge or materials (resources) for the innovation. Those promoting the implementation of an innovation, acting as a change catalyst. Those who struggle against or refuse to implement an innovation.										
What	Innovation- proposals for <i>qualitative change</i> in pedagogical materials, approaches, and values that are perceived as new by individuals who comprise a formal (language) education system.	This definition of innovation by Markee (2003) highlights three important elements of innovation. <i>Qualitative change can refer to fundamental changes in values or less complex changes in materials and approaches that didn't necessarily require a change in values. Pedagogical materials, approaches and values cover three levels of innovative behavior. A formal language education system places the innovation in a specific institutional context</i> which seems to be an important determiner as to whether an innovation is adopted.										
Where	Cultural      Ideological Historical      Political Economic      Administrative Institutional      Socio-linguistic	It is important to realize that 'where' refers to the Socio-cultural context, and not the geographical location of the innovation. The subcategories refer to the possible socio-cultural constraints that might impact the potential innovation. These constraints impinge on all aspects of an innovation.										
When	Innovators Early adopters Early majority Late majority Laggards	<table border="1" style="width: 100%;"> <tr> <td colspan="2" style="text-align: center;"><b>% of adopters who implement innovation over a specific time period often form a typical S-shaped diffusion curve</b></td> </tr> <tr> <td style="text-align: center;"></td> <td></td> </tr> <tr> <td style="text-align: center;">Laggards</td> <td></td> </tr> <tr> <td style="text-align: center;">Early Majority/Late Majority</td> <td></td> </tr> <tr> <td style="text-align: center;">Innovators/Early adopters</td> <td></td> </tr> </table>	<b>% of adopters who implement innovation over a specific time period often form a typical S-shaped diffusion curve</b>				Laggards		Early Majority/Late Majority		Innovators/Early adopters	
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How	There are three main implementation models, and a hybrid of the three. <ul style="list-style-type: none"> <li>• The Research, development and diffusion (RD and D) model</li> <li>• The problem solving model</li> <li>• The social interaction model</li> <li>• The hybrid or linkage model</li> </ul>	<table border="1" style="width: 100%;"> <thead> <tr> <th>RD and D model</th> <th>Problem solving model</th> <th>Social interaction model</th> <th>Hybrid or linkage model</th> </tr> </thead> <tbody> <tr> <td>Assumes that a rational, institutional model based on theory will encourage adoption</td> <td>Users employ action to articulate a problem and diagnose how they want to solve it.</td> <td>Emphasizes the importance of social relationships as a key variable in adoption.</td> <td>Assumes that none of the previous models will be sufficient on its own and allows for combinations of the models.</td> </tr> </tbody> </table>	RD and D model	Problem solving model	Social interaction model	Hybrid or linkage model	Assumes that a rational, institutional model based on theory will encourage adoption	Users employ action to articulate a problem and diagnose how they want to solve it.	Emphasizes the importance of social relationships as a key variable in adoption.	Assumes that none of the previous models will be sufficient on its own and allows for combinations of the models.		
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(adapted from Markee 2003)

Various scholars (Brindley & Hood, 1990; Kennedy, 1988; Kennedy & Kennedy, 1998) go to great length to emphasize the enormous and unpredictable influence that the constraints of the socio-cultural context (see 'where' in Table 1) may have on the implementation of any potential innovation. These constraints in Markee's 'where' section need to be seen as directly influencing all other aspects of the innovation. Consideration of these constraints should justify the *need* for

the innovation (see Brindley and Hood 1990, Kennedy 1988) as well as which implementation model a potential innovator might choose.

## 2. Case studies of innovation evaluated under Markee's framework

This section will provide a brief description of the six attempted innovations that are considered in this work. Each of the innovations underwent a similar process of evaluation under Markee's framework. Due to constraints of space, a 'thick description' (Holliday, 2002) of each innovation is not possible.

**Table 2- Summary of 6 attempted innovations**

Innovation	Innovation 1: Increasing continuity in the target language (English) program	Innovation 2: Combining face-to-face with online interaction	Innovation 3: Towards a new framework of supervision and evaluation of Teaching Practicum	Innovation 4: Implementation of the TOEFL test for language proficiency accreditation	Innovation 5: A remedial course for basic level English learners	Innovation 6: Individualizing and improving thesis supervision through the use of electronic interactive diaries
Who Actors/ stakeholders	<b>Adopters:</b> administration/ English coordinator. <b>Implementers/resisters:</b> teachers. <b>Clients:</b> students. <b>Suppliers/change agents:</b> teachers/ English coordinator.	<b>Clients/ adopters:</b> 30 students. <b>Implementer/ supplier/agent of change:</b> teacher. <b>Resisters:</b> none	<b>Adopters:</b> coordinator and 3 teachers. <b>Clients:</b> Teaching Practicum students. <b>Suppliers:</b> school coordinator and 3 teachers. <b>Resisters:</b> 2 teachers.	<b>Adopters:</b> teachers/ students/ institution. <b>Suppliers and agents of change:</b> teachers. <b>Resisters:</b> staff members and students who did not want external language examinations.	<b>Adopters:</b> coordinator, 4 teachers and students <b>Supplier:</b> 1 teacher. <b>Clients:</b> students. <b>Resisters:</b> 3 teachers and their students.	<b>Clients/adopters:</b> 22 students. <b>Adopter/ implementer/ supplier and agent of change:</b> teacher. <b>Resisters:</b> 6 students.
What Area(s) of change	Involved qualitative change in pedagogic approaches, materials, and values within an institutional context.	Involved qualitative change in pedagogical approach and values.	Involved qualitative change in approach to supervision and evaluation of Teaching Practicum.	Involved a qualitative change in working towards improving students' language proficiency standards.	Involved a change in teaching methodology and values in teaching and learning.	Involved a qualitative change in pedagogic approaches, materials and values.
Where Socio-cultural context	The innovation was laden with almost all facets of socio-cultural constraints that are mentioned within Markee's framework.	No real socio-cultural constraints due to easy access to technology	The innovation was affected by most of the socio-cultural constraints that Markee identifies	The innovation faced socio-cultural constraints that included: cultural, administrative, and institutional facets.	The innovation was laden with many facets of socio-cultural constraints mentioned in Markee's framework	No real socio-cultural constraints due to easy access to technology and willingness of most clients.
When Diffusion rate	<b>Innovators/early adopters:</b> 5%. <b>Laggards:</b> 95%.	<b>Innovators/early adopters:</b> 50% <b>Early majority/late majority:</b> 50%.	<b>Innovators/early majority:</b> 70%. <b>Late majority/resisters:</b> 30%.	<b>Innovators/early adopters:</b> 50%. <b>Late majority and laggards:</b> 50%.	<b>Innovators early adopters:</b> 25%. <b>Late majority/resisters:</b> 75%.	<b>Innovators/early adopters:</b> 70%. <b>Laggards:</b> 30%.
Why Attributes of the innovation	High advantage in regard to increased communication and continuity in the target language program.	High advantage to increased interaction among stakeholders. Low	High advantage in providing a more meaningful approach to Teaching Practicum.	High advantage in promoting students' credibility as competitive teachers in the job	Medium advantage in addressing lack of knowledge necessary for academic	High advantage to increased interaction between teacher and students. Low complexity

	High complexity Low compatibility Low observability No trial period	complexity Medium compatibility Highly observable No trial period	Medium complexity Low compatibility Highly observable Triability	market. High complexity Low compatibility Highly observable Triability	advancement. Medium complexity Low compatibility Low observability Triability	Medium compatibility Highly observable Triability
<b>How Implement- ation model</b>	Hybrid model: problem solving and social interaction	Problem solving	Hybrid model: problem solving and social interaction	Problem solving	Hybrid model: problem solving and social interaction	Hybrid model: problem solving and social interaction
<b>Comments</b>	This was a departmental innovation that failed for three main reasons: lack of attention to socio-cultural constraints, too many participants, and lack of a reduced participant trial period.	This innovation was classroom based and may be considered successful for two main reasons: its obligatory nature and its short duration of time.	Although this innovation was supported institutionally, there are still resistors that make the innovation only partially successful.	Although the innovation began at a classroom level, it had an institutional impact because it has now become a requirement for students who graduate from the program.	This was an innovation that failed with three groups and was very successful in one. There was a lack of communication with other participating teachers. A longer preparation and trial period was needed.	This innovation was classroom based and may be considered successful for two main reasons: its quick adoption after the trial period by a high percentage of students and its short duration of time.

However, innovation 1 (highlighted in grey in Table 2 above) is described below in more detail in order to illustrate the analytical process that was followed to evaluate each innovation considered in this work.

## 2.1 Increasing continuity in the target language (English) program

In the year 2002, the School of Languages experienced a period of substantial growth when the university significantly increased the number of students at the language school in response to larger infrastructure. As a result, the school was forced to greatly increase the English teaching staff, mostly hiring inexperienced teachers who had little or no idea about the aims of the target language (English) program or the current and future academic needs of the learners. The more experienced classroom teachers perceived a significant drop in learners' English proficiency as well as a strong feeling of discontinuity in the target language program over a period of two years. A series of staff meetings was held to address these problems, which led to an innovation proposal (innovation 1 in Table 2) from the target language coordinator that included:

- Revising the target language syllabi for each level, including behavioral objectives related to processes describing desired abilities in the four skills.
- Adopting a textbook series to be used throughout the different levels of the target language program, while allowing flexibility to adapt the text and develop extra materials to meet the needs of the learners.

- Creating a system of cooperative teaching where teachers giving parallel levels in the target language courses would share ideas, techniques and materials as much as possible.
- Scheduling paid biweekly meetings in order to increase communication among teachers and allow for group planning as well as in-service courses.

Examining innovation 1 within Markee's framework, certain strengths and weaknesses become apparent. The '**what**' of the innovation within the framework seems to meet Markee's definition of innovation since it requires qualitative change in pedagogic materials, approaches and values, while the innovation is placed within an institutional context.

However, placing the innovation in the actual institutional context created considerable difficulties because it involved a large number of participants in the '**who**' category (15 teachers and more than 150 students). Although the administration of the school (**adopters**) supported the innovation in principle, they did not provide the leadership that Kennedy (1988) sees as crucial, leaving the actual implementation to the target language coordinator (**supplier**), whose symbolic position had no real power (see Holliday 2001, Kennedy 1988). This situation led many teachers (**suppliers/resisters**) to question the seriousness of the innovation, resulting in a large number of **laggards** in the '**when**' section. Thus, the students (**clients**) remained mostly unaware of the on-going innovation. It is also interesting to note that many of the teachers, who were **entrepreneurs** during the planning stages, quickly turned into **resisters** as the innovation began actual implementation, which is seemingly impossible in Markee's framework. This might be partly explained by Hofstede's (1991) distinction between the 'desirable' (what one wants in an ideal world) and the 'desired' (what one wants in reality).

Hofstede's distinction leads us to the '**where**', '**why**' and '**how**' elements of the innovation within Markee's framework. An abundance of historical, cultural, ideological, and political constraints seriously affected the implementation of this innovation. For example, historically, the discourse community within the school frequently detects problems within the institutional context, discussing possible solutions, but rarely taking action. As the implementation actually began, it required pedagogical cooperation between classroom teachers (**suppliers**) who often had incompatible pedagogical ideologies. From our experience in this educational context, it is not a common practice to openly disagree with someone in public settings, which decreased negotiation between these classroom teachers and significantly reduced many of the **relative advantages** and **observability** of the innovation to the students (**clients**) for whom the innovation was supposed to benefit. These factors led to dissatisfaction with the innovation and inspired political groupings within the supplier community to **resist**.

Many problems also relate to the 'how' section of the framework, which could be described as a **hybrid model**, mostly consisting of elements taken from **problem solving** and **social interaction models** since the innovation intended to respond to a real problem and relied on the formation of social relationships in order to respond to it. Although the initial planning stages of the innovation, what Markee (1997, p. 79) calls 'strategic planning' (long-term) and 'tactical planning' (medium-term) were well organized, the 'operational planning' which is short-term, day-to-day planning that needed to take place between teachers did not receive enough attention. After six months, there were very few **early adopters** while a large number of **laggards** persisted. This state of affairs led to the eventual failure of the attempted innovation.

### 3. Results

After analyzing all the innovations in Table 2 under Markee's framework as illustrated above, certain tendencies within this context became salient. The most successful innovations analyzed for this study were those in which the clients were the students while classroom teachers assumed both the roles of change agent and implementer. Likewise, successful innovations most commonly involved short-term, classroom based experimentation that was only moderately complex and highly observable. Diffusion usually involved early adopters numbering more than 50% after a brief trial period. Most importantly, innovations where few socio-cultural constraints were challenged had the greatest chances of widespread adoption. All innovations included some element of problem solving; however, the most widely used model was the hybrid of the problem-solving and the social interaction model (Markee, 2001; Rea-Dickins & Germaine, 1992).

We might notice that almost all of the successful innovations took place in the context of the classroom involving only one classroom teacher and a group of learners; however, only Innovation 4 (see Table 2) constituted a permanent change due to the modification of institutional policy. The other successful innovations lasted only as long as the duration of the course where they were implemented. It is tempting to see these classroom based innovations as a "bottom-up" process; however, we must take into account which participants held the "power roles" (Fairclough, 1989) within these innovation contexts. One must consider how much agency students have to resist once a classroom teacher decides to innovate. In reality, innovation which is carried out within an asymmetrical context must be viewed as "top-down." It may be concluded that classroom innovations marginalize the innovative behavior away from the larger institutional context, thereby greatly reducing the number of potential resisters and effectively by-passing many of the wider socio-cultural constraints within that context. It is this by-passing of socio-cultural constraints, in all likelihood, that made these classroom based innovations successful.

An important finding in this study is that the results were contradictory to those most commonly reported in the literature (Brindley & Hood, 1990; Kennedy, 1988; Kennedy & Kennedy, 1998) which suggests that successful innovation is usually a grass-roots, "bottom-up" process, and "top-down" innovation coming from an institutional mandate encounters more resistance. It seems that within the institutional context where this study took place, only top-down innovations were successfully adopted and diffused.

On the other hand, the innovations at the school which seemed to be least successful were those in which widespread cooperation among teachers was necessary in order for them to take on the roles of implementers and suppliers while they were not actively seeking the role of change agent. In these instances, the socio-cultural constraints within this institutional context could not be avoided, and these constraints seemed to impinge on the innovations from all sides. It is worth mentioning that teachers within this socio-cultural context do have the agency to resist innovative practices and will do so when they feel that such practices do not maintain the "cultural continuity" (Holliday 2003) of the school. In each of these cases, the rates of early adoption were always quite low while the numbers of laggards were significant, resulting in a complete or partial failure of the innovation. This rejection of innovation may possibly reflect a particular institutional work culture that could be present in many public universities in Mexico. In the end, these non-cooperative practices challenge the idea of professional development that Wallace (1998) advocates when he says that "professional isolation is ultimately a barrier to professional development" (p. 207).

#### 4. Implications

Certain implications concerning the "why" and the "who" emerge from the results presented above. These are closely related to the "where" section in Markee's framework.

Concerning the "why" section within this context, it appears as though the existence/recognition of a problem is a necessary condition under which innovation is attempted; however, such awareness of a problem in itself is not sufficient to guarantee that innovation will successfully diffuse and be adopted. The most likely reasons for this lack of success are probably related to the different paradigms which converge within this socio-cultural context.

Regarding the "who" section, it seems that a salient pattern emerges where successful innovation requires innovators/implementers to hold "power roles" while clients/adopters are in low or non "power roles". This state of affairs seems to encourage issues of inequality where an institution is organized and run by those above who hold the power while those who are down below have little agency to resist.



The innovation problems discussed in relation to the "why" and the "who" above are probably directly attributable to insufficient attention being paid to the "where" element within Markee's framework. Attempting to significantly change the foundations of a socio-cultural context through innovation seems to be extremely challenging due to the unavoidable disturbance of "cultural continuity" (Holliday 2003) that such innovation usually entails. For this reason, extreme care must be taken during innovation attempts which intend to challenge the existing paradigms of an institution. As Holliday (2003) points out:

*our own professional discourses...prevent us from seeing the real worlds of the people we work with. We therefore need to be critically aware of ourselves as cultural actors and learn how to see the people we work with in their own terms instead of our terms (p. 169).*

When innovation is seen through the sociocultural lens of all the participants involved, new levels of sensitivity and understanding might be achieved in addressing issues that are fundamental to qualitative change.

As can be seen, by examining a variety of language teaching innovations within a framework that deals with the defining issues of innovation, a greater understanding of how the adoption process actually happens (or not) can be achieved. Such an understanding is essential if potential innovators hope to succeed in bringing about lasting change which will eventually have an impact on the professional development within the institution.

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